

APPENDIX A: ESCC Scoping Email

From: [Mark Weston](#)
To: [John Gilby](#)
Subject: RE: Grove School, West St Leonards, Hastings
Date: 21 February 2014 09:05:35
Attachments: [image001.jpg](#)
[image002.jpg](#)
[image003.jpg](#)
[image004.jpg](#)

Hi John

Your proposal seems fine but I would add the caveat that if the results show that any particular junction/arm is close to/at capacity, we may ask for additional surveys to provide more robust info.

Kind regards

Mark Weston

Senior Transport Development Control Officer
Transport Development Control
Communities Economy and Transport

East Sussex County Council

C Floor, W Block, County Hall, St Anne's Crescent, Lewes, East Sussex, BN7 1UE
T 01273 482242
E mark.weston@eastsussex.gov.uk | I <http://www.eastsussex.gov.uk>

From: John Gilby [<mailto:jgilby@mayerbrown.co.uk>]
Sent: 19 February 2014 13:47
To: Mark Weston
Subject: RE: Grove School, West St Leonards, Hastings
Importance: High

Thanks Mark.

We are planning to do a survey of the Darwell Close/School access junction, Darwell Close/Harley Shute Road junction and the B2092 roundabout to obtain the data we need for our TA.
The survey date is Tuesday the 25th Feb and will cover the following time - 0730-0930 and 1630-1830.

I'd be grateful if you could confirm that you are happy with the above survey specs.

Regards,

John.

From: Mark Weston [<mailto:Mark.Weston@eastsussex.gov.uk>]
Sent: 18 February 2014 13:13
To: John Gilby
Subject: RE: Grove School, West St Leonards, Hastings

Hi John

Apologies for the delay in getting this to you. We only have limited data in the area which comes from a manual count carried out further south in Harley Shute Road in 2011 and is attached.

Kind regards

Mark Weston

Senior Transport Development Control Officer
Transport Development Control
Communities Economy and Transport

East Sussex County Council

C Floor, W Block, County Hall, St Anne's Crescent, Lewes, East Sussex, BN7 1UE
T 01273 482242

E mark.weston@eastsussex.gov.uk | I <http://www.eastsussex.gov.uk>

From: John Gilby [<mailto:jgilby@mayerbrown.co.uk>]
Sent: 11 February 2014 09:55
To: Mark Weston
Subject: RE: Grove School, West St Leonards, Hastings

Mark,

Following our discussions last month regarding the TA for the Grove School site in Hastings, did you have any luck finding any existing modelling/traffic flow data for the local highway network?

Regards,

John.

John Gilby, BEng (Hons) MCIHT
Senior Transport Planner

Mayer Brown Limited
Lion House
Oriental Road

T: 01483 750 508
F: 01483 750 437

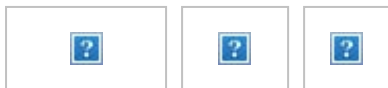
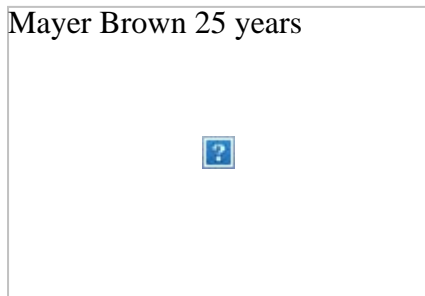
Woking
Surrey

E: jgilby@mayerbrown.co.uk

GU22 8AR

www.mayerbrown.co.uk

Mayer Brown 25 years



Please consider the environment before printing this email. Thank you.

IMPORTANT: This message is private and confidential. If you received this message in error, please notify us and remove it from your system.

Mayer Brown is a limited company registered in England.

Registered number: 3531997. Registered office: Lion House, Oriental Road, Woking Surrey, GU22 8AR

This message (and any associated files) is intended only for the use of the intended recipients and may contain information that is confidential, subject to copyright or constitutes a trade secret. If you are not the intended recipient you are hereby notified that any dissemination, copying or distribution of this message, or files associated with this message, is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer. Any views or opinions presented are solely those of the author (jjgilby@maverbrown.co.uk) and do not necessarily represent those of the company.

From: John Gilby
Sent: 16 January 2014 12:38
To: 'Mark Weston'
Subject: RE: Grove School, West St Leonards, Hastings

Mark,

Thanks again for discussing the scope of our Transport Assessment with me this morning. I am pleased to note that you were happy with the proposed scope of our assessment and that you will assist in obtaining any modelling/traffic flow data ESCC has for the local highway network and the Bexhill/Hastings Link Road.

If you have any additional questions regarding this project, please feel free to contact me.

Regards,

John.

From: Mark Weston [<mailto:Mark.Weston@eastsussex.gov.uk>]
Sent: 15 January 2014 10:20
To: John Gilby
Subject: Out of Office AutoReply: Grove School, West St Leonards, Hastings

I am away from the office until Thursday 16th January 2014. I will respond as soon as I can on my return. Please contact the Transport Development Control Team on 01273 482254 for anything urgent.

This message is intended for the use of the addressee only and may contain confidential or privileged information. If you have received it in error please notify the sender and destroy it. You may not use it or copy it to anyone else.

E-mail is not a secure communications medium. Please be aware of this when replying. All communications sent to or from the County Council may be subject to recording and/or monitoring in accordance with relevant legislation.

Although East Sussex County Council has taken steps to ensure that this e-mail and any attachments are virus free, we can take no responsibility if a virus is actually present and you are advised to ensure that the appropriate checks are made.

You can visit our website at <http://www.eastsussex.gov.uk>

This message is intended for the use of the addressee only and may contain confidential or privileged information. If you have received it in error please notify the sender and destroy it. You may not use it or copy it to anyone else.

E-mail is not a secure communications medium. Please be aware of this when replying. All communications sent to or from the County Council may be subject to recording and/or monitoring in accordance with relevant legislation.

Although East Sussex County Council has taken steps to ensure that this e-mail and any attachments are virus free, we can take no responsibility if a virus is actually present and you are advised to ensure that the appropriate checks are made.

You can visit our website at <http://www.eastsussex.gov.uk>

APPENDIX B: Accident Statistics

Harley Shute – Hastings – Mayer Brown

Collision report 01/05/2009 – 30/04/2014

Date produced
03 June 2014

Sussex Safer Roads
P A R T N E R S H I P

Safer Roads
Safer Communities
Sharing the Responsibility

Data regarding personal injury collisions is recorded by Sussex Police in accordance with the DfT Stats 19 requirements. The data is subsequently used by Sussex Safer Roads Partnership for monitoring and planning. While every effort is made to ensure that this data is accurate, it is subject to change should further information become available.

This data may not be fully validated and while every effort is made to ensure its accuracy any statistics provided may not match those published elsewhere.

Sussex Safer Roads Partnership does not hold collision data either where there are no recorded casualties or the incident has not been reported to Sussex Police.

For further information:

web: www.sussexsaferroads.gov.uk

email: data@sussexsaferroads.gov.uk

Colour coding by SEVERITY

- ▲ Fatal (0)
- Serious (1)
- Slight (3)



© Crown copyright. All rights reserved. 100019601.2014

Her Majesty's Office (c) Crown Copyright

Sussex Safer Roads
PARTNERSHIP

Collision data
Harley Shute Road - Hastings - Mayer Brown
01/05/2009 - 30/04/2014

SCALE	1 : 3200
DATE	03/06/2014
DRAWING No.	
DRAWN BY	

Details of Personal Injury Accidents for Period - **01/05/2009** to **30/04/2014** (60) months

Selection:

Selected using Manual Selection

Notes:

Police Ref.	Day	Location Description	Vehicles				Casualties					
			Veh No	Type	Age	Manv	Dir	Class	Sex	Age	Sev	
Road No.	Date											
2nd Road No.	Time											
Grid Ref.	D/L											
	R.S.C											
	Weather											
	Speed											
	Account of Accident											
Causation Factor:												

1103014 Wednesday U3114 DARWELL CLOSE 122m West of
11/05/2011 B2092 HARLEY SHUTE ROAD Veh 1 Car Go/head S to N Ped F 12 Slight
R1: U 3114 0840 hrs
E 578,484 Dry
N 110,290 Unknown
30 mph

Causation Factor: **Participant:** **Confidence:**
1st: Passing too close to cyclist, horse rider or pedestrian Vehicle 001 Very Likely
VEHICLE 1 TAXI, UNKNOWN REGISTRATION, TRAVELLED FROM DARWELL CLOSE IN TOWARDS SCHOOL GATES OF THE GROVE SCHOOL. VEHICLE 1 STRUCK CHILD PEDESTRIAN ON RIGHT SHOULDER AND FAILED TO STOP.

1300245 Tuesday C263 GILLSMANS HILL ST
15/01/2013 LEONARDS At Junction of B2092 Veh 1 Goods < 3.5t 48 Starting SE to NW Ped F 16 Slight
R1: C 263 1525 hrs HARLEY CHUTE ROAD
R2: B 2092
E 578,802 Wet/Damp
N 110,407 Fine without high winds
30 mph

Causation Factor: **Participant:** **Confidence:**
1st: Junction restart Vehicle 001 Possible
2nd: Junction restart Vehicle 001 Possible
3rd: Failed to look properly Casualty 001
V1 TRAVELING NW GILLSMANS HILL APPROACHED ROUNDABOUT WITH HARLEY CHUTE AND STOPPED, DRIVER LOOKED RIGHT TO CHECK FOR TRAFFIC, THEN BEGAN TO MOVE FORWARD VERY SLOWLY V1 THEN COLLIDED WITH PEDESTRIAN WHO WAS CROSSING JUNCTION HEADING NE DUE TO VERY SLOW SPEED ONLY SMALL BRUISE TO LEG.

1306849 Tuesday U GILLSMAN HILL HASTINGS AT
17/12/2013 JUNCTION OF B2092 CROWHURST Veh 1 Car 32 Go/head W to E Ped F 12 Serious
R1: C 263 0831 hrs ROAD OUTSIDE ON JUNCTION
R2: B 2092 Daylight:street lights present
E 578,815 Wet/Damp
N 110,422 Raining without high winds
30 mph

Causation Factor: **Participant:** **Confidence:**
1st: Failed to judge vehicles path or speed Casualty 1 Possible
PEDESTRIAN CHILD CROSSING MAIN ROAD FROM NORTH TO SOUTH WHEN HIT FROM RIGHTSIDE BY A VEHICLE VEH 1 COMING OFF THE ROUND ABOUT ON TO GILLSMAN HILL. CAUSING INJURY TO THE CHILD.

Details of Personal Injury Accidents for Period - 01/05/2009 to 30/04/2014 (60) months

Selection:

Selected using Manual Selection

Notes:

Police Ref.	Day	Location Description	Vehicles					Casualties					
			Veh No	Type	Age	Manv	Dir	Class	Sex	Age	Sev		
Road No.	Date												
2nd Road No.	Time												
Grid Ref.	D/L												
	R.S.C												
	Weather												
	Speed												
	Account of Accident												
Causation Factor:													

1401090 Wednesday U GILLSMAN HILL HASTINGS AT
 26/02/2014 JUNCTION OF B2092 HARLEY SHUTE ROAD OUTSIDE ON ROUNDABOUT
R1: C 263 1620 hrs Veh 1 Car 49 Turning left NW to E
R2: B 2092 Daylight:street lights present Veh 2 Pedal cycle 11 Starting W to E Dri M 11 Slight
E 578,822 Dry
N 110,410 Fine without high winds
 30 mph

Causation Factor:	Participant:	Confidence:
1st: Failed to look properly	Vehicle 1	Very Likely

VEH1 COMING AROUND THE ROUNDABOUT STOPPED TO LET PEDAL CYCLIST VEH2 CROSS THE ROAD AND VEH1 THEN PULLED AWAY AND CLIPPED VEH2 P/CYCLE CAUSING SLIGHT INJURY TO RIDER

APPENDIX C: ESCC Parking Demand Tool Output

EAST SUSSEX COUNTY COUNCIL CAR OWNERSHIP PARKING DEMAND TOOL



Ward 1	West St Leonards
District	Hastings
Ward 2	Hollington
District	Hastings
Ward 3	Maze Hill
District	Hastings
Ward Tempro Factor 2011-2026	1.070
District Tempro Factor 2011-2026	1.070

STAGE 1

Please input the ward name for your development location by double clicking in the box or click box and use the drop down menu to the right of the box. The spreadsheet will automatically show the District and Ward of this location. If the ward is not known please refer to <http://www.neighbourhood.statistics.gov.uk/dissemination/> and input postcode or search on Map viewer. Where Census data contains small samples for certain sized dwellings this is highlighted in red if <20, and green if <50 in the Total Demand column. In such cases, other wards should be selected to achieve a higher sample size, the tool allows for 3 wards. If there is still a low sample then the tool will automatically choose district/borough data.

GUIDANCE NOTE

The Parking Demand Tool should be used with reference to East Sussex County Council Residential Parking Policy Guidance. The tool uses Census 2001 Car Ownership, validated Household Survey 2011 Car Ownership and Tempro predicted growth to 2026 to predict residential development parking demand. The tool is not a definitive standard but a guide to the expected level of car ownership. For more information please refer to the guidance document or contact claire.warwick@eastsussex.gov.uk.

STAGE 2

Please input the unit type, number of bedrooms, number of units of that type and number of allocated parking spaces

DEVELOPMENT MIX					ALLOCATED PARKING Spaces (Per Unit)	PARKING DEMAND					
Ref.	Unit Type	Habitable Rooms (Per Unit)	Bedrooms (Per Unit)	No. of Units (Total)		Allocated No.	Unallocated for Residents		Unallocated for Visitors		Total Demand
						per unit	Total	per unit	Total		
A	Flats	2	1	14	1	14	0.15	2.10	0.20	2.80	18.90
B	Flats	3	2	6	1	6	0.28	1.66	0.20	1.20	8.86
C	Houses	4	2	56	1	56	0.54	30.26	0.20	11.20	97.46
D	Houses	5	3	74	2	148	0.24	17.77	0.20	14.80	180.57
E	Houses	5	4	42	2	84	0.24	10.09	0.20	8.40	102.49
F											
G	Houses	6	4	6	2	12	0.33	2.01	0.20	1.20	15.21
H	Houses	5	3	12	2	24	0.25	2.96	0.20	2.40	29.36
I											
J											
K											
L											
M											
N											
O											
P											
Q											
R											
S											
Total				210		344	66.85	42.00	452.85		

← Total Parking Demand for Development

APPENDIX D: Survey Data

K&M TRAFFIC SURVEYS

DATE : TUESDAY 25TH FEBRUARY 2014

LOCATION : HASTINGS, EAST SUSSEX

CROWHURST RD / HARLEY SHUTE RD / IRONLATCH AVE ROUNDABOUT

		CROWHURST ROAD LEFT TO IRONLATCH AVE						CROWHURST ROAD AHEAD TO GILLSMAN'S HILL						CROWHURST ROAD RIGHT TO HARLEY SHUTE ROAD						CROWHURST ROAD U TURNS					
		CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
0730-0745		1		1			2	32		1			33	55	3				58	0					0
0745-0800		3					3	37			1		38	69	6		1		76	0					0
0800-0815		9		2			11	66	1				67	77	2	1			80	0					0
0815-0830		7					7	62					62	68	5	1			74	0					0
0830-0845		2					2	63	2				65	82	7		1		90	0					0
0845-0900		11					11	80		1			81	46	8	2			56	0					0
0900-0915		8					8	64					64	63	6				69	3					3
0915-0930		7		1			8	48					48	62	3				65	1					1
0730-0930		48	0	4	0	0	52	452	3	2	1	0	458	522	40	4	2	0	568	4	0	0	0	0	4
0730-0830		20	0	3	0	0	23	197	1	1	1	0	200	269	16	2	1	0	288	0	0	0	0	0	0
0745-0845		21	0	2	0	0	23	228	3	0	1	0	232	296	20	2	2	0	320	0	0	0	0	0	0
0800-0900		29	0	2	0	0	31	271	3	1	0	0	275	273	22	4	1	0	300	0	0	0	0	0	0
0815-0915		28	0	0	0	0	28	269	2	1	0	0	272	259	26	3	1	0	289	3	0	0	0	0	3
0830-0930		28	0	1	0	0	29	255	2	1	0	0	258	253	24	2	1	0	280	4	0	0	0	0	4
		CROWHURST ROAD LEFT TO IRONLATCH AVE						CROWHURST ROAD AHEAD TO GILLSMAN'S HILL						CROWHURST ROAD RIGHT TO HARLEY SHUTE ROAD						CROWHURST ROAD U TURNS					
		CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
1630-1645		7					7	75			1		76	73	1		2		76	0					0
1645-1700		2	1	1			4	60					60	91	2		1		94	0					0
1700-1715		6	1				7	91			4		95	96			1	1	98	0					0
1715-1730		6		1			7	80					80	83		2	1	1	87	0					0
1730-1745		10		1			11	82	1		2	2	87	84			4		88	0					0
1745-1800		9					9	65	1				66	82					82	0					0
1800-1815		5					5	73			1		74	88		1	2		91	0					0
1815-1830		4					4	50	1				51	92	2	1			95	0					0
1630-1830		49	2	3	0	0	54	576	3	0	8	2	589	689	5	4	11	2	711	0	0	0	0	0	0
1630-1730		21	2	2	0	0	25	306	0	0	5	0	311	343	3	2	5	2	355	0	0	0	0	0	0
1645-1745		24	2	3	0	0	29	313	1	0	6	2	322	354	2	2	7	2	367	0	0	0	0	0	0
1700-1800		31	1	2	0	0	34	318	2	0	6	2	328	345	0	2	6	2	355	0	0	0	0	0	0
1715-1815		30	0	2	0	0	32	300	2	0	3	2	307	337	0	3	7	1	348	0	0	0	0	0	0
1730-1830		28	0	1	0	0	29	270	3	0	3	2	278	346	2	2	6	0	356	0	0	0	0	0	0

K&M TRAFFIC SURVEYS

DATE : TUESDAY 25TH FEBRUARY 2014

LOCATION : HASTINGS, EAST SUSSEX

CROWHURST RD / HARLEY SHUTE RD / IRONLATCH AVE ROUNDABOUT

		IRONLATCH AVENUE LEFT TO GILLSMAN'S HILL						IRONLATCH AVENUE AHEAD TO HARLEY SHUTE ROAD						IRONLATCH AVENUE RIGHT TO CROWHURST RD						IRONLATCH AVENUE U TURNS					
		CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
0730-0745		13	1	1			15	87	2		1		90	7	1				8	0					0
0745-0800		28				1	29	84	1	1	1		87	7		1			8	0					0
0800-0815		30	1				31	84	2	2	1		89	8		1			9	0					0
0815-0830		27					27	96			1		97	3	2				5	0					0
0830-0845		42			1		43	54	3		1		58	5	1				6	0					0
0845-0900		33		1			34	52	6	4			62	14	1				15	0					0
0900-0915		29					29	68		1	3		72	3	1				4	0					0
0915-0930		17					17	51	2	1	1		55	2	1	1			4	0					0
0730-0930		219	2	2	1	1	225	576	16	9	9	0	610	49	7	3	0	0	59	0	0	0	0	0	0
0730-0830		98	2	1	0	1	102	351	5	3	4	0	363	25	3	2	0	0	30	0	0	0	0	0	0
0745-0845		127	1	0	1	1	130	318	6	3	4	0	331	23	3	2	0	0	28	0	0	0	0	0	0
0800-0900		132	1	1	1	0	135	286	11	6	3	0	306	30	4	1	0	0	35	0	0	0	0	0	0
0815-0915		131	0	1	1	0	133	270	9	5	5	0	289	25	5	0	0	0	30	0	0	0	0	0	0
0830-0930		121	0	1	1	0	123	225	11	6	5	0	247	24	4	1	0	0	29	0	0	0	0	0	0
		IRONLATCH AVENUE LEFT TO GILLSMAN'S HILL						IRONLATCH AVENUE AHEAD TO HARLEY SHUTE ROAD						IRONLATCH AVENUE RIGHT TO CROWHURST RD						IRONLATCH AVENUE U TURNS					
		CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
1630-1645		17		1			18	72	1	1	2		76	8					8	0					0
1645-1700		24					24	63	3	1	1		68	7		1			8	0					0
1700-1715		32	2				34	70			1	1	72	3	1				4	0					0
1715-1730		33	1		2		36	66	3	1	1	1	72	2		1			3	0					0
1730-1745		22			1		23	59	2	1	2	1	65	2					2	0					0
1745-1800		30					30	60	1	1			62	1		1			2	0					0
1800-1815		36					36	61	1		4		66	3					3	0					0
1815-1830		27	1				28	64			1		65	4		1			5	0					0
1630-1830		221	4	1	3	0	229	515	11	5	12	3	546	30	1	4	0	0	35	0	0	0	0	0	0
1630-1730		106	3	1	2	0	112	271	7	3	5	2	288	20	1	2	0	0	23	0	0	0	0	0	0
1645-1745		111	3	0	3	0	117	258	8	3	5	3	277	14	1	2	0	0	17	0	0	0	0	0	0
1700-1800		117	3	0	3	0	123	255	6	3	4	3	271	8	1	2	0	0	11	0	0	0	0	0	0
1715-1815		121	1	0	3	0	125	246	7	3	7	2	265	8	0	2	0	0	10	0	0	0	0	0	0
1730-1830		115	1	0	1	0	117	244	4	2	7	1	258	10	0	2	0	0	12	0	0	0	0	0	0

K&M TRAFFIC SURVEYS

DATE : TUESDAY 25TH FEBRUARY 2014

LOCATION : HASTINGS, EAST SUSSEX

CROWHURST RD / HARLEY SHUTE RD / IRONLATCH AVE ROUNDABOUT

		GILLSMAN'S HILL LEFT TO HARLEY SHUTE ROAD						GILLSMAN'S HILL AHEAD TO CROWHURST ROAD						GILLSMAN'S HILL RIGHT TO IRONLATCH AVENUE						GILLSMAN'S HILL U TURNS					
		CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
0730-0745		22					22	45	1		1		47	16					16	0					0
0745-0800		21		1			22	62			1		63	35			1		36	1					1
0800-0815		17			1		18	66	1		2		69	21					21	0					0
0815-0830		34					34	71			1		72	20					20	0					0
0830-0845		20	1				21	77	1				78	28					28	0					0
0845-0900		14					14	63					63	19	1				20	0					0
0900-0915		9					9	49	1		3		53	19					19	0					0
0915-0930		5					5	41	1				42	9		2			11	0					0
0730-0930		142	1	1	1	0	145	474	5	0	8	0	487	167	1	2	1	0	171	1	0	0	0	0	1
0730-0830		94	0	1	1	0	96	244	2	0	5	0	251	92	0	0	1	0	93	1	0	0	0	0	1
0745-0845		92	1	1	1	0	95	276	2	0	4	0	282	104	0	0	1	0	105	1	0	0	0	0	1
0800-0900		85	1	0	1	0	87	277	2	0	3	0	282	88	1	0	0	0	89	0	0	0	0	0	0
0815-0915		77	1	0	0	0	78	260	2	0	4	0	266	86	1	0	0	0	87	0	0	0	0	0	0
0830-0930		48	1	0	0	0	49	230	3	0	3	0	236	75	1	2	0	0	78	0	0	0	0	0	0
		GILLSMAN'S HILL LEFT TO HARLEY SHUTE ROAD						GILLSMAN'S HILL AHEAD TO CROWHURST ROAD						GILLSMAN'S HILL RIGHT TO IRONLATCH AVENUE						GILLSMAN'S HILL U TURNS					
		CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
1630-1645		13					13	56					56	22	1				23	0					0
1645-1700		11					11	42					42	10	1				11	0					0
1700-1715		21					21	45	2				47	19	1				20	0					0
1715-1730		10					10	49	1	1			51	18	1	1			20	0					0
1730-1745		18					18	59					59	21			1		22	0					0
1745-1800		13					13	37					37	16			1		17	0					0
1800-1815		11			1		12	31		1			32	17			1		18	0					0
1815-1830		13					13	38					38	9	1				10	0					0
1630-1830		110	0	0	1	0	111	357	3	2	0	0	362	132	5	1	3	0	141	0	0	0	0	0	0
1630-1730		55	0	0	0	0	55	192	3	1	0	0	196	69	4	1	0	0	74	0	0	0	0	0	0
1645-1745		60	0	0	0	0	60	195	3	1	0	0	199	68	3	1	1	0	73	0	0	0	0	0	0
1700-1800		62	0	0	0	0	62	190	3	1	0	0	194	74	2	1	2	0	79	0	0	0	0	0	0
1715-1815		52	0	0	1	0	53	176	1	2	0	0	179	72	1	1	3	0	77	0	0	0	0	0	0
1730-1830		55	0	0	1	0	56	165	0	1	0	0	166	63	1	0	3	0	67	0	0	0	0	0	0

K&M TRAFFIC SURVEYS

DATE : TUESDAY 25TH FEBRUARY 2014

LOCATION : HASTINGS, EAST SUSSEX

CROWHURST RD / HARLEY SHUTE RD / IRONLATCH AVE ROUNDABOUT

		HARLEY SHUTE ROAD LEFT TO CROWHURST ROAD						HARLEY SHUTE ROAD AHEAD TO IRONLATCH AVENUE						HARLEY SHUTE ROAD RIGHT TO GILLSMAN'S HILL						HARLEY SHUTE ROAD U TURNS					
		CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
0730-0745		95	3	1	2	1	102	76		1		2	79	14					14	2					2
0745-0800		95	3	1		1	100	82	2		4		88	21					21	1					1
0800-0815		72	1			1	74	75	1		1		77	23					23	0					0
0815-0830		94	7		2		103	73	1	2	2	1	79	27					27	1					1
0830-0845		104	4	1			109	69	4				73	38					38	0					0
0845-0900		102	1		1	1	105	72	2	3	2		79	16	1	1			18	0					0
0900-0915		69	6		1		76	71	1	1	1		74	24					24	0					0
0915-0930		51	3				54	53	1	1			55	14	1				15	0					0
0730-0930		682	28	3	6	4	723	571	12	8	10	3	604	177	2	1	0	0	180	4	0	0	0	0	4
0730-0830		356	14	2	4	3	379	306	4	3	7	3	323	85	0	0	0	0	85	4	0	0	0	0	4
0745-0845		365	15	2	2	2	386	299	8	2	7	1	317	109	0	0	0	0	109	2	0	0	0	0	2
0800-0900		372	13	1	3	2	391	289	8	5	5	1	308	104	1	1	0	0	106	1	0	0	0	0	1
0815-0915		369	18	1	4	1	393	285	8	6	5	1	305	105	1	1	0	0	107	1	0	0	0	0	1
0830-0930		326	14	1	2	1	344	265	8	5	3	0	281	92	2	1	0	0	95	0	0	0	0	0	0
		HARLEY SHUTE ROAD LEFT TO CROWHURST ROAD						HARLEY SHUTE ROAD AHEAD TO IRONLATCH AVENUE						HARLEY SHUTE ROAD RIGHT TO GILLSMAN'S HILL						HARLEY SHUTE ROAD U TURNS					
		CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
1630-1645		68	1				69	72	1	1	1	1	76	20					20	0					0
1645-1700		64	1		2		67	69	1	2			72	22			2		24	0					0
1700-1715		55	2				57	75	3	1	2		81	13	1		1		15	0					0
1715-1730		78					78	79	1	1	1		82	17					17	0					0
1730-1745		62	4	1			67	76		1			77	16			2		18	0					0
1745-1800		72					72	69	1	1	1	1	73	18					18	0					0
1800-1815		48			1		49	71	1		1		73	14					14	0					0
1815-1830		62	3				65	73					73	10					10	0					0
1630-1830		509	11	1	3	0	524	584	8	7	6	2	607	130	1	0	5	0	136	0	0	0	0	0	0
1630-1730		265	4	0	2	0	271	295	6	5	4	1	311	72	1	0	3	0	76	0	0	0	0	0	0
1645-1745		259	7	1	2	0	269	299	5	5	3	0	312	68	1	0	5	0	74	0	0	0	0	0	0
1700-1800		267	6	1	0	0	274	299	5	4	4	1	313	64	1	0	3	0	68	0	0	0	0	0	0
1715-1815		260	4	1	1	0	266	295	3	3	3	1	305	65	0	0	2	0	67	0	0	0	0	0	0
1730-1830		244	7	1	1	0	253	289	2	2	2	1	296	58	0	0	2	0	60	0	0	0	0	0	0

K&M TRAFFIC SURVEYS

DATE : TUESDAY 25TH FEBRUARY 2014

LOCATION : HASTINGS, EAST SUSSEX

DARWELL CLOSE / HARLEY SHUTE RD PRIORITY JUNCTION

		DARWELL CLOSE OUT LEFT TO HARLEY SHUTE RD						DARWELL CLOSE OUT RIGHT TO HARLEY SHUTE RD S						DARWELL CLOSE RIGHT TURN IN FROM HARLEY SHUTE RD						DARWELL CLOSE LEFT TURN IN FROM HARLEY SHUTE RD					
		CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
0730-0745		8					8	1					1	3					3	1					1
0745-0800		18					18	5					5	4	1				5	0					0
0800-0815		8					8	2					2	4					4	2					2
0815-0830		14					14	8					8	2		1			3	3					3
0830-0845		15					15	5		1			6	3					3	4					4
0845-0900		4					4	0					0	2					2	4					4
0900-0915		8					8	4					4	5					5	3					3
0915-0930		4					4	3					3	2					2	2					2
0730-0930		79	0	0	0	0	79	28	0	1	0	0	29	25	1	1	0	0	27	19	0	0	0	0	19
0730-0830		48	0	0	0	0	48	16	0	0	0	0	16	13	1	1	0	0	15	6	0	0	0	0	6
0745-0845		55	0	0	0	0	55	20	0	1	0	0	21	13	1	1	0	0	15	9	0	0	0	0	9
0800-0900		41	0	0	0	0	41	15	0	1	0	0	16	11	0	1	0	0	12	13	0	0	0	0	13
0815-0915		41	0	0	0	0	41	17	0	1	0	0	18	12	0	1	0	0	13	14	0	0	0	0	14
0830-0930		31	0	0	0	0	31	12	0	1	0	0	13	12	0	0	0	0	12	13	0	0	0	0	13
		DARWELL CLOSE OUT LEFT TO HARLEY SHUTE RD						DARWELL CLOSE OUT RIGHT TO HARLEY SHUTE RD S						DARWELL CLOSE RIGHT TURN IN FROM HARLEY SHUTE RD						DARWELL CLOSE LEFT TURN IN FROM HARLEY SHUTE RD					
		CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
1630-1645		3					3	6					6	9					9	3					3
1645-1700		3					3	2					2	9					9	1					1
1700-1715		4					4	3					3	6					6	4					4
1715-1730		4					4	4					4	11					11	1					1
1730-1745		4					4	0					0	4					4	5					5
1745-1800		5					5	0					0	11					11	1			1		2
1800-1815		5					5	6					6	6					6	7					7
1815-1830		9					9	1					1	13					13	2					2
1630-1830		37	0	0	0	0	37	22	0	0	0	0	22	69	0	0	0	0	69	24	0	0	0	1	25
1630-1730		14	0	0	0	0	14	15	0	0	0	0	15	35	0	0	0	0	35	9	0	0	0	0	9
1645-1745		15	0	0	0	0	15	9	0	0	0	0	9	30	0	0	0	0	30	11	0	0	0	0	11
1700-1800		17	0	0	0	0	17	7	0	0	0	0	7	32	0	0	0	0	32	11	0	0	0	1	12
1715-1815		18	0	0	0	0	18	10	0	0	0	0	10	32	0	0	0	0	32	14	0	0	0	1	15
1730-1830		23	0	0	0	0	23	7	0	0	0	0	7	34	0	0	0	0	34	15	0	0	0	1	16

K&M TRAFFIC SURVEYS

DATE : TUESDAY 25TH FEBRUARY 2014

LOCATION : HASTINGS, EAST SUSSEX

DARWELL CLOSE / HARLEY SHUTE RD PRIORITY JUNCTION

HARTLEY SHUTE ROAD STRAIGHT AHEAD SOUTHBOUND						
	CAR	HGV	BUS	MCY	PCY	TOT
0730-0745	164	5	1	1		171
0745-0800	157	5	1	1		164
0800-0815	164	6	3	2		175
0815-0830	184	2	1	1		188
0830-0845	164	11	2	2		179
0845-0900	114	14	6			134
0900-0915	140	6	1	2		149
0915-0930	116	4	1	1		122
0730-0930	1203	53	16	10	0	1282
0730-0830	669	18	6	5	0	698
0745-0845	669	24	7	6	0	706
0800-0900	626	33	12	5	0	676
0815-0915	602	33	10	5	0	650
0830-0930	534	35	10	5	0	584

HARTLEY SHUTE ROAD STRAIGHT AHEAD NORTHBOUND						
	CAR	HGV	BUS	MCY	PCY	TOT
	182	4	3	1	3	193
	175	6	2	4	1	188
	172	3		1	1	177
	168			4	1	173
	201	8	2			211
	186	4	5	3	1	199
	156	7	3	1		167
	123	5	2			130
	1363	37	17	14	7	1438
0730-0830	697	13	5	10	6	731
0745-0845	716	17	4	9	3	749
0800-0900	727	15	7	8	3	760
0815-0915	711	19	10	8	2	750
0830-0930	666	24	12	4	1	707

HARTLEY SHUTE ROAD STRAIGHT AHEAD SOUTHBOUND						
	CAR	HGV	BUS	MCY	PCY	TOT
1630-1645	148	3	1	3		155
1645-1700	152	4	1	2	1	160
1700-1715	167	1	1		3	172
1715-1730	153	4	2	2	3	164
1730-1745	146	3	1	6	2	158
1745-1800	146		1			147
1800-1815	139	1	2	4	1	147
1815-1830	150	2	1	1		154
1630-1830	1201	18	10	18	10	1257
1630-1730	620	12	5	7	7	651
1645-1745	618	12	5	10	9	654
1700-1800	612	8	5	8	8	641
1715-1815	584	8	6	12	6	616
1730-1830	581	6	5	11	3	606

HARTLEY SHUTE ROAD STRAIGHT AHEAD NORTHBOUND						
	CAR	HGV	BUS	MCY	PCY	TOT
	147	2	1	1		151
	158	2	3	4		167
	136	6		3		145
	179	2	2	1		184
	134	4	3	2	2	145
	156	2	1	1	1	161
	131	1		2	1	135
	147	3				150
	1188	22	10	14	4	1238
1630-1730	620	12	6	9	0	647
1645-1745	607	14	8	10	2	641
1700-1800	605	14	6	7	3	635
1715-1815	600	9	6	6	4	625
1730-1830	568	10	4	5	4	591

K&M TRAFFIC SURVEYS

DATE : TUESDAY 25TH FEBRUARY 2014

LOCATION : HASTINGS, EAST SUSSEX

DARWELL CLOSE / SCHOOL ACCESS JUNCTION

DARWELL CLOSE STRAIGHT AHEAD WESTBOUND						
	CAR	HGV	BUS	MCY	PCY	TOT
0730-0745	4					4
0745-0800	3					3
0800-0815	5					5
0815-0830	5		1			6
0830-0845	7					7
0845-0900	6					6
0900-0915	8					8
0915-0930	4					4
0730-0930	42	0	1	0	0	43
0730-0830	17	0	1	0	0	18
0745-0845	20	0	1	0	0	21
0800-0900	23	0	1	0	0	24
0815-0915	26	0	1	0	0	27
0830-0930	25	0	0	0	0	25

DARWELL CLOSE STRAIGHT AHEAD EAST TO H.SHUTE RD						
	CAR	HGV	BUS	MCY	PCY	TOT
	9					9
	23					23
	10					10
	22					22
	20		1			21
	4					4
	12					12
	7					7
	107	0	1	0	0	108
	64	0	0	0	0	64
	75	0	1	0	0	76
	56	0	1	0	0	57
	58	0	1	0	0	59
	43	0	1	0	0	44

SCHOOL ACCESS CLOSED
SITE USED FOR POLICE DOG TRAINING

(3 vehicles in are tree surgeons)

DARWELL CLOSE STRAIGHT AHEAD WESTBOUND						
	CAR	HGV	BUS	MCY	PCY	TOT
1630-1645	12					12
1645-1700	10					10
1700-1715	8					8
1715-1730	12					12
1730-1745	9					9
1745-1800	12				1	13
1800-1815	13					13
1815-1830	15					15
1630-1830	91	0	0	0	1	92
1630-1730	42	0	0	0	0	42
1645-1745	39	0	0	0	0	39
1700-1800	41	0	0	0	1	42
1715-1815	46	0	0	0	1	47
1730-1830	49	0	0	0	1	50

DARWELL CLOSE STRAIGHT AHEAD EAST TO H.SHUTE RD						
	CAR	HGV	BUS	MCY	PCY	TOT
	9					9
	5					5
	7					7
	8					8
	4					4
	5					5
	11					11
	10					10
	59	0	0	0	0	59
	29	0	0	0	0	29
	24	0	0	0	0	24
	24	0	0	0	0	24
	28	0	0	0	0	28
	30	0	0	0	0	30

(2 vehicles in are police cars)

APPENDIX E: TRICS Assessments

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
 Category : B - SECONDARY

VEHICLESSelected regions and areas:**02 SOUTH EAST**

SC	SURREY	1 days
WS	WEST SUSSEX	2 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:	Number of pupils
Actual Range:	456 to 1523 (units:)
Range Selected by User:	456 to 1780 (units:)

Public Transport Provision:

Selection by:	Include all surveys
---------------	---------------------

Date Range:	01/01/05 to 10/11/10
-------------	----------------------

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:

Wednesday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	3 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)	2
Edge of Town	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:

Residential Zone	3
------------------	---

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

Filtering Stage 3 selection:Use Class:

D1 3 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:

1,001 to 5,000 1 days

10,001 to 15,000 1 days

15,001 to 20,000 1 days

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

Population within 5 miles:

100,001 to 125,000 1 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:

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.

Travel Plan:

Yes 2 days

No 1 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	SC-04-B-02	SECONDARY SCH.	SURREY
	SUMMERS ROAD		
	FARNCOMBE		
	GODALMING		
	Edge of Town		
	Residential Zone		
	Total Number of pupils:	456	
	Survey date: THURSDAY	21/10/10	Survey Type: MANUAL
2	WS-04-B-02	SECONDARY SCHOOL	WEST SUSSEX
	ASHDOWN DRIVE		
	TILGATE		
	CRAWLEY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of pupils:	1327	
	Survey date: WEDNESDAY	28/11/07	Survey Type: MANUAL
3	WS-04-B-03	SECONDARY SCHOOL	WEST SUSSEX
	STATION ROAD		
	ANGMERING		
	LITTLEHAMPTON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of pupils:	1523	
	Survey date: WEDNESDAY	10/11/10	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 04 - EDUCATION/B - SECONDARY

VEHICLES**Calculation factor: 1 PUPILS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	3	1102	0.055	3	1102	0.012	3	1102	0.067
08:00 - 09:00	3	1102	0.189	3	1102	0.121	3	1102	0.310
09:00 - 10:00	3	1102	0.029	3	1102	0.023	3	1102	0.052
10:00 - 11:00	3	1102	0.017	3	1102	0.019	3	1102	0.036
11:00 - 12:00	3	1102	0.019	3	1102	0.022	3	1102	0.041
12:00 - 13:00	3	1102	0.017	3	1102	0.022	3	1102	0.039
13:00 - 14:00	3	1102	0.018	3	1102	0.020	3	1102	0.038
14:00 - 15:00	3	1102	0.035	3	1102	0.025	3	1102	0.060
15:00 - 16:00	3	1102	0.083	3	1102	0.125	3	1102	0.208
16:00 - 17:00	3	1102	0.026	3	1102	0.062	3	1102	0.088
17:00 - 18:00	3	1102	0.016	3	1102	0.029	3	1102	0.045
18:00 - 19:00	3	1102	0.026	3	1102	0.039	3	1102	0.065
19:00 - 20:00	1	1523	0.002	1	1523	0.014	1	1523	0.016
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.532			0.533			1.065

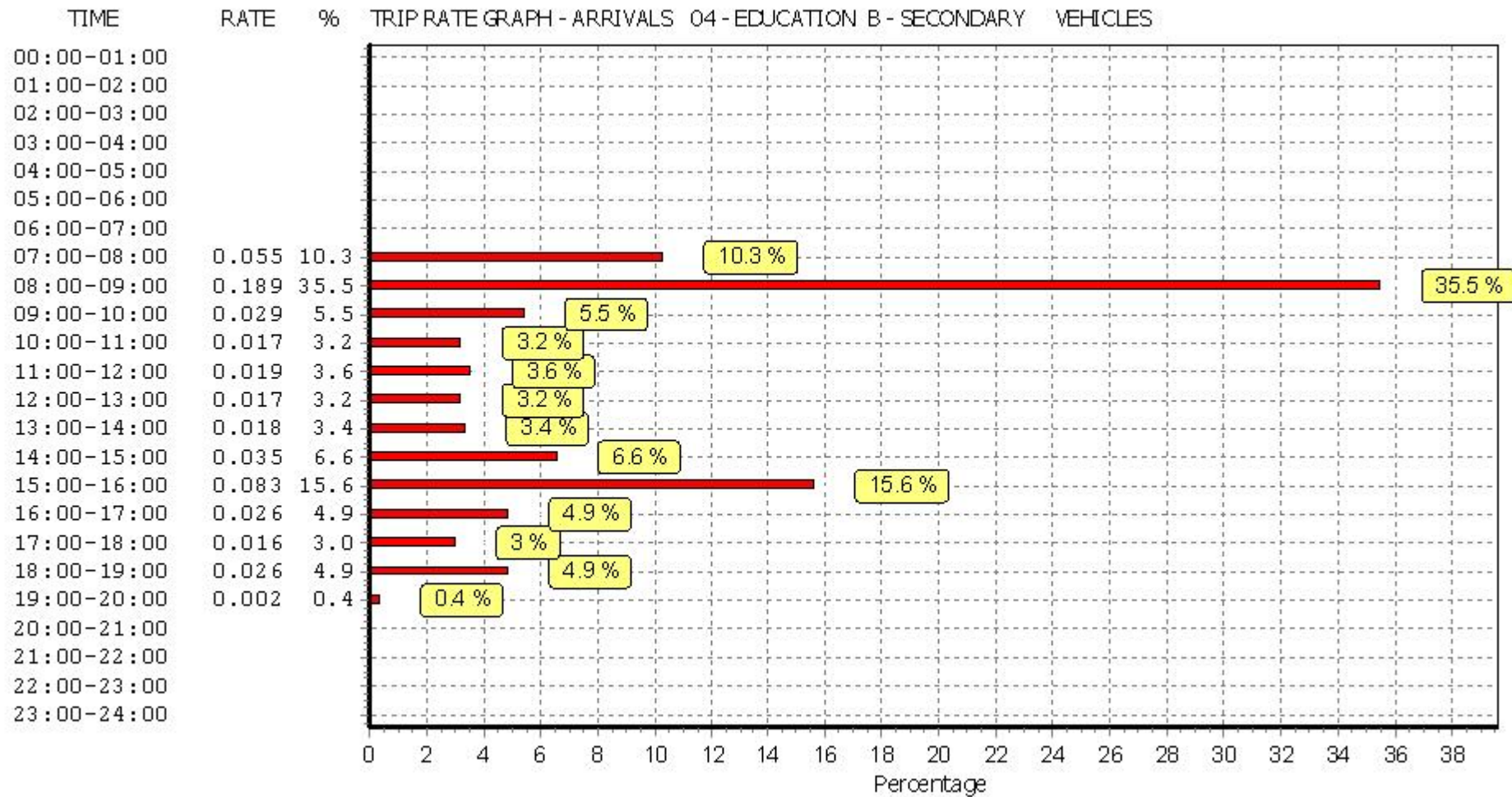
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are 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.

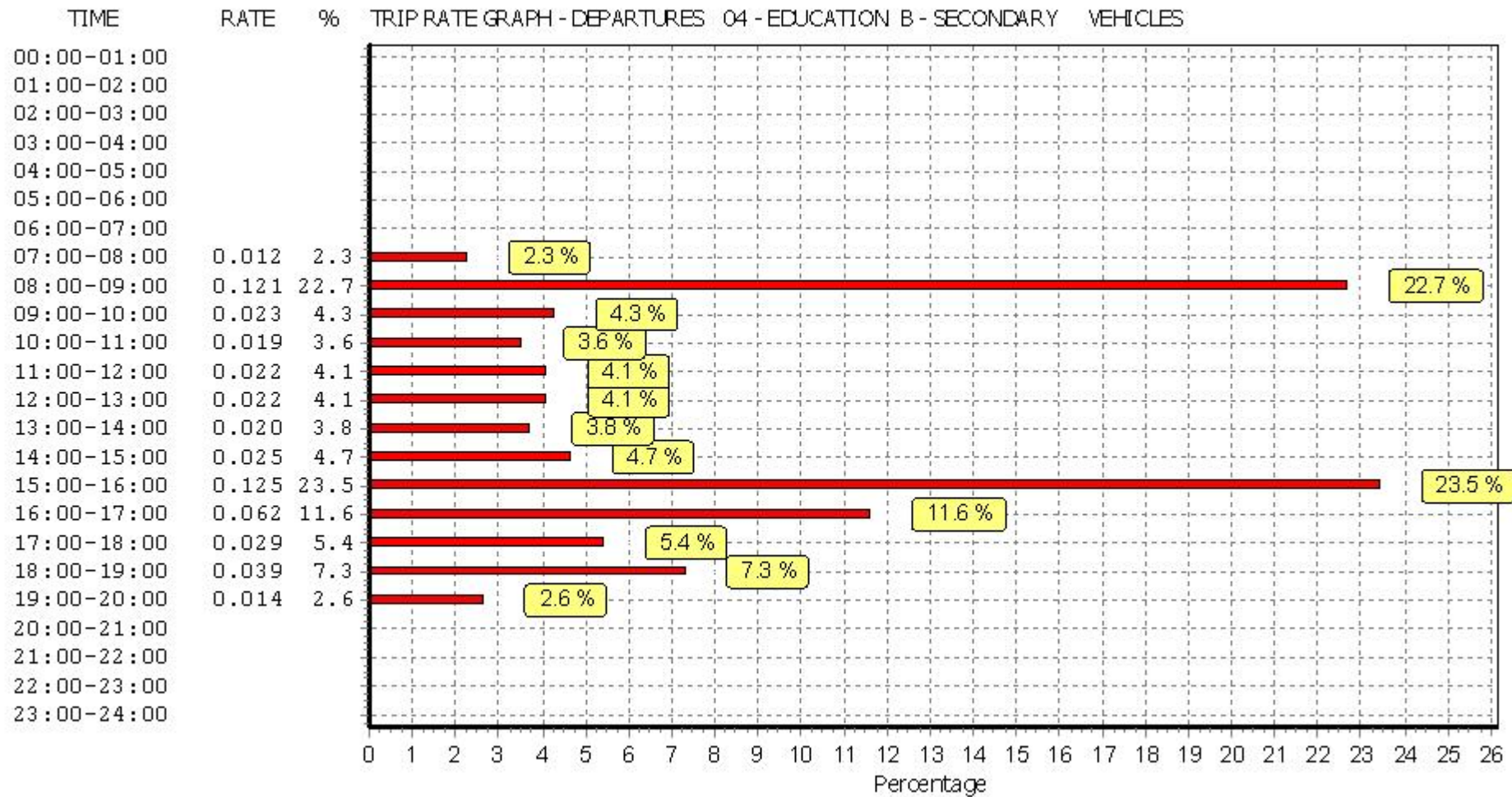
Parameter summary

Trip rate parameter range selected:	456 - 1523 (units:)
Survey date date range:	01/01/05 - 10/11/10
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

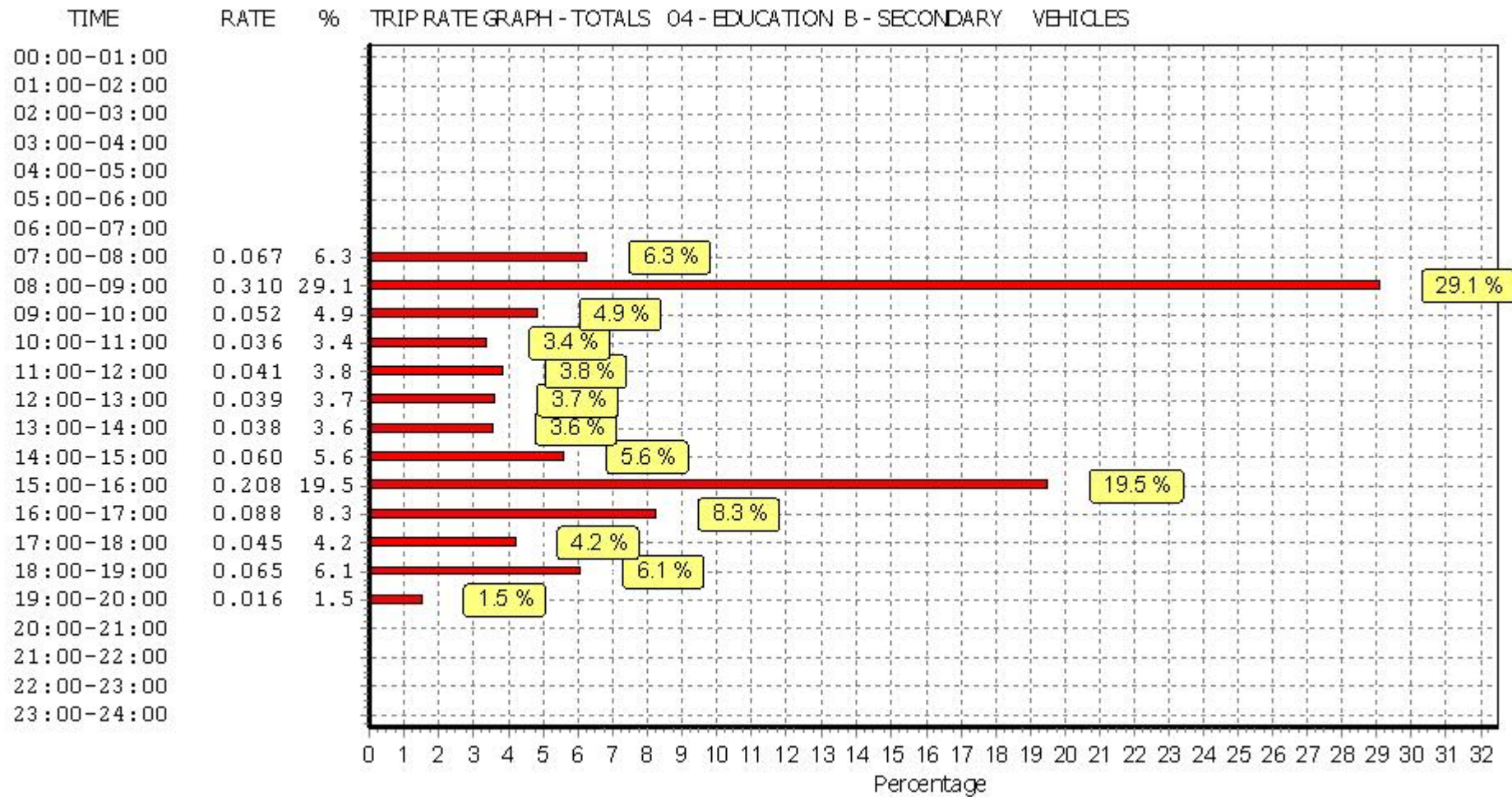
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected 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.



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



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



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

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED

VEHICLESSelected regions and areas:

02 SOUTH EAST		
EX ESSEX		1 days
05 EAST MIDLANDS		
LN LINCOLNSHIRE		2 days
NT NOTTINGHAMSHIRE		1 days
06 WEST MIDLANDS		
SH SHROPSHIRE		1 days
WM WEST MIDLANDS		2 days
WO WORCESTERSHIRE		3 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: Number of dwellings
 Actual Range: 48 to 237 (units:)
 Range Selected by User: 6 to 4334 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 22/09/12

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

Selected survey days:

Monday	2 days
Tuesday	3 days
Wednesday	1 days
Thursday	2 days
Friday	2 days

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

Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Edge of Town	6

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:

Residential Zone	7
No Sub Category	3

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

Filtering Stage 3 selection:Use Class:

C3 10 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:

10,001 to 15,000	2 days
15,001 to 20,000	4 days
20,001 to 25,000	2 days
25,001 to 50,000	2 days

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

Population within 5 miles:

75,001 to 100,000	3 days
100,001 to 125,000	3 days
125,001 to 250,000	2 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	3 days
1.1 to 1.5	6 days

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

Travel Plan:

No 10 days

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

LIST OF SITES relevant to selection parameters

1	EX-03-A-01	SEMI-DET.		ESSEX
	MILTON ROAD			
	CORRINGHAM			
	STANFORD-LE-HOPE			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:		237	
	Survey date: TUESDAY		13/05/08	Survey Type: MANUAL
2	LN-03-A-01	MIXED HOUSES		LINCOLNSHIRE
	BRANT ROAD			
	BRACEBRIDGE			
	LINCOLN			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:		150	
	Survey date: TUESDAY		15/05/07	Survey Type: MANUAL
3	LN-03-A-02	MIXED HOUSES		LINCOLNSHIRE
	HYKEHAM ROAD			
	LINCOLN			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:		186	
	Survey date: MONDAY		14/05/07	Survey Type: MANUAL
4	NT-03-A-03	SEMI DETACHED		NOTTINGHAMSHIRE
	B6018 SUTTON ROAD			
	KIRKBY-IN-ASHFIELD			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:		166	
	Survey date: WEDNESDAY		28/06/06	Survey Type: MANUAL
5	SH-03-A-04	TERRACED		SHROPSHIRE
	ST MICHAEL'S STREET			
	SHREWSBURY			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Number of dwellings:		108	
	Survey date: THURSDAY		11/06/09	Survey Type: MANUAL
6	WM-03-A-01	TERRACED		WEST MIDLANDS
	FOLESHILL ROAD			
	FOLESHILL			
	COVENTRY			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:		79	
	Survey date: FRIDAY		03/02/06	Survey Type: MANUAL
7	WM-03-A-03	MIXED HOUSING		WEST MIDLANDS
	BASELEY WAY			
	ROWLEYS GREEN			
	COVENTRY			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:		84	
	Survey date: MONDAY		24/09/07	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	WO-03-A-02	SEMI DETACHED		WORCESTERSHIRE
	MEADOWHILL ROAD			
	REDDITCH			
	Edge of Town			
	No Sub Category			
	Total Number of dwellings:		48	
	Survey date: TUESDAY		02/05/06	Survey Type: MANUAL
9	WO-03-A-03	DETACHED		WORCESTERSHIRE
	BLAKEBROOK			
	BLAKEBROOK			
	KIDDERMINSTER			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:		138	
	Survey date: FRIDAY		05/05/06	Survey Type: MANUAL
10	WO-03-A-06	DET./TERRACED		WORCESTERSHIRE
	ST GODWALDS ROAD			
	ASTON FIELDS			
	BROMSGROVE			
	Edge of Town			
	No Sub Category			
	Total Number of dwellings:		232	
	Survey date: THURSDAY		30/06/05	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
ES-03-A-02	Too small.
LE-03-A-01	Too small.
LN-03-A-03	Too small.
SH-03-A-03	Too small.
ST-03-A-05	Too small.
WK-03-A-01	Too Small.
WM-03-A-02	Too small.
WO-03-A-01	Too small.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	10	143	0.088	10	143	0.318	10	143	0.406
08:00 - 09:00	10	143	0.174	10	143	0.443	10	143	0.617
09:00 - 10:00	10	143	0.172	10	143	0.239	10	143	0.411
10:00 - 11:00	10	143	0.148	10	143	0.195	10	143	0.343
11:00 - 12:00	10	143	0.196	10	143	0.174	10	143	0.370
12:00 - 13:00	10	143	0.209	10	143	0.190	10	143	0.399
13:00 - 14:00	10	143	0.181	10	143	0.166	10	143	0.347
14:00 - 15:00	10	143	0.202	10	143	0.190	10	143	0.392
15:00 - 16:00	10	143	0.325	10	143	0.250	10	143	0.575
16:00 - 17:00	10	143	0.341	10	143	0.205	10	143	0.546
17:00 - 18:00	10	143	0.441	10	143	0.274	10	143	0.715
18:00 - 19:00	10	143	0.299	10	143	0.238	10	143	0.537
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.776			2.882			5.658

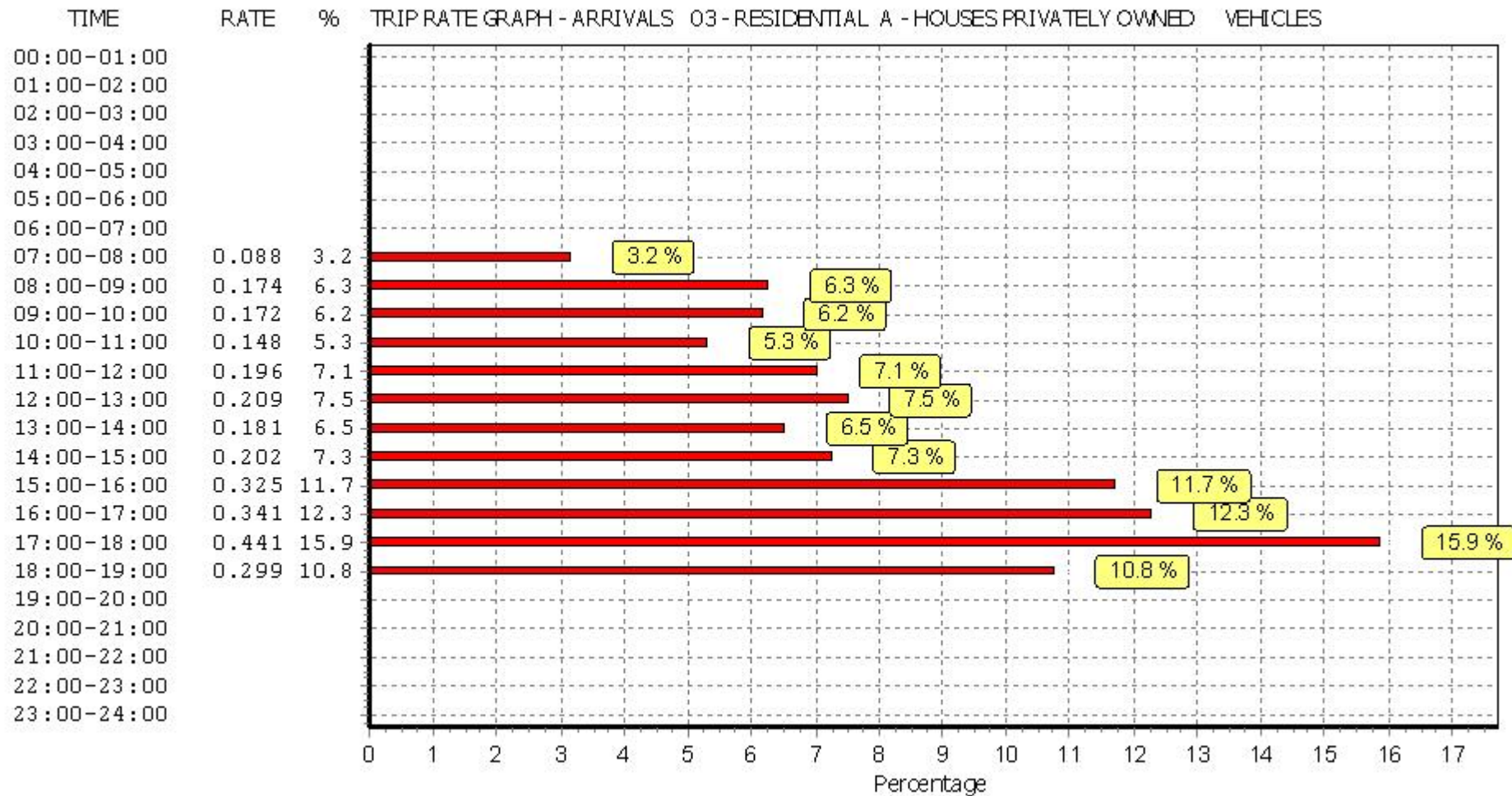
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are 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.

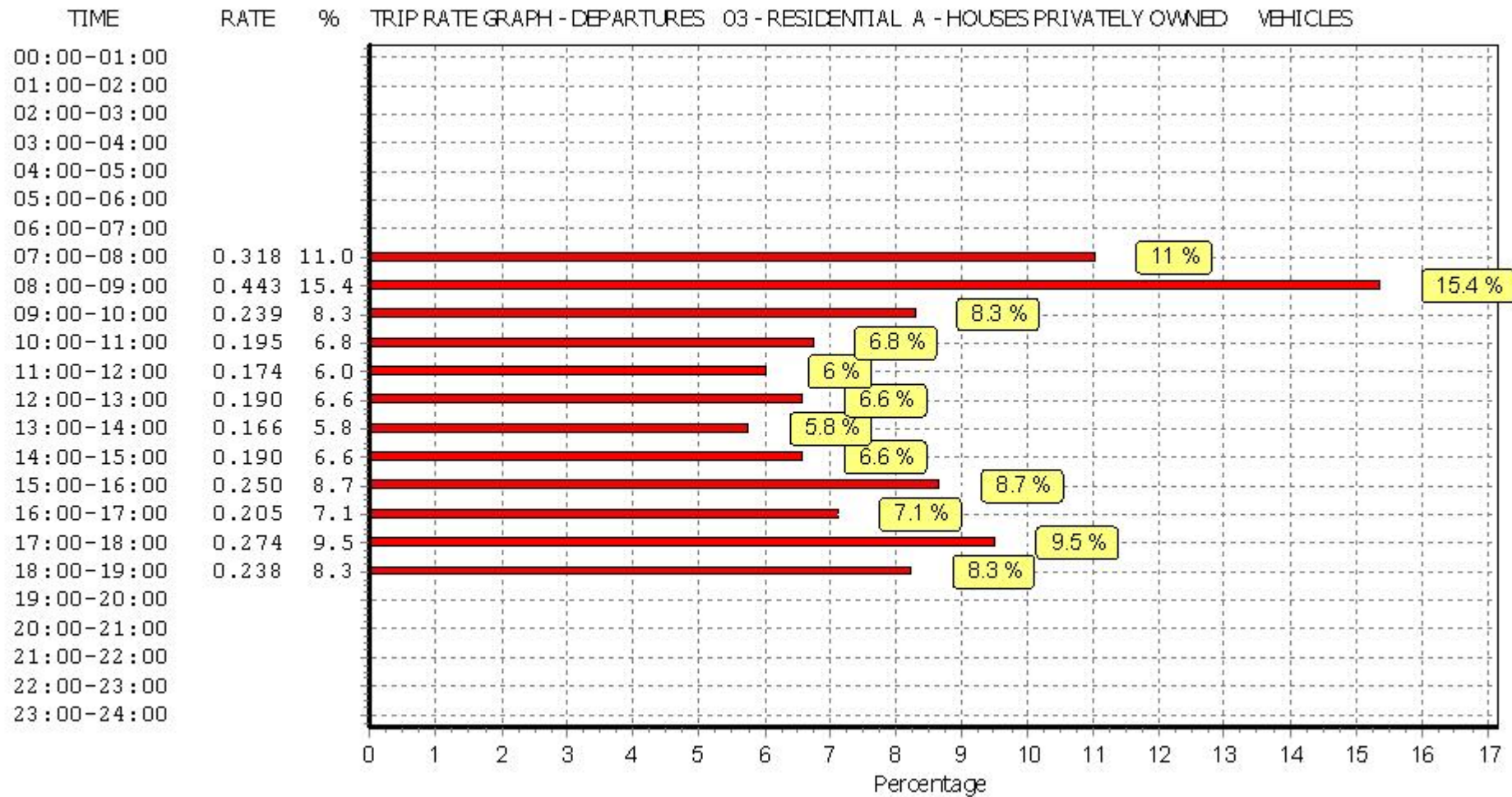
Parameter summary

Trip rate parameter range selected: 48 - 237 (units:)
 Survey date range: 01/01/05 - 22/09/12
 Number of weekdays (Monday-Friday): 10
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 8

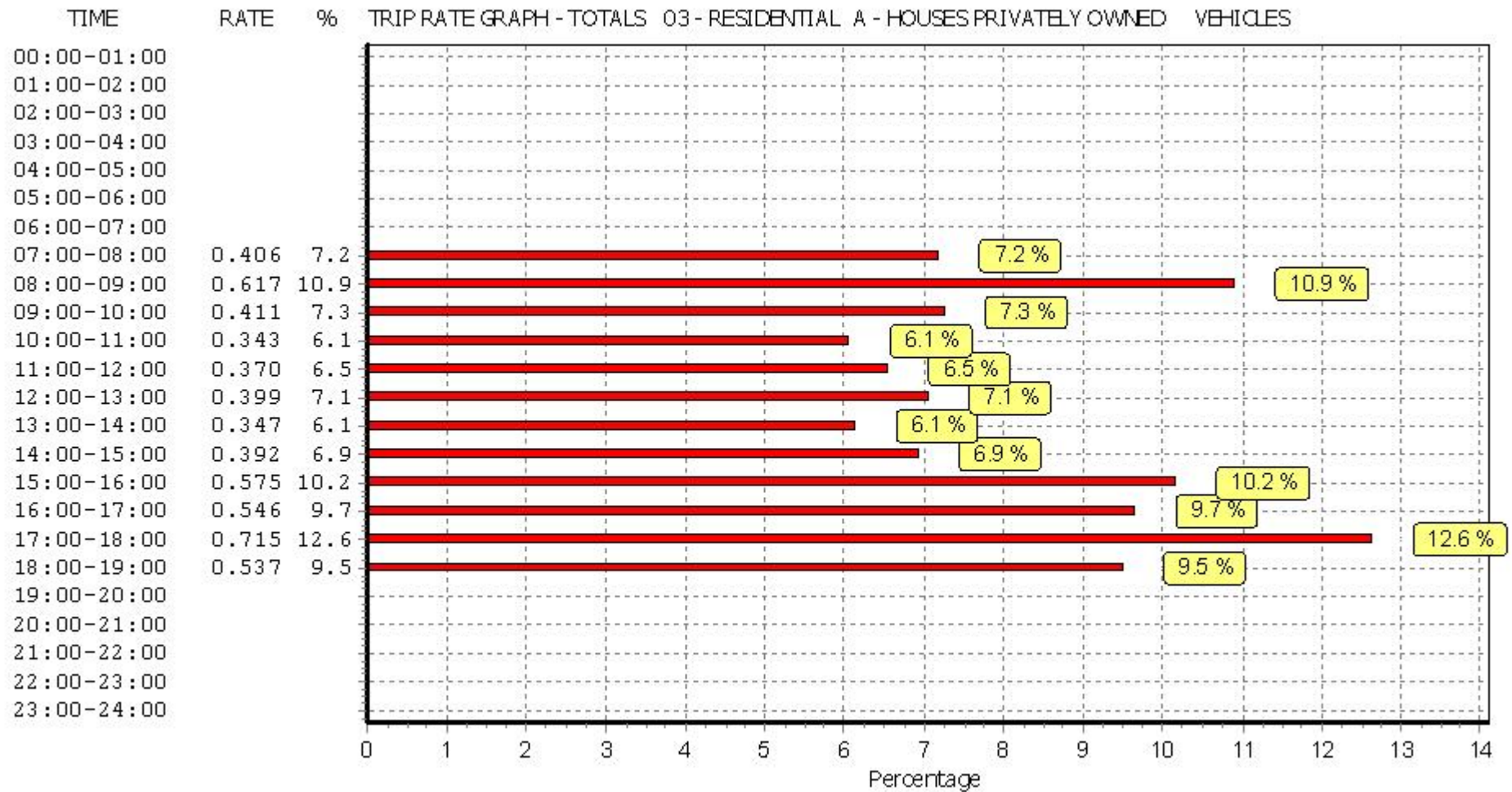
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected 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.



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



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



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

APPENDIX F: PICADY Modelling Results

TRL LIMITED

(C) COPYRIGHT 2010

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010) (Patch 15 Apr 2011)

ADAPTED FROM PICADY/3 WHICH IS CROWN COPYRIGHT
BY PERMISSION OF THE CONTROLLER OF HMSO

FOR SALES AND DISTRIBUTION INFORMATION,
PROGRAM ADVICE AND MAINTENANCE CONTACT:
TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF HIS/HER RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

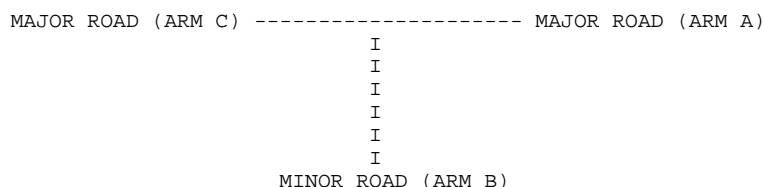
Run with file:-
"H:_Planning 1\Current Jobs\MBAHastings\Modelling and TRICS\PICADY 5\Site Access - Darwell Cl.vpi"
(drive-on-the-left) at 14:53:45 on Wednesday, 5 March 2014

RUN INFORMATION

RUN TITLE : Site Access - Darwell Close
LOCATION : Hastings
DATE : 05/03/14
CLIENT : MBA
ENUMERATOR : jgilby [MBWPC074]
JOB NUMBER : MBA Hastings
STATUS : Final Version
DESCRIPTION : Priority junction.

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Darwell Close (W)
ARM B IS Site Access
ARM C IS Darwell Close (E)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

 GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I	(W) 6.00 M.	I
I	CENTRAL RESERVE WIDTH	I	(WCR) 0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	(WC-B) 2.20 M.	I
I	- VISIBILITY	I	(VC-B) 100.00 M.	I
I	- BLOCKS TRAFFIC (SPACES)	I	YES (0)	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 75.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 17.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) -	I
I	- LANE 2 WIDTH	I	(WB-A) -	I
I	WIDTH AT 0 M FROM JUNCTION	I	10.00 M.	I
I	WIDTH AT 5 M FROM JUNCTION	I	3.70 M.	I
I	WIDTH AT 10 M FROM JUNCTION	I	2.50 M.	I
I	WIDTH AT 15 M FROM JUNCTION	I	2.50 M.	I
I	WIDTH AT 20 M FROM JUNCTION	I	2.50 M.	I
I	- LENGTH OF FLARED SECTION	I	DERIVED: 0 PCU	I

 .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I	
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM	C-B
I	0.00		0.00		0.00		0.00		0.00

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	631.87		0.24		0.24	I

(NB These values do not allow for any site specific corrections)

 TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE (%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: AM Base

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	6.51	0.000		0.00	0.00	0.0		0.00
B-A	0.00	7.53	0.000		0.00	0.00	0.0		0.00
C-AB	0.06	7.92	0.007		0.01	0.01	0.1		0.13
C-A	0.38								
A-B	0.00								
A-C	1.39								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	6.55	0.000		0.00	0.00	0.0		0.00
B-A	0.00	7.60	0.000		0.00	0.00	0.0		0.00
C-AB	0.05	7.92	0.006		0.01	0.01	0.1		0.13
C-A	0.31								
A-B	0.00								
A-C	1.14								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.00	6.58	0.000		0.00	0.00	0.0		0.00
B-A	0.00	7.65	0.000		0.00	0.00	0.0		0.00
C-AB	0.04	7.92	0.005		0.01	0.01	0.1		0.13
C-A	0.26								
A-B	0.00								
A-C	0.95								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.00
B-A	0.0	0.0	0.00
C-AB	4.3	2.9	0.6
C-A	28.7	19.2	
A-B	0.0	0.0	
A-C	104.6	69.7	
ALL	137.6	91.8	0.6

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-C	STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-C	STREAM A-B
631.87	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-C	0.00	6.66	0.000		0.00	0.00	0.0		0.00	I
I	B-A	0.00	7.71	0.000		0.00	0.00	0.0		0.00	I
I	C-AB	0.04	10.89	0.004		0.00	0.00	0.1		0.09	I
I	C-A	0.71									I
I	A-B	0.00									I
I	A-C	0.44									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.45-18.00										I
I	B-C	0.00	6.67	0.000		0.00	0.00	0.0		0.00	I
I	B-A	0.00	7.75	0.000		0.00	0.00	0.0		0.00	I
I	C-AB	0.03	10.82	0.003		0.00	0.00	0.0		0.09	I
I	C-A	0.58									I
I	A-B	0.00									I
I	A-C	0.36									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	18.00-18.15										I
I	B-C	0.00	6.68	0.000		0.00	0.00	0.0		0.00	I
I	B-A	0.00	7.77	0.000		0.00	0.00	0.0		0.00	I
I	C-AB	0.03	10.78	0.002		0.00	0.00	0.0		0.09	I
I	C-A	0.49									I
I	A-B	0.00									I
I	A-C	0.30									I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.00
B-A	0.0	0.0	0.00
C-AB	2.9	1.9	0.3
C-A	53.5	35.7	
A-B	0.0	0.0	
A-C	33.0	22.0	
ALL	89.5	59.6	0.3

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-C	STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-C	STREAM A-B
631.87	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: AM Total

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.95	10.48	0.186		0.23	0.23	3.4		0.12
B-A	0.00	8.54	0.000		0.00	0.00	0.0		0.00
C-AB	0.86	10.22	0.084		0.10	0.10	1.4		0.11
C-A	0.35								
A-B	0.00								
A-C	1.39								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.59	10.54	0.151		0.23	0.18	2.7		0.11
B-A	0.00	8.67	0.000		0.00	0.00	0.0		0.00
C-AB	0.70	10.23	0.068		0.10	0.08	1.1		0.10
C-A	0.29								
A-B	0.00								
A-C	1.14								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	1.33	10.59	0.126		0.18	0.14	2.2		0.11
B-A	0.00	8.77	0.000		0.00	0.00	0.0		0.00
C-AB	0.58	10.24	0.057		0.08	0.06	0.9		0.10
C-A	0.25								
A-B	0.00								
A-C	0.95								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2
09.15	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	145.9	16.3	0.11
B-A	0.0	0.0	0.00
C-AB	64.0	7.0	0.11
C-A	26.8	17.9	
A-B	0.0		
A-C	104.6		
ALL	341.4	23.3	0.07

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-C	STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-C	STREAM A-B
631.87	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: PM Total

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.21	10.72	0.113		0.13	0.13	1.9		0.11
B-A	0.00	8.33	0.000		0.00	0.00	0.0		0.00
C-AB	2.08	10.89	0.191		0.25	0.25	3.8		0.11
C-A	0.58								
A-B	0.00								
A-C	0.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.99	10.74	0.092		0.13	0.10	1.6		0.10
B-A	0.00	8.50	0.000		0.00	0.00	0.0		0.00
C-AB	1.68	10.82	0.155		0.25	0.19	2.9		0.11
C-A	0.49								
A-B	0.00								
A-C	0.36								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.83	10.76	0.077		0.10	0.08	1.3		0.10
B-A	0.00	8.63	0.000		0.00	0.00	0.0		0.00
C-AB	1.39	10.78	0.129		0.19	0.16	2.3		0.11
C-A	0.43								
A-B	0.00								
A-C	0.30								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN)
B-C	90.8	9.3	9.3
B-A	0.0	0.0	0.0
C-AB	154.6	17.9	17.9
C-A	45.0		
A-B	0.0		
A-C	33.0		
ALL	323.5	27.2	27.2

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

==== end of file =====

TRL LIMITED

(C) COPYRIGHT 2010

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010) (Patch 15 Apr 2011)

ADAPTED FROM PICADY/3 WHICH IS CROWN COPYRIGHT
BY PERMISSION OF THE CONTROLLER OF HMSO

FOR SALES AND DISTRIBUTION INFORMATION,
PROGRAM ADVICE AND MAINTENANCE CONTACT:
TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF HIS/HER RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

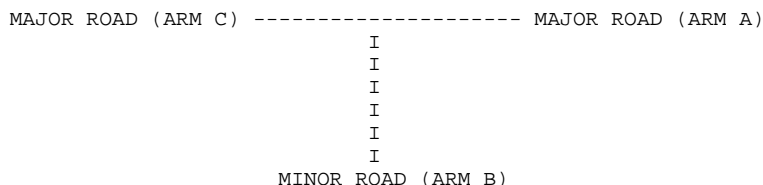
Run with file:-
"H:_Planning 1\Current Jobs\MBAHastings\Modelling and TRICS\PICADY 5\Darwall Cl - Harley Shute Rd.vpi"
(drive-on-the-left) at 12:24:00 on Friday, 6 June 2014

RUN INFORMATION

RUN TITLE : Darwell Close/Harley Shute Road
LOCATION : Hastings
DATE : 06/06/14
CLIENT : MBA
ENUMERATOR : jgilby [MBWPC074]
JOB NUMBER : MBAHastings.1
STATUS : Final Version
DESCRIPTION : Priority junction.

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Harley Shute Road (W)
ARM B IS Darwell Close
ARM C IS Harley Shute Road (E)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

 GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I (W)	7.35 M.	I
I	CENTRAL RESERVE WIDTH	I (WCR)	0.00 M.	I
I	MAJOR ROAD RIGHT TURN - WIDTH	I (WC-B)	2.20 M.	I
I	- VISIBILITY	I (VC-B)	100.00 M.	I
I	- BLOCKS TRAFFIC (SPACES)	I	YES (0)	I
I	MINOR ROAD - VISIBILITY TO LEFT	I (VB-C)	25.0 M.	I
I	- VISIBILITY TO RIGHT	I (VB-A)	13.0 M.	I
I	- LANE 1 WIDTH	I (WB-C)	-	I
I	- LANE 2 WIDTH	I (WB-A)	-	I
I	WIDTH AT 0 M FROM JUNCTION	I	10.00 M.	I
I	WIDTH AT 5 M FROM JUNCTION	I	4.60 M.	I
I	WIDTH AT 10 M FROM JUNCTION	I	2.75 M.	I
I	WIDTH AT 15 M FROM JUNCTION	I	2.75 M.	I
I	WIDTH AT 20 M FROM JUNCTION	I	2.75 M.	I
I	- LENGTH OF FLARED SECTION	I DERIVED:	0 PCU	I

 .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I	
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM	C-B
I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	631.87	0.23	0.23	0.23	0.23	I

(NB These values do not allow for any site specific corrections)

 TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: AM Base

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.01	7.26	0.139		0.16	0.16	2.4		0.16
B-A	0.39	3.16	0.122		0.14	0.14	2.0		0.36
C-AB	1.14	15.92	0.072		0.13	0.13	1.9		0.07
C-A	12.09								
A-B	0.17								
A-C	13.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.82	7.95	0.104		0.16	0.12	1.8		0.14
B-A	0.31	4.03	0.078		0.14	0.09	1.4		0.27
C-AB	0.72	14.69	0.049		0.13	0.08	1.1		0.07
C-A	10.08								
A-B	0.13								
A-C	11.22								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.69	8.44	0.082		0.12	0.09	1.4		0.13
B-A	0.26	4.67	0.056		0.09	0.06	0.9		0.23
C-AB	0.45	13.44	0.034		0.08	0.05	0.7		0.08
C-A	8.59								
A-B	0.11								
A-C	9.40								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.2
08.45	0.2
09.00	0.1
09.15	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	75.7	10.9	0.14
B-A	28.9	8.3	0.29
C-AB	69.4	7.4	0.11
C-A	923.0		
A-B	12.4		
A-C	1030.9		
ALL	2140.3	26.6	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-C	STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-C	STREAM A-B
631.87	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.28	7.80	0.035		0.04	0.04	0.5		0.13
B-A	0.17	3.90	0.042		0.04	0.04	0.7		0.27
C-AB	1.95	16.39	0.119		0.27	0.28	4.2		0.07
C-A	10.60								
A-B	0.20								
A-C	11.76								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.22	8.36	0.027		0.04	0.03	0.4		0.12
B-A	0.13	4.75	0.028		0.04	0.03	0.5		0.22
C-AB	1.20	15.09	0.080		0.28	0.15	2.3		0.07
C-A	9.04								
A-B	0.16								
A-C	9.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.19	8.75	0.022		0.03	0.02	0.3		0.12
B-A	0.11	5.36	0.021		0.03	0.02	0.3		0.19
C-AB	0.86	14.29	0.060		0.15	0.10	1.5		0.07
C-A	7.73								
A-B	0.14								
A-C	8.04								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	20.6	13.8	2.6
B-A	12.4	8.3	2.8
C-AB	120.1	80.1	15.7
C-A	821.4	547.6	
A-B	15.1	10.1	
A-C	882.3	588.2	
ALL	1871.9	1248.0	21.1

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-C	STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-C	STREAM A-B
631.87	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: AM Total

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.87	6.61	0.283		0.39	0.39	5.8		0.21
B-A	1.25	3.11	0.401		0.63	0.65	9.6		0.54
C-AB	2.59	16.45	0.158		0.44	0.45	6.8		0.07
C-A	10.97								
A-B	0.50								
A-C	13.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.53	7.47	0.205		0.39	0.26	4.1		0.17
B-A	1.02	4.04	0.252		0.65	0.35	5.6		0.34
C-AB	1.53	14.98	0.102		0.45	0.22	3.4		0.07
C-A	9.54								
A-B	0.40								
A-C	11.22								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	1.28	8.05	0.159		0.26	0.19	3.0		0.15
B-A	0.85	4.71	0.181		0.35	0.23	3.6		0.26
C-AB	1.06	14.11	0.075		0.22	0.14	2.1		0.08
C-A	8.21								
A-B	0.34								
A-C	9.40								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.6 *
08.45	0.6 *
09.00	0.3
09.15	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.4
08.45	0.4
09.00	0.2
09.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	140.4	93.6	24.8
B-A	93.6	62.4	35.2
C-AB	155.2	103.5	24.1
C-A	862.0	574.6	
A-B	37.2	24.8	
A-C	1030.9	687.3	
ALL	2319.3	1546.2	84.0

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-C	STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-C	STREAM A-B
631.87	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: PM Total

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.81	7.79	0.104		0.11	0.11	1.7		0.14
B-A	0.70	3.62	0.192		0.23	0.23	3.5		0.34
C-AB	5.17	16.39	0.315		1.10	1.12	17.0		0.09
C-A	8.23								
A-B	1.05								
A-C	11.76								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.66	8.49	0.078		0.11	0.08	1.3		0.13
B-A	0.57	4.55	0.125		0.23	0.15	2.3		0.25
C-AB	3.21	15.13	0.212		1.12	0.63	9.6		0.08
C-A	7.73								
A-B	0.85								
A-C	9.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.55	8.97	0.062		0.08	0.07	1.0		0.12
B-A	0.48	5.22	0.091		0.15	0.10	1.6		0.21
C-AB	2.20	14.21	0.155		0.63	0.40	6.0		0.08
C-A	6.96								
A-B	0.72								
A-C	8.04								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.4
17.15	0.6 *
17.30	1.1 *
17.45	1.1 *
18.00	0.6 *
18.15	0.4

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	60.6	40.4	7.9
B-A	52.3	34.9	14.1
C-AB	316.5	211.0	63.8
C-A	688.3	458.9	
A-B	78.5	52.3	
A-C	882.3	588.2	
ALL	2078.4	1385.6	85.8

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

==== end of file =====

TRL LIMITED

(C) COPYRIGHT 2010

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010) (Patch 15 Apr 2011)

ADAPTED FROM PICADY/3 WHICH IS CROWN COPYRIGHT
BY PERMISSION OF THE CONTROLLER OF HMSO

FOR SALES AND DISTRIBUTION INFORMATION,
PROGRAM ADVICE AND MAINTENANCE CONTACT:
TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF HIS/HER RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

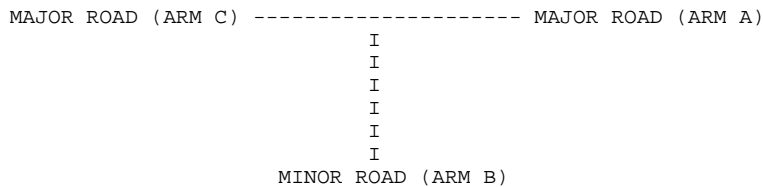
Run with file:-
"H:_Planning 1\Current Jobs\MBAHastings\Modelling and TRICS\PICADY 5\Darwall C1 - Harley Shute Rd RTL.vpi"
(drive-on-the-left) at 15:14:18 on Wednesday, 18 February 2015

RUN INFORMATION

RUN TITLE : Darwell Close/Harley Shute Road
LOCATION : Hastings
DATE : 06/06/14
CLIENT : MBA
ENUMERATOR : jgilby [MBWPC074]
JOB NUMBER : MBAHastings.1
STATUS : Final Version
DESCRIPTION : Priority junction.

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Harley Shute Road (W)
ARM B IS Darwell Close
ARM C IS Harley Shute Road (E)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

 GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I	(W) 9.00 M.	I
I	CENTRAL RESERVE WIDTH	I	(WCR) 0.00 M.	I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	(WC-B) 3.00 M.	I
I	- VISIBILITY	I	(VC-B) 100.00 M.	I
I	- BLOCKS TRAFFIC (SPACES)	I	YES (0)	I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 25.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 13.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) -	I
I	- LANE 2 WIDTH	I	(WB-A) -	I
I	WIDTH AT 0 M FROM JUNCTION	I	10.00 M.	I
I	WIDTH AT 5 M FROM JUNCTION	I	4.60 M.	I
I	WIDTH AT 10 M FROM JUNCTION	I	2.75 M.	I
I	WIDTH AT 15 M FROM JUNCTION	I	2.75 M.	I
I	WIDTH AT 20 M FROM JUNCTION	I	2.75 M.	I
I	- LENGTH OF FLARED SECTION	I	DERIVED: 0 PCU	I

 .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I	
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM	C-B
I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	686.89	0.23	0.23	0.23	0.23	I

(NB These values do not allow for any site specific corrections)

 TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: AM Base

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.01	7.53	0.134		0.15	0.15	2.3		0.15
B-A	0.39	3.52	0.109		0.12	0.12	1.8		0.32
C-AB	1.04	16.37	0.064		0.11	0.11	1.6		0.07
C-A	12.19								
A-B	0.17								
A-C	13.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.82	8.17	0.101		0.15	0.11	1.7		0.14
B-A	0.31	4.33	0.073		0.12	0.08	1.2		0.25
C-AB	0.67	15.20	0.044		0.11	0.06	1.0		0.07
C-A	10.13								
A-B	0.13								
A-C	11.22								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.69	8.62	0.080		0.11	0.09	1.3		0.13
B-A	0.26	4.92	0.054		0.08	0.06	0.9		0.21
C-AB	0.43	14.00	0.030		0.06	0.04	0.6		0.07
C-A	8.62								
A-B	0.11								
A-C	9.40								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.2
08.45	0.2
09.00	0.1
09.15	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	75.7	10.5	0.14
B-A	28.9	7.6	0.26
C-AB	64.1	6.3	0.10
C-A	928.3		
A-B	12.4		
A-C	1030.9		
ALL	2140.3	24.4	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-C	STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-C	STREAM A-B
686.89	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: PM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.28	8.03	0.034		0.04	0.04	0.5		0.13
B-A	0.17	4.26	0.039		0.04	0.04	0.6		0.24
C-AB	1.80	16.93	0.106		0.23	0.23	3.5		0.07
C-A	10.75								
A-B	0.20								
A-C	11.76								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.22	8.54	0.026		0.04	0.03	0.4		0.12
B-A	0.13	5.03	0.027		0.04	0.03	0.4		0.20
C-AB	1.13	15.70	0.072		0.23	0.13	1.9		0.07
C-A	9.12								
A-B	0.16								
A-C	9.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.19	8.90	0.021		0.03	0.02	0.3		0.11
B-A	0.11	5.60	0.020		0.03	0.02	0.3		0.18
C-AB	0.81	14.95	0.054		0.13	0.09	1.3		0.07
C-A	7.77								
A-B	0.14								
A-C	8.04								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	20.6	13.8	2.5
B-A	12.4	8.3	2.6
C-AB	111.9	74.6	13.3
C-A	829.5	553.0	
A-B	15.1	10.1	
A-C	882.3	588.2	
ALL	1871.9	1248.0	18.4

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-C	STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept	Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-C	STREAM A-B
686.89	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: AM Total

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.87	6.94	0.270		0.36	0.37	5.5		0.20
B-A	1.25	3.50	0.357		0.53	0.54	8.1		0.44
C-AB	2.37	16.93	0.140		0.36	0.36	5.5		0.07
C-A	11.19								
A-B	0.50								
A-C	13.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.53	7.71	0.198		0.37	0.25	3.9		0.16
B-A	1.02	4.35	0.234		0.54	0.31	5.0		0.30
C-AB	1.42	15.53	0.091		0.36	0.19	2.8		0.07
C-A	9.65								
A-B	0.40								
A-C	11.22								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	1.28	8.24	0.155		0.25	0.19	2.9		0.14
B-A	0.85	4.97	0.172		0.31	0.21	3.3		0.24
C-AB	1.00	14.70	0.068		0.19	0.12	1.8		0.07
C-A	8.28								
A-B	0.34								
A-C	9.40								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.2
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.5 *
08.45	0.5 *
09.00	0.3
09.15	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.4
08.45	0.4
09.00	0.2
09.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	140.4	93.6	23.6
B-A	93.6	62.4	30.9
C-AB	143.2	95.5	19.9
C-A	874.0	582.7	
A-B	37.2	24.8	
A-C	1030.9	687.3	
ALL	2319.3	1546.2	74.4

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope	For Opposing	Slope	For Opposing
STREAM B-C	STREAM A-C	STREAM A-B	STREAM A-B	
0.00	0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

Intercept	Slope	For Opposing	Slope	For Opposing	Slope	For Opposing	Slope	For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	STREAM C-B	STREAM C-B	STREAM C-B	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

Intercept	Slope	For Opposing	Slope	For Opposing
STREAM C-B	STREAM A-C	STREAM A-B	STREAM A-B	
686.89	0.23	0.23	0.23	

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: PM Total

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.81	8.06	0.100		0.11	0.11	1.7		0.14
B-A	0.70	4.01	0.174		0.21	0.21	3.1		0.30
C-AB	4.75	16.92	0.281		0.89	0.91	13.8		0.08
C-A	8.64								
A-B	1.05								
A-C	11.76								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.66	8.69	0.076		0.11	0.08	1.3		0.12
B-A	0.57	4.86	0.117		0.21	0.13	2.1		0.23
C-AB	3.00	15.72	0.191		0.91	0.52	7.9		0.08
C-A	7.94								
A-B	0.85								
A-C	9.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.55	9.14	0.060		0.08	0.06	1.0		0.12
B-A	0.48	5.48	0.087		0.13	0.10	1.5		0.20
C-AB	2.07	14.87	0.139		0.52	0.34	5.1		0.08
C-A	7.09								
A-B	0.72								
A-C	8.04								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.3
17.15	0.5 *
17.30	0.9 *
17.45	0.9 *
18.00	0.5 *
18.15	0.3

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	60.6	40.4	7.7
B-A	52.3	34.9	12.9
C-AB	294.0	196.0	52.6
C-A	710.7	473.8	
A-B	78.5	52.3	
A-C	882.3	588.2	
ALL	2078.4	1385.6	73.2

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

==== end of file =====

APPENDIX G: ARCADY Modelling Results

ARCADY 7

Version: 7.1.1.245 [9th June 2011]
© Copyright Transport Research Laboratory 2011

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.trisoftware.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

File: H:_Planning 1\Current Jobs\MBAHastings\Modelling and TRICS\ARCADY 7\Wishing Tree RB - 210 dwellings 14-06-06.arc7
Report generation date: 06/06/2014 14:59:12

- » A1 - Existing Layout - D1 - Base, AM
- » A1 - Existing Layout - D2 - Base, PM
- » A1 - Existing Layout - D5 - Total, AM
- » A1 - Existing Layout - D6 - Total, PM

Summary of roundabout performance

	AM				PM			
	Queue (Veh)	Delay (min)	RFC	LOS	Queue (Veh)	Delay (min)	RFC	LOS
Existing Layout - Base								
Crowhurst Road	1.56	0.15	0.61	A	2.40	0.19	0.71	B
Ironlatch Avenue	3.02	0.35	0.76	C	2.12	0.29	0.69	C
Gillsman's Hill	1.14	0.13	0.53	A	0.57	0.09	0.36	A
Harley Shute Road	3.03	0.21	0.76	B	1.30	0.11	0.57	A
Existing Layout - Total								
Crowhurst Road	1.69	0.16	0.63	A	2.80	0.21	0.74	B
Ironlatch Avenue	3.37	0.38	0.78	C	2.63	0.35	0.73	C
Gillsman's Hill	1.15	0.13	0.54	A	0.58	0.10	0.37	A
Harley Shute Road	3.84	0.25	0.80	C	1.44	0.12	0.59	A

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

Base - AM runs from 07:45:00 to 09:15:00

Base - PM runs from 16:45:00 to 18:15:00

Dev - AM runs from 07:45:00 to 09:15:00

Dev - PM runs from 16:45:00 to 18:15:00

Total - AM runs from 07:45:00 to 09:15:00

Total - PM runs from 16:45:00 to 18:15:00

File summary

File Description

Title	B2029 Roundabout
Location	St Leonards, Hastings
Site Number	
Date	06/03/2014
Version	
Status	Existing
Identifier	
Client	MBA
Jobnumber	MBAHastings.1
Enumerator	MAYERBROWN2K\jgilby
Description	4-arm roundabout

Analysis Options

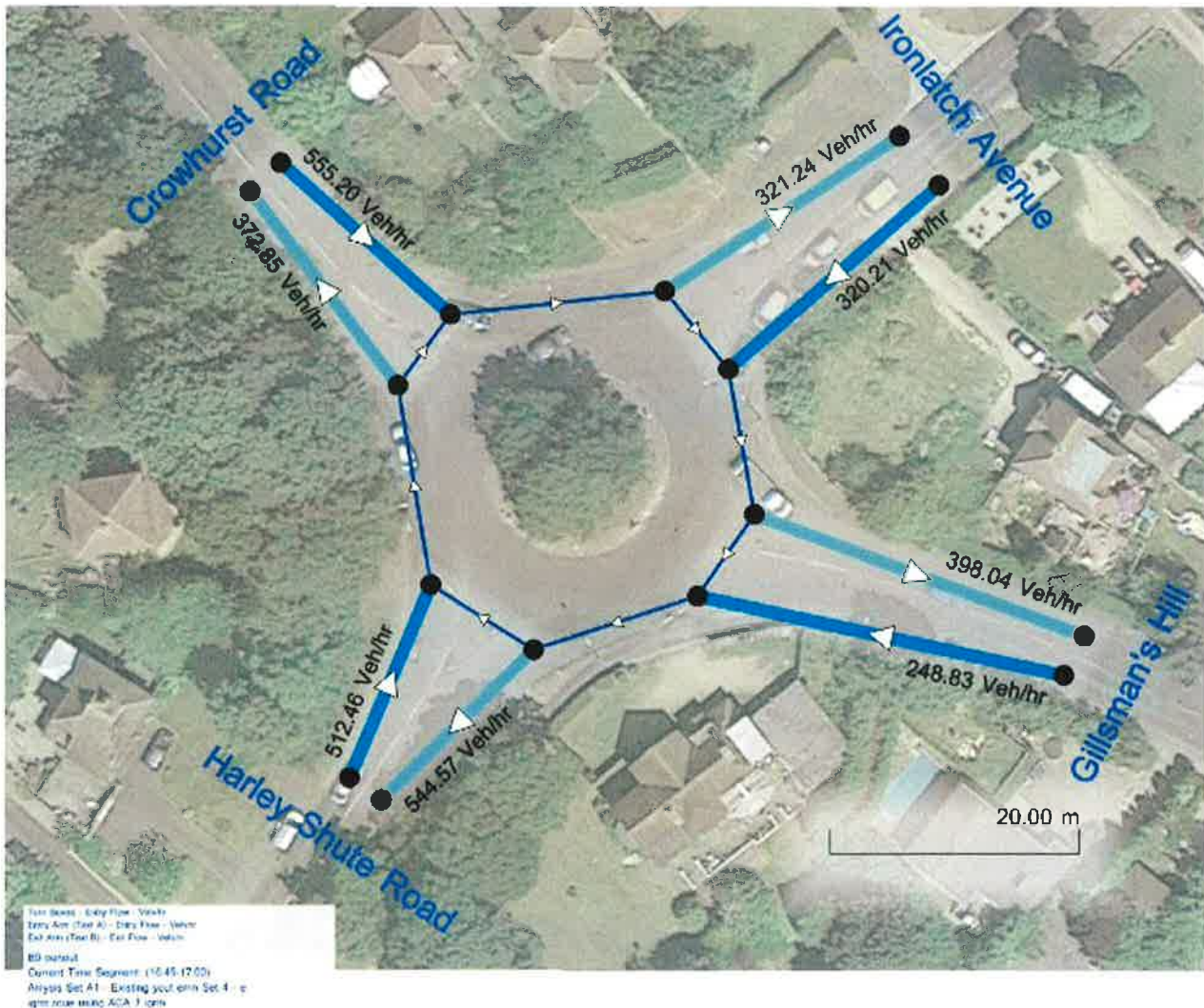
RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
Yes	Order	Ascending	Numerical	By Destination	Absolute Time

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	min	-Min	perMin



The junction diagram reflects the last run of ARCADY.

A1 - Existing Layout - D1 - Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base, AM	Base	AM		Yes	Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	B2029 Roundabout	1,2,3,4	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
1	Crowhurst Road	
2	Ironlatch Avenue	
3	Gillsman's Hill	
4	Harley Shute Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Crowhurst Road	0.00	99999.00		0.00
Ironlatch Avenue	0.00	99999.00		0.00
Gillsman's Hill	0.00	99999.00		0.00
Harley Shute Road	0.00	99999.00		0.00

Standard 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
Crowhurst Road	3.65	6.00	4.70	20.00	37.50	16.00	
Ironlatch Avenue	3.10	5.00	4.20	12.00	37.00	33.00	
Gillsman's Hill	3.30	6.30	7.10	45.00	38.00	14.00	
Harley Shute Road	3.75	6.40	4.50	35.00	37.50	15.00	

Pedestrian Crossings

Arm	Crossing Type
Crowhurst Road	None

Ironlatch Avenue	None
Gillsman's Hill	None
Harley Shute Road	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Crowhurst Road		((calculated))	((calculated))	0.611	1446.847
Ironlatch Avenue		((calculated))	((calculated))	0.519	1123.993
Gillsman's Hill		((calculated))	((calculated))	0.631	1500.995
Harley Shute Road		((calculated))	((calculated))	0.633	1517.900

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
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
Crowhurst Road	ONE HOUR	Yes	575.00	100.000	N/A
Ironlatch Avenue	ONE HOUR	Yes	489.00	100.000	N/A
Gillsman's Hill	ONE HOUR	Yes	483.00	100.000	N/A
Harley Shute Road	ONE HOUR	Yes	814.00	100.000	N/A

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)
1	Crowhurst Road	432.89	453.29	N/A	N/A
1	Ironlatch Avenue	368.14	379.43	N/A	N/A
1	Gillsman's Hill	363.63	366.62	N/A	N/A
1	Harley Shute Road	612.82	633.25	N/A	N/A
2	Crowhurst Road	516.91	541.27	N/A	N/A
2	Ironlatch Avenue	439.60	453.08	N/A	N/A
2	Gillsman's Hill	434.21	437.78	N/A	N/A
2	Harley Shute Road	731.77	756.16	N/A	N/A
3	Crowhurst Road	633.09	662.92	N/A	N/A
3	Ironlatch Avenue	538.40	554.90	N/A	N/A
3	Gillsman's Hill	531.79	536.16	N/A	N/A
3	Harley Shute Road	896.23	926.10	N/A	N/A
4	Crowhurst Road	633.09	662.92	N/A	N/A
4	Ironlatch Avenue	538.40	554.90	N/A	N/A

4	Gillsman's Hill	531.79	536.16	N/A	N/A
4	Harley Shute Road	896.23	926.10	N/A	N/A
5	Crowhurst Road	516.91	541.27	N/A	N/A
5	Ironlatch Avenue	439.60	453.08	N/A	N/A
5	Gillsman's Hill	434.21	437.78	N/A	N/A
5	Harley Shute Road	731.77	756.16	N/A	N/A
6	Crowhurst Road	432.89	453.29	N/A	N/A
6	Ironlatch Avenue	368.14	379.43	N/A	N/A
6	Gillsman's Hill	363.63	366.62	N/A	N/A
6	Harley Shute Road	612.82	633.25	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	0.000	23.000	232.000	320.000
	2	28.000	0.000	130.000	331.000
	3	282.000	105.000	1.000	95.000
	4	386.000	317.000	109.000	2.000

Turning Proportions (Veh) - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.04	0.40	0.56
	2	0.06	0.00	0.27	0.68
	3	0.58	0.22	0.00	0.20
	4	0.47	0.39	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.087	1.013	1.069
	2	1.179	1.000	1.008	1.027
	3	1.007	1.000	1.000	1.021
	4	1.044	1.032	1.000	1.000

Heavy Vehicle Percentages - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	0.000	8.700	1.300	6.900
	2	17.900	0.000	0.800	2.700
	3	0.700	0.000	0.000	2.100
	4	4.400	3.200	0.000	0.000

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
Crowhurst Road	0.61	0.15	1.56	A	527.63	791.44	90.44	0.11	1.00	90.45	0.11	0.611	1446.847
Ironlatch Avenue	0.76	0.35	3.02	C	448.72	673.07	146.40	0.22	1.63	146.43	0.22	0.519	1123.993
Gillsman's Hill	0.53	0.13	1.14	A	443.21	664.81	67.03	0.10	0.74	67.03	0.10	0.631	1500.995
Harley Shute Road	0.76	0.21	3.03	B	746.94	1120.41	157.22	0.14	1.75	157.24	0.14	0.633	1517.900

Main Results

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	432.89	108.22	430.48	521.00	399.70	0.00	1144.05	951.17	0.378	0.00	0.60
Ironlatch Avenue	368.15	92.04	365.01	333.10	497.07	0.00	830.85	539.42	0.443	0.00	0.78
Gillsman's Hill	363.63	90.91	361.80	353.05	509.04	0.00	1153.09	875.16	0.315	0.00	0.46
Harley Shute Road	612.82	153.21	609.16	559.30	311.54	0.00	1274.95	1013.90	0.481	0.00	0.91

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	516.91	129.23	515.80	624.15	478.81	0.00	1097.00	951.17	0.471	0.60	0.88
Ironlatch Avenue	439.60	109.90	437.69	399.03	595.58	0.00	779.38	539.42	0.564	0.78	1.26
Gillsman's Hill	434.21	108.55	433.40	423.09	610.18	0.00	1086.39	875.16	0.400	0.46	0.66
Harley Shute Road	731.77	182.94	729.73	670.36	373.22	0.00	1236.54	1013.90	0.592	0.91	1.42

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	633.08	158.27	630.44	761.97	584.34	0.00	1034.26	951.17	0.612	0.88	1.54
Ironlatch Avenue	538.40	134.60	531.92	487.07	727.71	0.00	710.34	539.42	0.758	1.26	2.88
Gillsman's Hill	531.79	132.95	529.95	516.07	743.55	0.00	998.42	875.16	0.533	0.66	1.12
Harley Shute Road	896.23	224.06	890.13	817.33	456.17	0.00	1184.91	1013.90	0.756	1.42	2.95

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	633.08	158.27	632.99	766.09	587.75	0.00	1032.22	951.17	0.613	1.54	1.56
Ironlatch Avenue	538.40	134.60	537.86	489.81	730.94	0.00	708.65	539.42	0.760	2.88	3.02
Gillsman's Hill	531.79	132.95	531.72	519.46	749.35	0.00	994.63	875.16	0.535	1.12	1.14
Harley Shute Road	896.23	224.06	895.90	823.13	457.94	0.00	1183.78	1013.90	0.757	2.95	3.03

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	516.91	129.23	519.54	630.08	483.71	0.00	1094.08	951.17	0.472	1.56	0.91
Ironlatch Avenue	439.60	109.90	446.31	402.96	600.30	0.00	776.92	539.42	0.566	3.02	1.34
Gillsman's Hill	434.21	108.55	436.04	428.00	618.61	0.00	1080.87	875.16	0.402	1.14	0.68
Harley Shute Road	731.77	182.94	737.96	678.82	375.83	0.00	1234.88	1013.90	0.593	3.03	1.48

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
-----	-----------------	----------------	---------------------	--------------------	---------------------------	----------------------------	-------------------	------------------------------	-----	-------------------	-----------------

Crowhurst Road	432.89	108.22	434.05	525.63	403.35	0.00	1141.87	951.17	0.379	0.91	0.62
Ironlatch Avenue	368.15	92.04	370.25	336.10	501.31	0.00	828.63	539.42	0.444	1.34	0.81
Gillsman's Hill	363.63	90.91	364.47	356.67	514.89	0.00	1149.24	875.16	0.316	0.68	0.47
Harley Shute Road	612.82	153.21	615.00	565.38	313.99	0.00	1273.41	1013.90	0.481	1.48	0.94

Queueing Delay Results

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	8.76	0.58	0.084	A	A
Ironlatch Avenue	11.20	0.75	0.128	A	A
Gillsman's Hill	6.67	0.44	0.076	A	A
Harley Shute Road	13.20	0.88	0.090	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	12.80	0.85	0.103	A	A
Ironlatch Avenue	17.99	1.20	0.175	B	B
Gillsman's Hill	9.64	0.64	0.092	A	A
Harley Shute Road	20.50	1.37	0.118	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	21.94	1.46	0.148	A	A
Ironlatch Avenue	38.51	2.57	0.325	C	B
Gillsman's Hill	16.11	1.07	0.128	A	A
Harley Shute Road	40.58	2.71	0.199	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	23.33	1.56	0.150	A	A
Ironlatch Avenue	44.43	2.96	0.349	C	C
Gillsman's Hill	16.96	1.13	0.130	A	A
Harley Shute Road	44.97	3.00	0.208	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	14.13	0.94	0.105	A	A
Ironlatch Avenue	21.59	1.44	0.185	B	B
Gillsman's Hill	10.50	0.70	0.093	A	A
Harley Shute Road	23.43	1.56	0.122	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	9.49	0.63	0.085	A	A
Ironlatch Avenue	12.68	0.85	0.132	A	A
Gillsman's Hill	7.16	0.48	0.077	A	A
Harley Shute Road	14.54	0.97	0.091	A	A

Overview: Standard Roundabout Geometry

Overview: Standard Roundabout Geometry

Standard 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	Final Slope	Final Intercept (PCU/hr)
Crowhurst Road	3.65	6.00	4.70	20.00	37.50	16.00		0.611	1446.847
Ironlatch Avenue	3.10	5.00	4.20	12.00	37.00	33.00		0.519	1123.993
Gillsman's Hill	3.30	6.30	7.10	45.00	38.00	14.00		0.631	1500.995
Harley Shute Road	3.75	6.40	4.50	35.00	37.50	15.00		0.633	1517.900

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
1	Crowhurst Road	432.89	1144.05	0.378	0.00	0.00	0.60	8.76	(0.02)	0.084
1	Ironlatch Avenue	368.15	830.85	0.443	0.00	0.00	0.78	11.20	(0.02)	0.128
1	Gillsman's Hill	363.63	1153.09	0.315	0.00	0.00	0.46	6.67	(0.02)	0.076
1	Harley Shute Road	612.82	1274.95	0.481	0.00	0.00	0.91	13.20	(0.02)	0.090
2	Crowhurst Road	516.91	1097.00	0.471	0.00	0.60	0.88	12.80	(0.02)	0.103
2	Ironlatch Avenue	439.60	779.38	0.564	0.00	0.78	1.26	17.99	(0.02)	0.175
2	Gillsman's Hill	434.21	1086.39	0.400	0.00	0.46	0.66	9.64	(0.02)	0.092
2	Harley Shute Road	731.77	1236.54	0.592	0.00	0.91	1.42	20.50	(0.02)	0.118
3	Crowhurst Road	633.08	1034.26	0.612	0.00	0.88	1.54	21.94	(0.02)	0.148
3	Ironlatch Avenue	538.40	710.34	0.758	0.00	1.26	2.88	38.51	(0.02)	0.325
3	Gillsman's Hill	531.79	998.42	0.533	0.00	0.66	1.12	16.11	(0.02)	0.128
3	Harley Shute Road	896.23	1184.91	0.756	0.00	1.42	2.95	40.58	(0.02)	0.199
4	Crowhurst Road	633.08	1032.22	0.613	0.00	1.54	1.56	23.33	(0.02)	0.150
4	Ironlatch Avenue	538.40	708.65	0.760	0.00	2.88	3.02	44.43	(0.02)	0.349
4	Gillsman's Hill	531.79	994.63	0.535	0.00	1.12	1.14	16.96	(0.02)	0.130
4	Harley Shute Road	896.23	1183.78	0.757	0.00	2.95	3.03	44.97	(0.02)	0.208
5	Crowhurst Road	516.91	1094.08	0.472	0.00	1.56	0.91	14.13	(0.02)	0.105
5	Ironlatch Avenue	439.60	776.92	0.566	0.00	3.02	1.34	21.59	(0.02)	0.185
5	Gillsman's Hill	434.21	1080.87	0.402	0.00	1.14	0.68	10.50	(0.02)	0.093
5	Harley Shute Road	731.77	1234.88	0.593	0.00	3.03	1.48	23.43	(0.02)	0.122
	Crowhurst									

6	Crowhurst Road	432.89	1141.87	0.379	0.00	0.91	0.62	9.49	(0.02)	0.085
6	Ironlatch Avenue	368.15	828.63	0.444	0.00	1.34	0.81	12.68	(0.02)	0.132
6	Gillsman's Hill	363.63	1149.24	0.316	0.00	0.68	0.47	7.16	(0.02)	0.077
6	Harley Shute Road	612.82	1273.41	0.481	0.00	1.48	0.94	14.54	(0.02)	0.091

A1 - Existing Layout - D2 - Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base, PM	Base	PM		Yes	Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	B2029 Roundabout	1,2,3,4	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
1	Crowhurst Road	
2	Ironlatch Avenue	
3	Gillsman's Hill	
4	Harley Shute Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Crowhurst Road	0.00	99999.00		0.00
Ironlatch Avenue	0.00	99999.00		0.00
Gillsman's Hill	0.00	99999.00		0.00

Harley Shute Road	0.00	99999.00	0.00
-------------------	------	----------	------

Standard 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
Crowhurst Road	3.65	6.00	4.70	20.00	37.50	16.00	
Ironlatch Avenue	3.10	5.00	4.20	12.00	37.00	33.00	
Gillsman's Hill	3.30	6.30	7.10	45.00	38.00	14.00	
Harley Shute Road	3.75	6.40	4.50	35.00	37.50	15.00	

Pedestrian Crossings

Arm	Crossing Type
Crowhurst Road	None
Ironlatch Avenue	None
Gillsman's Hill	None
Harley Shute Road	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Crowhurst Road		((calculated))	((calculated))	0.611	1446.847
Ironlatch Avenue		((calculated))	((calculated))	0.519	1123.993
Gillsman's Hill		((calculated))	((calculated))	0.631	1500.995
Harley Shute Road		((calculated))	((calculated))	0.633	1517.900

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
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
Crowhurst Road	ONE HOUR	Yes	718.00	100.000	N/A
Ironlatch Avenue	ONE HOUR	Yes	411.00	100.000	N/A
Gillsman's Hill	ONE HOUR	Yes	332.00	100.000	N/A
Harley Shute Road	ONE HOUR	Yes	655.00	100.000	N/A

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)
1	Crowhurst Road	540.55	548.07	N/A	N/A
1	Ironlatch Avenue	309.42	321.51	N/A	N/A

1	Gillsman's Hill	249.95	255.97	N/A	N/A
1	Harley Shute Road	493.12	507.49	N/A	N/A
2	Crowhurst Road	645.47	654.45	N/A	N/A
2	Ironlatch Avenue	369.48	383.92	N/A	N/A
2	Gillsman's Hill	298.46	305.65	N/A	N/A
2	Harley Shute Road	588.83	605.99	N/A	N/A
3	Crowhurst Road	790.53	801.53	N/A	N/A
3	Ironlatch Avenue	452.52	470.20	N/A	N/A
3	Gillsman's Hill	365.54	374.34	N/A	N/A
3	Harley Shute Road	721.17	742.19	N/A	N/A
4	Crowhurst Road	790.53	801.53	N/A	N/A
4	Ironlatch Avenue	452.52	470.20	N/A	N/A
4	Gillsman's Hill	365.54	374.34	N/A	N/A
4	Harley Shute Road	721.17	742.19	N/A	N/A
5	Crowhurst Road	645.47	654.45	N/A	N/A
5	Ironlatch Avenue	369.48	383.92	N/A	N/A
5	Gillsman's Hill	298.46	305.65	N/A	N/A
5	Harley Shute Road	588.83	605.99	N/A	N/A
6	Crowhurst Road	540.55	548.07	N/A	N/A
6	Ironlatch Avenue	309.42	321.51	N/A	N/A
6	Gillsman's Hill	249.95	255.97	N/A	N/A
6	Harley Shute Road	493.12	507.49	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	0.000	29.000	322.000	367.000
	2	17.000	0.000	117.000	277.000
	3	199.000	73.000	0.000	60.000
	4	269.000	312.000	74.000	0.000

Turning Proportions (Veh) - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.04	0.45	0.51
	2	0.04	0.00	0.28	0.67
	3	0.60	0.22	0.00	0.18
	4	0.41	0.48	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.172	1.003	1.011
	2	1.176	1.000	1.017	1.040
	3	1.020	1.055	1.000	1.000
	4	1.030	1.032	1.014	1.000

Heavy Vehicle Percentages - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	0.000	17.200	0.300	1.100
	2	17.600	0.000	1.700	4.000
	3	2.000	5.500	0.000	0.000
	4	3.000	3.200	1.400	0.000

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
Crowhurst Road	0.71	0.19	2.40	B	658.85	988.27	129.88	0.13	1.44	129.89	0.13	0.611	1446.847
Ironlatch Avenue	0.69	0.29	2.12	C	377.14	565.71	109.31	0.19	1.21	109.33	0.19	0.519	1123.993
Gillsman's Hill	0.36	0.09	0.57	A	304.65	456.97	36.40	0.08	0.40	36.40	0.08	0.631	1500.995
Harley Shute Road	0.57	0.11	1.30	A	601.04	901.55	80.12	0.09	0.89	80.13	0.09	0.633	1517.900

Main Results

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	540.55	135.14	537.36	363.41	343.95	0.00	1212.90	939.22	0.446	0.00	0.80
Ironlatch Avenue	309.42	77.36	306.90	310.21	571.11	0.00	794.26	571.73	0.390	0.00	0.63
Gillsman's Hill	249.95	62.49	248.85	383.81	494.21	0.00	1152.64	902.21	0.217	0.00	0.28
Harley Shute Road	493.12	123.28	490.80	526.49	216.57	0.00	1336.68	989.93	0.369	0.00	0.58

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	645.46	161.37	643.81	435.33	412.00	0.00	1170.54	939.22	0.551	0.80	1.21
Ironlatch Avenue	369.48	92.37	368.06	371.59	684.23	0.00	737.32	571.73	0.501	0.63	0.98
Gillsman's Hill	298.46	74.62	298.07	459.93	592.37	0.00	1090.46	902.21	0.274	0.28	0.37
Harley Shute Road	588.83	147.21	587.91	631.01	259.42	0.00	1309.33	989.93	0.450	0.58	0.81

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	790.53	197.63	785.95	532.58	504.07	0.00	1113.24	939.22	0.710	1.21	2.35
Ironlatch Avenue	452.52	113.13	448.25	454.56	835.47	0.00	661.20	571.73	0.684	0.98	2.05
Gillsman's Hill	365.54	91.38	364.78	561.34	722.38	0.00	1008.12	902.21	0.363	0.37	0.56
Harley Shute Road	721.16	180.29	719.25	769.76	317.40	0.00	1272.33	989.93	0.567	0.81	1.29

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	790.53	197.63	790.33	533.95	505.34	0.00	1112.45	939.22	0.711	2.35	2.40
Ironlatch Avenue	452.52	113.13	452.23	455.79	839.89	0.00	658.98	571.73	0.687	2.05	2.12
Gillsman's Hill	365.54	91.38	365.52	564.65	727.47	0.00	1004.88	902.21	0.364	0.56	0.57
Harley Shute Road	721.16	180.29	721.12	774.82	318.17	0.00	1271.83	989.93	0.567	1.29	1.30

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	645.46	161.37	650.07	437.41	413.91	0.00	1169.36	939.22	0.552	2.40	1.25
Ironlatch Avenue	369.48	92.37	373.83	373.43	690.56	0.00	734.14	571.73	0.503	2.12	1.03
Gillsman's Hill	298.46	74.62	299.21	464.69	599.69	0.00	1085.80	902.21	0.275	0.57	0.38
Harley Shute Road	588.83	147.21	590.72	638.31	260.60	0.00	1308.56	989.93	0.450	1.30	0.83

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	540.55	135.14	542.30	365.83	346.21	0.00	1211.50	939.22	0.446	1.25	0.81
Ironlatch Avenue	309.42	77.36	310.96	312.29	576.22	0.00	791.69	571.73	0.391	1.03	0.65
Gillsman's Hill	249.95	62.49	250.36	387.55	499.63	0.00	1149.20	902.21	0.218	0.38	0.28
Harley Shute Road	493.12	123.28	494.06	532.01	217.97	0.00	1335.77	989.93	0.369	0.83	0.59

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	11.50	0.77	0.088	A	A
Ironlatch Avenue	9.04	0.60	0.123	A	A
Gillsman's Hill	4.03	0.27	0.066	A	A
Harley Shute Road	8.46	0.56	0.071	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	17.48	1.17	0.114	A	A
Ironlatch Avenue	14.13	0.94	0.162	A	A
Gillsman's Hill	5.51	0.37	0.076	A	A
Harley Shute Road	11.84	0.79	0.083	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	32.86	2.19	0.181	B	B
Ironlatch Avenue	28.14	1.88	0.276	C	B
Gillsman's Hill	8.24	0.55	0.093	A	A
Harley Shute Road	18.60	1.24	0.108	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	35.77	2.38	0.186	B	B
Ironlatch Avenue	31.44	2.10	0.289	C	B
Gillsman's Hill	8.50	0.57	0.094	A	A
Harley Shute Road	19.41	1.29	0.109	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	19.68	1.31	0.117	A	A

Ironlatch Avenue	16.45	1.10	0.168	B	B
Gillsman's Hill	5.86	0.39	0.076	A	A
Harley Shute Road	12.77	0.85	0.084	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	12.59	0.84	0.090	A	A
Ironlatch Avenue	10.12	0.67	0.125	A	A
Gillsman's Hill	4.27	0.28	0.067	A	A
Harley Shute Road	9.04	0.60	0.071	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	r' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
Crowhurst Road	3.65	6.00	4.70	20.00	37.50	16.00		0.611	1446.847
Ironlatch Avenue	3.10	5.00	4.20	12.00	37.00	33.00		0.519	1123.993
Gillsman's Hill	3.30	6.30	7.10	45.00	38.00	14.00		0.631	1500.995
Harley Shute Road	3.75	6.40	4.50	35.00	37.50	15.00		0.633	1517.900

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
1	Crowhurst Road	540.55	1212.90	0.446	0.00	0.00	0.80	11.50	(0.02)	0.088
1	Ironlatch Avenue	309.42	794.26	0.390	0.00	0.00	0.63	9.04	(0.02)	0.123
1	Gillsman's Hill	249.95	1152.64	0.217	0.00	0.00	0.28	4.03	(0.02)	0.066
1	Harley Shute Road	493.12	1336.68	0.369	0.00	0.00	0.58	8.46	(0.02)	0.071
2	Crowhurst Road	645.46	1170.54	0.551	0.00	0.80	1.21	17.48	(0.02)	0.114
2	Ironlatch Avenue	369.48	737.32	0.501	0.00	0.63	0.98	14.13	(0.02)	0.162
2	Gillsman's Hill	298.46	1090.46	0.274	0.00	0.28	0.37	5.51	(0.02)	0.076
2	Harley Shute Road	588.83	1309.33	0.450	0.00	0.58	0.81	11.84	(0.02)	0.083
3	Crowhurst Road	790.53	1113.24	0.710	0.00	1.21	2.35	32.86	(0.02)	0.181
3	Ironlatch Avenue	452.52	661.20	0.684	0.00	0.98	2.05	28.14	(0.02)	0.276
3	Gillsman's Hill	365.54	1008.12	0.363	0.00	0.37	0.56	8.24	(0.02)	0.093
3	Harley Shute Road	721.16	1272.33	0.567	0.00	0.81	1.29	18.60	(0.02)	0.108
4	Crowhurst Road	790.53	1112.45	0.711	0.00	2.35	2.40	35.77	(0.02)	0.186

4	Ironlatch Avenue	452.52	658.98	0.687	0.00	2.05	2.12	31.44	(0.02)	0.289
4	Gillsman's Hill	365.54	1004.88	0.364	0.00	0.56	0.57	8.50	(0.02)	0.094
4	Harley Shute Road	721.16	1271.83	0.567	0.00	1.29	1.30	19.41	(0.02)	0.109
5	Crowhurst Road	645.46	1169.36	0.552	0.00	2.40	1.25	19.68	(0.02)	0.117
5	Ironlatch Avenue	369.48	734.14	0.503	0.00	2.12	1.03	16.45	(0.02)	0.168
5	Gillsman's Hill	298.46	1085.80	0.275	0.00	0.57	0.38	5.86	(0.02)	0.076
5	Harley Shute Road	588.83	1308.56	0.450	0.00	1.30	0.83	12.77	(0.02)	0.084
6	Crowhurst Road	540.55	1211.50	0.446	0.00	1.25	0.81	12.59	(0.02)	0.090
6	Ironlatch Avenue	309.42	791.69	0.391	0.00	1.03	0.65	10.12	(0.02)	0.125
6	Gillsman's Hill	249.95	1149.20	0.218	0.00	0.38	0.28	4.27	(0.02)	0.067
6	Harley Shute Road	493.12	1335.77	0.369	0.00	0.83	0.59	9.04	(0.02)	0.071

A1 - Existing Layout - D5 - Total, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Total, AM	Total	AM			Yes	Yes	D1 + D3	07:45	09:15	90	15	(DIRECT)

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	B2029 Roundabout	1,2,3,4	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
1	Crowhurst Road	
2	Ironlatch Avenue	
3	Gillsman's Hill	
4	Harley Shute Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Crowhurst Road	0.00	99999.00		0.00
Ironlatch Avenue	0.00	99999.00		0.00
Gillsman's Hill	0.00	99999.00		0.00
Harley Shute Road	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Crowhurst Road	3.65	6.00	4.70	20.00	37.50	16.00	
Ironlatch Avenue	3.10	5.00	4.20	12.00	37.00	33.00	
Gillsman's Hill	3.30	6.30	7.10	45.00	38.00	14.00	
Harley Shute Road	3.75	6.40	4.50	35.00	37.50	15.00	

Pedestrian Crossings

Arm	Crossing Type
Crowhurst Road	None
Ironlatch Avenue	None
Gillsman's Hill	None
Harley Shute Road	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Crowhurst Road		((calculated))	((calculated))	0.611	1446.847
Ironlatch Avenue		((calculated))	((calculated))	0.519	1123.993
Gillsman's Hill		((calculated))	((calculated))	0.631	1500.995
Harley Shute Road		((calculated))	((calculated))	0.633	1517.900

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
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF

Crowhurst Road	DIRECT			100.000	N/A
Ironlatch Avenue	DIRECT			100.000	N/A
Gillsman's Hill	DIRECT			100.000	N/A
Harley Shute Road	DIRECT			100.000	N/A

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)
1	Crowhurst Road	438.91	459.60	N/A	N/A
1	Ironlatch Avenue	374.17	385.64	N/A	N/A
1	Gillsman's Hill	363.63	366.62	N/A	N/A
1	Harley Shute Road	647.45	669.03	N/A	N/A
2	Crowhurst Road	524.11	548.80	N/A	N/A
2	Ironlatch Avenue	446.79	460.49	N/A	N/A
2	Gillsman's Hill	434.21	437.78	N/A	N/A
2	Harley Shute Road	773.12	798.89	N/A	N/A
3	Crowhurst Road	641.89	672.14	N/A	N/A
3	Ironlatch Avenue	547.21	563.98	N/A	N/A
3	Gillsman's Hill	531.79	536.16	N/A	N/A
3	Harley Shute Road	946.88	978.43	N/A	N/A
4	Crowhurst Road	641.89	672.14	N/A	N/A
4	Ironlatch Avenue	547.21	563.98	N/A	N/A
4	Gillsman's Hill	531.79	536.16	N/A	N/A
4	Harley Shute Road	946.88	978.43	N/A	N/A
5	Crowhurst Road	524.11	548.80	N/A	N/A
5	Ironlatch Avenue	446.79	460.49	N/A	N/A
5	Gillsman's Hill	434.21	437.78	N/A	N/A
5	Harley Shute Road	773.12	798.89	N/A	N/A
6	Crowhurst Road	438.91	459.60	N/A	N/A
6	Ironlatch Avenue	374.17	385.64	N/A	N/A
6	Gillsman's Hill	363.63	366.62	N/A	N/A
6	Harley Shute Road	647.45	669.03	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	0.000	23.000	232.000	320.000
	2	28.000	0.000	130.000	331.000
	3	282.000	105.000	1.000	95.000
	4	386.000	317.000	109.000	2.000

Turning Proportions (Veh) - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.04	0.40	0.56
	2	0.06	0.00	0.27	0.68
	3	0.58	0.22	0.00	0.20
	4	0.47	0.39	0.13	0.00

	0.71	0.99	0.19	0.00
--	------	------	------	------

Vehicle Mix

Average PCU Per Vehicle - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.087	1.013	1.069
	2	1.179	1.000	1.008	1.027
	3	1.007	1.000	1.000	1.021
	4	1.044	1.032	1.000	1.000

Heavy Vehicle Percentages - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	0.000	8.700	1.300	6.900
	2	17.900	0.000	0.800	2.700
	3	0.700	0.000	0.000	2.100
	4	4.400	3.200	0.000	0.000

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
Crowhurst Road	0.63	0.16	1.69	A	534.97	802.45	95.91	0.12	1.07	95.92	0.12	0.611	1446.847
Ironlatch Avenue	0.78	0.38	3.37	C	456.06	684.09	158.52	0.23	1.76	158.55	0.23	0.519	1123.993
Gillsman's Hill	0.54	0.13	1.15	A	443.21	664.81	67.82	0.10	0.75	67.82	0.10	0.631	1500.995
Harley Shute Road	0.80	0.25	3.84	C	789.15	1183.72	188.43	0.16	2.09	188.45	0.16	0.633	1517.900

Main Results

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	438.91	109.73	436.41	537.56	417.68	0.00	1133.30	951.17	0.387	0.00	0.63
Ironlatch Avenue	374.17	93.54	370.90	346.66	507.43	0.00	825.50	539.42	0.453	0.00	0.82
Gillsman's Hill	363.63	90.91	361.79	361.59	516.75	0.00	1148.01	875.16	0.317	0.00	0.46
Harley Shute Road	647.45	161.86	643.37	566.67	311.87	0.00	1274.71	1013.90	0.508	0.00	1.02

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	524.10	131.03	522.91	643.95	500.32	0.00	1084.15	951.17	0.483	0.63	0.92
Ironlatch Avenue	446.79	111.70	444.73	415.26	607.99	0.00	772.97	539.42	0.578	0.82	1.33
Gillsman's Hill	434.21	108.55	433.39	433.31	619.40	0.00	1080.32	875.16	0.402	0.46	0.67
Harley Shute Road	773.12	193.28	770.66	679.18	373.61	0.00	1236.26	1013.90	0.625	1.02	1.63

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
-----	-----------------	----------------	---------------------	--------------------	---------------------------	----------------------------	-------------------	------------------------------	-----	-------------------	-----------------

Crowhurst Road	641.89	160.47	638.96	785.39	609.82	0.00	1019.03	951.17	0.630	0.92	1.66
Ironlatch Avenue	547.21	136.80	539.79	506.28	742.49	0.00	702.70	539.42	0.779	1.33	3.19
Gillsman's Hill	531.79	132.95	529.91	528.09	754.19	0.00	991.42	875.16	0.536	0.67	1.14
Harley Shute Road	946.87	236.72	938.61	827.50	456.59	0.00	1184.60	1013.90	0.799	1.63	3.70

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	641.89	160.47	641.77	790.48	614.26	0.00	1016.38	951.17	0.632	1.66	1.69
Ironlatch Avenue	547.21	136.80	546.50	509.79	746.24	0.00	700.75	539.42	0.781	3.19	3.37
Gillsman's Hill	531.79	132.95	531.72	532.04	760.70	0.00	987.16	875.16	0.539	1.14	1.15
Harley Shute Road	946.87	236.72	946.30	833.99	458.43	0.00	1183.43	1013.90	0.800	3.70	3.84

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	524.10	131.03	527.03	651.29	506.69	0.00	1080.35	951.17	0.485	1.69	0.96
Ironlatch Avenue	446.79	111.70	454.57	420.28	613.44	0.00	770.14	539.42	0.580	3.37	1.42
Gillsman's Hill	434.21	108.55	436.08	439.06	628.95	0.00	1074.07	875.16	0.404	1.15	0.69
Harley Shute Road	773.12	193.28	781.64	688.69	376.34	0.00	1234.52	1013.90	0.626	3.84	1.71

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	438.91	109.73	440.17	542.65	421.82	0.00	1130.84	951.17	0.388	0.96	0.64
Ironlatch Avenue	374.17	93.54	376.47	350.02	511.97	0.00	823.13	539.42	0.455	1.42	0.85
Gillsman's Hill	363.63	90.91	364.49	365.49	522.94	0.00	1143.94	875.16	0.318	0.69	0.47
Harley Shute Road	647.45	161.86	650.11	573.08	314.36	0.00	1273.15	1013.90	0.509	1.71	1.05

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	9.08	0.61	0.086	A	A
Ironlatch Avenue	11.65	0.78	0.131	A	A
Gillsman's Hill	6.71	0.45	0.076	A	A
Harley Shute Road	14.66	0.98	0.094	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	13.42	0.89	0.107	A	A
Ironlatch Avenue	18.96	1.26	0.182	B	B
Gillsman's Hill	9.72	0.65	0.093	A	A
Harley Shute Road	23.40	1.56	0.128	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	23.50	1.57	0.157	A	A
Ironlatch Avenue	42.11	2.81	0.353	C	C
Gillsman's Hill	16.34	1.09	0.129	A	A
Harley Shute Road	49.84	3.32	0.236	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	25.14	1.68	0.160	A	A
Ironlatch Avenue	49.43	3.30	0.384	C	C
Gillsman's Hill	17.22	1.15	0.132	A	A
Harley Shute Road	56.79	3.79	0.251	C	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	14.90	0.99	0.109	A	A
Ironlatch Avenue	23.13	1.54	0.195	B	B
Gillsman's Hill	10.62	0.71	0.094	A	A
Harley Shute Road	27.44	1.83	0.135	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	9.87	0.66	0.087	A	A
Ironlatch Avenue	13.25	0.88	0.135	A	A
Gillsman's Hill	7.21	0.48	0.077	A	A
Harley Shute Road	16.30	1.09	0.097	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	F - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
Crowhurst Road	3.65	6.00	4.70	20.00	37.50	16.00		0.611	1446.847
Ironlatch Avenue	3.10	5.00	4.20	12.00	37.00	33.00		0.519	1123.993
Gillsman's Hill	3.30	6.30	7.10	45.00	38.00	14.00		0.631	1500.995
Harley Shute Road	3.75	6.40	4.50	35.00	37.50	15.00		0.633	1517.900

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
1	Crowhurst Road	438.91	1133.30	0.387	0.00	0.00	0.63	9.08	(0.02)	0.086
1	Ironlatch Avenue	374.17	825.50	0.453	0.00	0.00	0.82	11.65	(0.02)	0.131
1	Gillsman's Hill	363.63	1148.01	0.317	0.00	0.00	0.46	6.71	(0.02)	0.076
1	Harley Shute Road	647.45	1274.71	0.508	0.00	0.00	1.02	14.66	(0.02)	0.094
2	Crowhurst Road	524.10	1084.15	0.483	0.00	0.63	0.92	13.42	(0.02)	0.107
2	Ironlatch Avenue	446.79	772.97	0.578	0.00	0.82	1.33	18.96	(0.02)	0.182

2	Gillsman's Hill	434.21	1080.32	0.402	0.00	0.46	0.67	9.72	(0.02)	0.093
2	Harley Shute Road	773.12	1236.26	0.625	0.00	1.02	1.63	23.40	(0.02)	0.128
3	Crowhurst Road	641.89	1019.03	0.630	0.00	0.92	1.66	23.50	(0.02)	0.157
3	Ironlatch Avenue	547.21	702.70	0.779	0.00	1.33	3.19	42.11	(0.02)	0.353
3	Gillsman's Hill	531.79	991.42	0.536	0.00	0.67	1.14	16.34	(0.02)	0.129
3	Harley Shute Road	946.87	1184.60	0.799	0.00	1.63	3.70	49.84	(0.02)	0.236
4	Crowhurst Road	641.89	1016.38	0.632	0.00	1.66	1.69	25.14	(0.02)	0.160
4	Ironlatch Avenue	547.21	700.75	0.781	0.00	3.19	3.37	49.43	(0.02)	0.384
4	Gillsman's Hill	531.79	987.16	0.539	0.00	1.14	1.15	17.22	(0.02)	0.132
4	Harley Shute Road	946.87	1183.43	0.800	0.00	3.70	3.84	56.79	(0.02)	0.251
5	Crowhurst Road	524.10	1080.35	0.485	0.00	1.69	0.96	14.90	(0.02)	0.109
5	Ironlatch Avenue	446.79	770.14	0.580	0.00	3.37	1.42	23.13	(0.02)	0.195
5	Gillsman's Hill	434.21	1074.07	0.404	0.00	1.15	0.69	10.62	(0.02)	0.094
5	Harley Shute Road	773.12	1234.52	0.626	0.00	3.84	1.71	27.44	(0.02)	0.135
6	Crowhurst Road	438.91	1130.84	0.388	0.00	0.96	0.64	9.87	(0.02)	0.087
6	Ironlatch Avenue	374.17	823.13	0.455	0.00	1.42	0.85	13.25	(0.02)	0.135
6	Gillsman's Hill	363.63	1143.94	0.318	0.00	0.69	0.47	7.21	(0.02)	0.077
6	Harley Shute Road	647.45	1273.15	0.509	0.00	1.71	1.05	16.30	(0.02)	0.097

A1 - Existing Layout - D6 - Total, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Total, PM	Total	PM			Yes	Yes	D2 + D4	16:45	18:15	90	15	(DIRECT)

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	B2029 Roundabout	1,2,3,4	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
1	Crowhurst Road	
2	Ironlatch Avenue	
3	Gillsman's Hill	
4	Harley Shute Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Crowhurst Road	0.00	99999.00		0.00
Ironlatch Avenue	0.00	99999.00		0.00
Gillsman's Hill	0.00	99999.00		0.00
Harley Shute Road	0.00	99999.00		0.00

Standard 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
Crowhurst Road	3.65	6.00	4.70	20.00	37.50	16.00	
Ironlatch Avenue	3.10	5.00	4.20	12.00	37.00	33.00	
Gillsman's Hill	3.30	6.30	7.10	45.00	38.00	14.00	
Harley Shute Road	3.75	6.40	4.50	35.00	37.50	15.00	

Pedestrian Crossings

Arm	Crossing Type
Crowhurst Road	None
Ironlatch Avenue	None
Gillsman's Hill	None
Harley Shute Road	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Crowhurst Road		((calculated))	((calculated))	0.611	1446.847
Ironlatch Avenue		((calculated))	((calculated))	0.519	1123.993
Gillsman's Hill		((calculated))	((calculated))	0.631	1500.995
Harley Shute Road		((calculated))	((calculated))	0.633	1517.900

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
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
Crowhurst Road	DIRECT			100.000	N/A
Ironlatch Avenue	DIRECT			100.000	N/A
Gillsman's Hill	DIRECT			100.000	N/A
Harley Shute Road	DIRECT			100.000	N/A

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)
1	Crowhurst Road	558.62	566.39	N/A	N/A
1	Ironlatch Avenue	322.97	335.59	N/A	N/A
1	Gillsman's Hill	249.95	255.97	N/A	N/A
1	Harley Shute Road	514.95	529.96	N/A	N/A
2	Crowhurst Road	667.04	676.32	N/A	N/A
2	Ironlatch Avenue	385.66	400.73	N/A	N/A
2	Gillsman's Hill	298.46	305.65	N/A	N/A
2	Harley Shute Road	614.90	632.82	N/A	N/A
3	Crowhurst Road	816.96	828.33	N/A	N/A
3	Ironlatch Avenue	472.34	490.80	N/A	N/A
3	Gillsman's Hill	365.54	374.34	N/A	N/A
3	Harley Shute Road	753.10	775.05	N/A	N/A
4	Crowhurst Road	816.96	828.33	N/A	N/A
4	Ironlatch Avenue	472.34	490.80	N/A	N/A
4	Gillsman's Hill	365.54	374.34	N/A	N/A
4	Harley Shute Road	753.10	775.05	N/A	N/A
5	Crowhurst Road	667.04	676.32	N/A	N/A
5	Ironlatch Avenue	385.66	400.73	N/A	N/A
5	Gillsman's Hill	298.46	305.65	N/A	N/A
5	Harley Shute Road	614.90	632.82	N/A	N/A
6	Crowhurst Road	558.62	566.39	N/A	N/A
6	Ironlatch Avenue	322.97	335.59	N/A	N/A
6	Gillsman's Hill	249.95	255.97	N/A	N/A
6	Harley Shute Road	514.95	529.96	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - B2029 Roundabout (for whole period)

To

		1	2	3	4
From	1	0.000	29.000	322.000	367.000
	2	17.000	0.000	117.000	277.000
	3	199.000	73.000	0.000	60.000
	4	269.000	312.000	74.000	0.000

Turning Proportions (Veh) - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.04	0.45	0.51
	2	0.04	0.00	0.28	0.67
	3	0.60	0.22	0.00	0.18
	4	0.41	0.48	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.172	1.003	1.011
	2	1.176	1.000	1.017	1.040
	3	1.020	1.055	1.000	1.000
	4	1.030	1.032	1.014	1.000

Heavy Vehicle Percentages - B2029 Roundabout (for whole period)

		To			
		1	2	3	4
From	1	0.000	17.200	0.300	1.100
	2	17.600	0.000	1.700	4.000
	3	2.000	5.500	0.000	0.000
	4	3.000	3.200	1.400	0.000

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
Crowhurst Road	0.74	0.21	2.80	B	680.87	1021.30	146.06	0.14	1.62	146.08	0.14	0.611	1446.847
Ironlatch Avenue	0.73	0.35	2.63	C	393.66	590.49	128.22	0.22	1.42	128.24	0.22	0.519	1123.993
Gillsman's Hill	0.37	0.10	0.58	A	304.65	456.97	37.17	0.08	0.41	37.18	0.08	0.631	1500.995
Harley Shute Road	0.59	0.12	1.44	A	627.65	941.47	87.50	0.09	0.97	87.51	0.09	0.633	1517.900

Main Results

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	558.61	139.65	555.20	372.85	356.71	0.00	1204.99	939.22	0.464	0.00	0.85
Ironlatch Avenue	322.97	80.74	320.21	321.24	590.67	0.00	784.41	571.73	0.412	0.00	0.69
Gillsman's Hill	249.95	62.49	248.83	398.04	512.84	0.00	1140.81	902.21	0.219	0.00	0.28
Harley Shute Road	514.95	128.74	512.46	544.57	217.11	0.00	1336.29	989.93	0.385	0.00	0.62

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	667.04	166.76	665.15	446.65	427.30	0.00	1161.06	939.22	0.575	0.85	1.33
Ironlatch Avenue	385.66	96.42	383.99	384.82	707.65	0.00	725.53	571.73	0.532	0.69	1.11
Gillsman's Hill	298.46	74.62	298.05	476.97	614.67	0.00	1076.30	902.21	0.277	0.28	0.38
Harley Shute Road	614.90	153.72	613.88	652.65	260.07	0.00	1308.86	989.93	0.470	0.62	0.88

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	816.95	204.24	811.34	546.32	522.72	0.00	1101.68	939.22	0.742	1.33	2.73
Ironlatch Avenue	472.34	118.08	466.74	470.65	863.41	0.00	647.13	571.73	0.730	1.11	2.51
Gillsman's Hill	365.54	91.38	364.75	581.56	748.58	0.00	991.48	902.21	0.369	0.38	0.58
Harley Shute Road	753.09	188.27	750.90	795.20	318.14	0.00	1271.79	989.93	0.592	0.88	1.43

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	816.95	204.24	816.67	547.87	524.14	0.00	1100.79	939.22	0.742	2.73	2.80
Ironlatch Avenue	472.34	118.08	471.86	472.06	868.76	0.00	644.44	571.73	0.733	2.51	2.63
Gillsman's Hill	365.54	91.38	365.52	585.65	754.97	0.00	987.41	902.21	0.370	0.58	0.58
Harley Shute Road	753.09	188.27	753.04	801.51	318.98	0.00	1271.24	989.93	0.592	1.43	1.44

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	667.04	166.76	672.73	448.98	429.45	0.00	1159.73	939.22	0.575	2.80	1.38
Ironlatch Avenue	385.66	96.42	391.46	386.90	715.28	0.00	721.69	571.73	0.534	2.63	1.18
Gillsman's Hill	298.46	74.62	299.24	482.85	623.88	0.00	1070.43	902.21	0.279	0.58	0.39
Harley Shute Road	614.90	153.72	617.07	661.78	261.35	0.00	1308.02	989.93	0.470	1.44	0.90

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
Crowhurst Road	558.61	139.65	560.63	375.42	359.14	0.00	1203.48	939.22	0.464	1.38	0.88
Ironlatch Avenue	322.97	80.74	324.82	323.49	596.28	0.00	781.59	571.73	0.413	1.18	0.71
Gillsman's Hill	249.95	62.49	250.37	402.19	518.91	0.00	1136.95	902.21	0.220	0.39	0.28
Harley Shute Road	514.95	128.74	516.00	550.73	218.56	0.00	1335.35	989.93	0.386	0.90	0.63

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	12.33	0.82	0.092	A	A
Ironlatch Avenue	9.88	0.66	0.129	A	A
Gillsman's Hill	4.09	0.27	0.067	A	A
Harley Shute Road	9.06	0.60	0.073	A	A

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

Arm	Queueing Total Delay	Queueing Rate Of Delay	Average Delay Per Arriving	Unsignalised Level Of	Signalised Level Of
Crowhurst Road	12.33	0.82	0.092	A	A
Ironlatch Avenue	9.88	0.66	0.129	A	A
Gillsman's Hill	4.09	0.27	0.067	A	A
Harley Shute Road	9.06	0.60	0.073	A	A

Arm	(Veh-min)	(Veh-min/min)	Vehicle (min)	Service	Service
Crowhurst Road	19.11	1.27	0.121	A	A
Ironlatch Avenue	15.83	1.06	0.175	B	B
Gillsman's Hill	5.61	0.37	0.077	A	A
Harley Shute Road	12.81	0.85	0.086	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	37.66	2.51	0.203	B	B
Ironlatch Avenue	33.74	2.25	0.323	C	B
Gillsman's Hill	8.45	0.56	0.096	A	A
Harley Shute Road	20.52	1.37	0.115	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	41.61	2.77	0.211	B	B
Ironlatch Avenue	38.70	2.58	0.345	C	C
Gillsman's Hill	8.73	0.58	0.096	A	A
Harley Shute Road	21.51	1.43	0.116	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	21.79	1.45	0.125	A	A
Ironlatch Avenue	18.91	1.26	0.185	B	B
Gillsman's Hill	5.98	0.40	0.078	A	A
Harley Shute Road	13.88	0.93	0.087	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Crowhurst Road	13.58	0.91	0.094	A	A
Ironlatch Avenue	11.15	0.74	0.132	A	A
Gillsman's Hill	4.33	0.29	0.068	A	A
Harley Shute Road	9.71	0.65	0.073	A	A

Overview: Standard Roundabout Geometry

Standard 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	Final Slope	Final Intercept (PCU/hr)
Crowhurst Road	3.65	6.00	4.70	20.00	37.50	16.00		0.611	1446.847
Ironlatch Avenue	3.10	5.00	4.20	12.00	37.00	33.00		0.519	1123.993
Gillsman's Hill	3.30	6.30	7.10	45.00	38.00	14.00		0.631	1500.995
Harley Shute Road	3.75	6.40	4.50	35.00	37.50	15.00		0.633	1517.900

Overview: Time Segment Results

Time Segment Results

				Reduction	Start	End		Average Delay Per
--	--	--	--	-----------	-------	-----	--	-------------------

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Peak Hour Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
1	Crowhurst Road	558.61	1204.99	0.464	0.00	0.00	0.85	12.33	(0.02)	0.092
1	Ironlatch Avenue	322.97	784.41	0.412	0.00	0.00	0.69	9.88	(0.02)	0.129
1	Gillsman's Hill	249.95	1140.81	0.219	0.00	0.00	0.28	4.09	(0.02)	0.067
1	Harley Shute Road	514.95	1336.29	0.385	0.00	0.00	0.62	9.06	(0.02)	0.073
2	Crowhurst Road	667.04	1161.06	0.575	0.00	0.85	1.33	19.11	(0.02)	0.121
2	Ironlatch Avenue	385.66	725.53	0.532	0.00	0.69	1.11	15.83	(0.02)	0.175
2	Gillsman's Hill	298.46	1076.30	0.277	0.00	0.28	0.38	5.61	(0.02)	0.077
2	Harley Shute Road	614.90	1308.86	0.470	0.00	0.62	0.88	12.81	(0.02)	0.086
3	Crowhurst Road	816.95	1101.68	0.742	0.00	1.33	2.73	37.66	(0.02)	0.203
3	Ironlatch Avenue	472.34	647.13	0.730	0.00	1.11	2.51	33.74	(0.02)	0.323
3	Gillsman's Hill	365.54	991.48	0.369	0.00	0.38	0.58	8.45	(0.02)	0.096
3	Harley Shute Road	753.09	1271.79	0.592	0.00	0.88	1.43	20.52	(0.02)	0.115
4	Crowhurst Road	816.95	1100.79	0.742	0.00	2.73	2.80	41.61	(0.02)	0.211
4	Ironlatch Avenue	472.34	644.44	0.733	0.00	2.51	2.63	38.70	(0.02)	0.345
4	Gillsman's Hill	365.54	987.41	0.370	0.00	0.58	0.58	8.73	(0.02)	0.096
4	Harley Shute Road	753.09	1271.24	0.592	0.00	1.43	1.44	21.51	(0.02)	0.116
5	Crowhurst Road	667.04	1159.73	0.575	0.00	2.80	1.38	21.79	(0.02)	0.125
5	Ironlatch Avenue	385.66	721.69	0.534	0.00	2.63	1.18	18.91	(0.02)	0.185
5	Gillsman's Hill	298.46	1070.43	0.279	0.00	0.58	0.39	5.98	(0.02)	0.078
5	Harley Shute Road	614.90	1308.02	0.470	0.00	1.44	0.90	13.88	(0.02)	0.087
6	Crowhurst Road	558.61	1203.48	0.464	0.00	1.38	0.88	13.58	(0.02)	0.094
6	Ironlatch Avenue	322.97	781.59	0.413	0.00	1.18	0.71	11.15	(0.02)	0.132
6	Gillsman's Hill	249.95	1136.95	0.220	0.00	0.39	0.28	4.33	(0.02)	0.068
6	Harley Shute Road	514.95	1335.35	0.386	0.00	0.90	0.63	9.71	(0.02)	0.073

