Key Route No.5: Site - Belvedere Retail Park

Photo 5.1

Photo 5.2

Photo 5.3

Photo 5.4

Photo 5.5

Photo 5.6

Photo 5.7

Photo 5.8

Photo 5.9

Photo 5.10

Photo 5.11

Photo 5.12

Photo 5.13

Key Route No.6/7: Site – Southmere Park and School

Photo 6.1

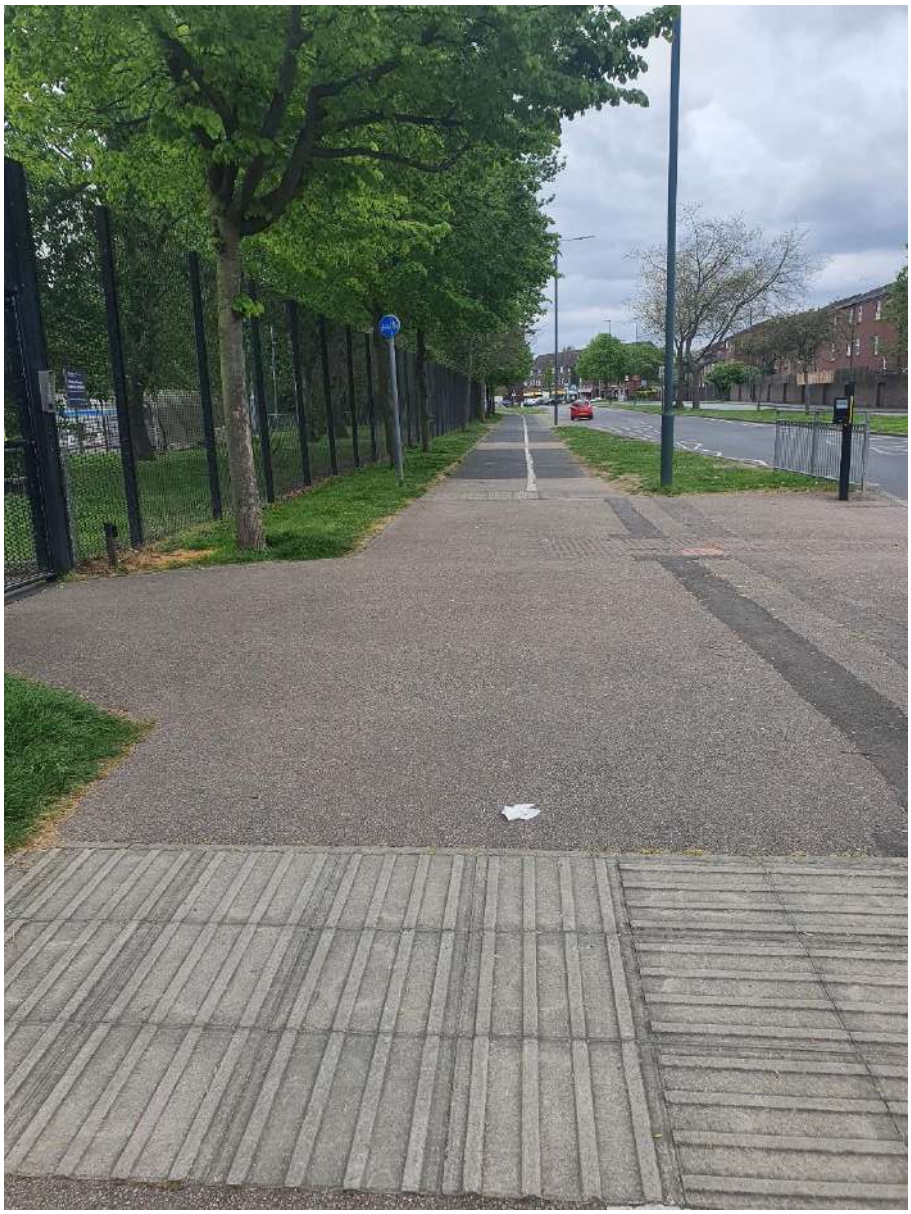


Photo 6.2

Photo 6.3

Photo 6.4

Photo 6.5

Photo 6.6

Photo 6.7

Photo 6.8

Photo 6.9

Photo 6.10

Photo 6.11

Photo 6.12

Photo 6.13

Photo 6.14

Photo 6.15

Photo 6.16

Photo 6.17

Photo 6.18

Photo 6.19

Photo 6.20

Photo 6.21

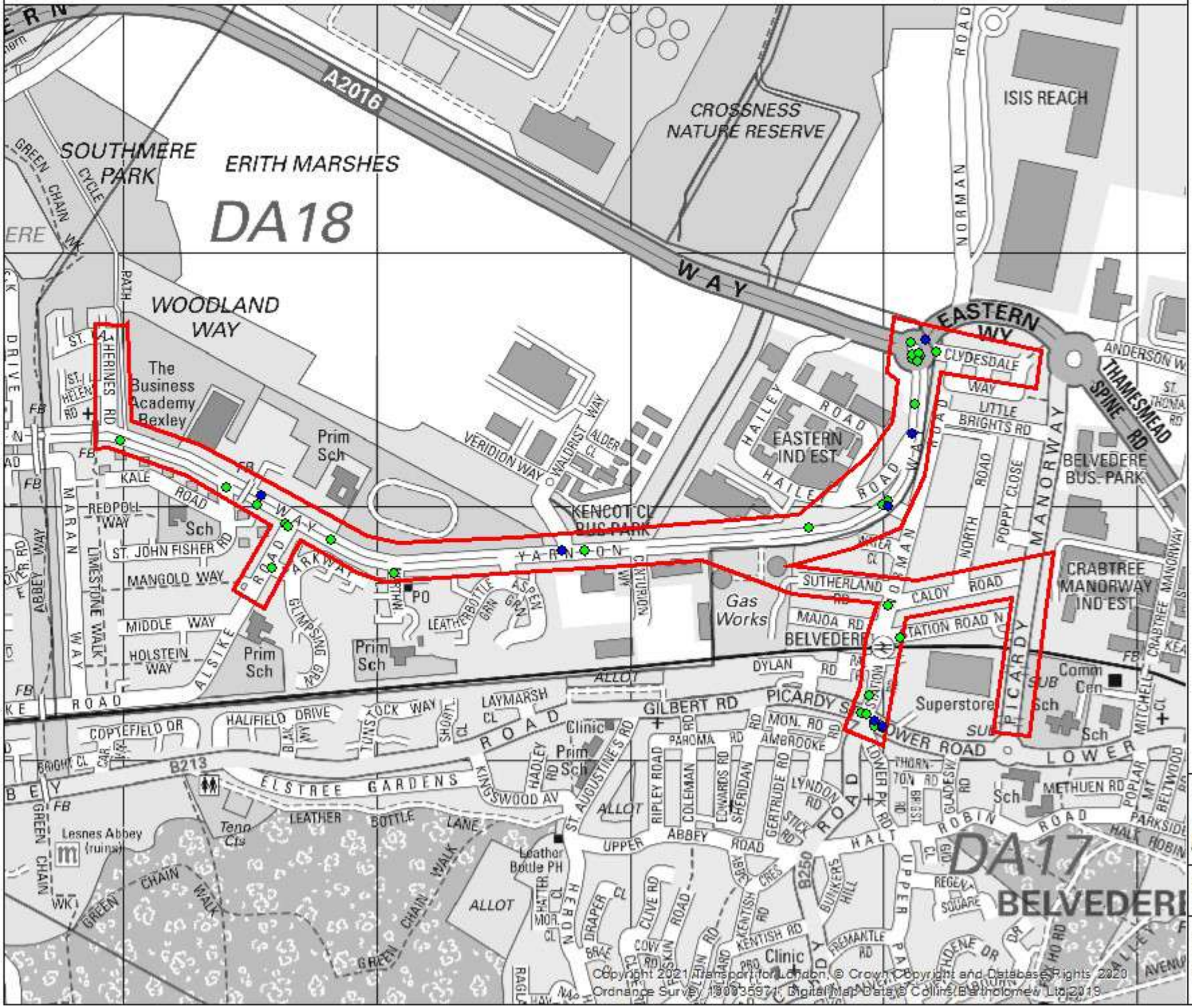
Photo 6.22

Photo 6.23

Appendix F

Personal Injury Accident Study Area and Data

Yarnton Way Personal Injury Collisions 60 months to end of June 2022 (Provisional)



Severity of collision

Slight	Serious	Fatal
1 (28)	1 (7)	1 (0)
2 (0)	2 (0)	2 (0)
3 (0)	3 (0)	3 (0)
4 (0)	4 (0)	4 (0)
5 (0)	5 (0)	5 (0)

N

0 0.15 0.3 Km

PRINTED BY:
COLLSTATS 3 - TfL City Planning

DATE:
12/10/2022

Yarnton Way Personal Injury Collisions 60 months to end of June 2022 (Provisional)

SUMMARY OF COLLISIONS SELECTED

SITE REFERENCE AND DESCRIPTION	DATE PERIOD	COLLISION COUNT
GIS AREA B18 YARNTON WAY(P)	60MTS TO JUN/2022	35

THE DESCRIPTION OF HOW THE COLLISION OCCURRED AND THE CONTRIBUTORY FACTORS ARE THE REPORTING OFFICER'S OPINION AT THE TIME OF REPORTING AND MAY NOT BE THE RESULT OF EXTENSIVE INVESTIGATION. NOTE THAT SELF-REPORTED COLLISIONS (INTRODUCED IN SEPTEMBER 2016) MAY HAVE LIMITED INFORMATION. DESCRIPTIONS HAVE BEEN AUTOMATICALLY REDACTED TO REMOVE ALL PERSONALLY IDENTIFIABLE INFORMATION, BUT SHOULD YOU RECEIVE ANY IN ERROR PLEASE INFORM THE COLLISIONS DATA TEAM AS SOON AS PRACTICAL. SELF-REPORTED COLLISIONS INTRODUCED IN SEPTEMBER 2016 MAY HAVE LIMITED INFORMATION AND TEND TO BE LOWER IN QUALITY THAN POLICE REPORTS. THE INTRODUCTION OF ONLINE SELF-REPORTING HAS MADE IT EASIER FOR MEMBERS OF THE PUBLIC TO REPORT COLLISIONS TO THE POLICE. THERE HAVE BEEN YEAR ON YEAR INCREASES IN SELF-REPORTS SINCE THIS WAS INTRODUCED. THIS HAS CONTRIBUTED TO AN OVERALL INCREASE IN THE NUMBER OF CASUALTIES REPORTED ON LONDON'S ROADS.

1

01170056452	WED 16/08/2017 16:00		LIGHT	STATION RD 15M N OF J/W SLIP RD TO PICARDY ST			18 LINK 198-199		549470/179130
SELF-REPORTED		UNKNOWN S/R	WEATHER-UNKNOWN	UNKNOWN	T/STAG JUN	UNKNOWN S/R	UNKNOWN S/R		UNKNOWN S/R
CASUALTY	001 (001)	(46 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
CASUALTY	002 (001)	(? YRS - M - REDA)		SLIGHT	VEH/PILLION PAX	REAR SEAT PASSENGER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(46 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R	

2

01170066326	WED 25/10/2017 07:48		LIGHT	YARNTON WAY J/W A2016			18 NODE 239		549570/179800
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	ROUNDABOUT	ROUNDABOUT	GIVEWAY /UNCONT	NO XING FACIL IN 50M		NONE IN 50M
CASUALTY	001 (001)	(22 YRS - F - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NOT REQ		(22 YRS - F - REDACT)		G/AHEAD - OTHER	(N TO S) N/S HIT FIRST	COMMUTING L/ROUNDABOUT	
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(? YRS - M - REDACT)		CHNG LANE - RIGHT	(N TO S) O/S HIT FIRST	J/P - UNKN L/ROUNDABOUT	

V002	A	403 (POOR TURN OR MANOEUVRE)	V002	A
V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)		

305 (ILLEGAL TURN OR DIRECTION OF TRAVEL)

3

01170078907	MON 18/12/2017 21:25		DARK	YARNTON WAY J/W ALSIKE RD			18 LINK 239-772	548320/179470
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	ROUNDABOUT	ROUNDABOUT	GIVEWAY /UNCONT	PELICAN OR SIML	CTRL - SCH XING PTRL
CASUALTY	001 (001)	(42 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(42 YRS - M - REDACT)		TURNING RIGHT	(N TO W) O/S HIT FIRST	JOURNEY P/O WORK
VEHICLE	002 (000)	M/C 126-500CC BT - NOT REQ		(27 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	J/P - UNKN

V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)	V002 A	901 (STOLEN VEHICLE)
V002	A	902 (VEHICLE IN COURSE OF CRIME)		

4

01180101115	WED 11/04/2018 10:20		LIGHT	PARKWAY J/W ALSIKE RD			18 CELL 548000/179000	548292/179382
POLICE - AT SCENE NOT KNOWN HOW COLLISION OCCURRED		ROAD-WET	RAINING	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(59 YRS - M - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	CAR BT - NOT REQ		(35 YRS - F - REDACT)		TURNING - LEFT	(SW TO SE) BACK HIT FIRST	JOURNEY P/O WORK JCT MID
VEHICLE	002 (000)	CAR BT - NOT REQ		(25 YRS - M - REDACT)		G/AHEAD - OTHER	(SW TO SW) FRONT HIT FIRST	J/P - UNKN JCT APP

V002	A	410 (LOSS OF CONTROL)

5

01180121423	MON 16/07/2018 23:20	DARK	EASTERN WAY J/W YARNTON RD			18 NODE 239		549580/179830
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	ROUNDABOUT	ROUNDABOUT	GIVEWAY /UNCONT	NO XING FACIL IN 50M		NONE IN 50M

APPARENTLY THE DRIVER OF V001, WAS TRAVELLING AT SPEED ONTO THE EASTERN WAY, (REDACTED) ROADABOUT (REDACTED) HE HAS SUBSEQUENTLY LOST CONTROL OF THE BIKE, CLOSE TO ONE OF THE EXITS AND HIT THE CURB CAUSING HIM AND HIS PASSENGER TO COME OFF THE BIKE AND SUSTAIN INJURIES. (REDACTED)

CASUALTY	001 (001)	(23 YRS - M - REDA)	SLIGHT	DRIVER/RIDER				
CASUALTY	002 (001)	(21 YRS - F - REDA)	SERIOUS	VEH/PILLION PAX				
VEHICLE	001 (000)	M/C >500CC BT - NEG	(23 YRS - M - REDACT)		G/AHEAD - L-HAND BEND		(N TO SW) DID NOT IMPACT	J/P - UNKN L/ROUNDABOUT
V001	A	306 (EXCEEDING SPEED LIMIT)			V001	A	409 (SWERVED)	
V001	A	410 (LOSS OF CONTROL)						

6

01180123385	THU 26/07/2018 13:00	LIGHT	YARNTON WAY 478M E OF J/W WALDRIST WAY			18 LINK 239-772		549350/179460
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	PEDN PHASE ATS		NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (001)	(36 YRS - M - REDA)	SLIGHT	DRIVER/RIDER				
CASUALTY	002 (002)	(43 YRS - M - REDA)	SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NOT REQ	(36 YRS - M - REDACT)		WAITING - HELD UP		(SW TO SE) BACK HIT FIRST	COMMUTING
VEHICLE	002 (000)	CAR BT - NOT REQ	(43 YRS - M - REDACT)		WAITING - HELD UP		(SW TO SE) BACK HIT FIRST	COMMUTING
VEHICLE	003 (000)	VAN/GOODS => 3.5T BT - NOT REQ	(24 YRS - M - REDACT)	CARAVAN	G/AHEAD - OTHER		(SW TO SE) FRONT HIT FIRST	JOURNEY P/O WORK
V003	A	602 (CARELESS, RECKLESS OR IN A HURRY)			V003	A	509 (DISTRACTION IN VEHICLE)	

7

01180141538	FRI 26/10/2018 19:11		DARK	YARTON WAY 50M E OF J/W KALE RD			18 LINK 239-772	548264/179505
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(28 YRS - M - REDA)		SLIGHT	PEDESTRIAN	UNKNOWN	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	LONDON BUS BT - NOT REQ		(50 YRS - M - REDACT)	G/AHEAD - OTHER		(E TO E) N/S HIT FIRST	J/P - UNKN
C001	A	802 (FAILED TO LOOK PROPERLY)						

8

01190166518	SAT 02/03/2019 14:01		LIGHT	YARNTON WAY, NR JUNCT WTH KALE RD.			18 LINK 239-772	548204/179541
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(33 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	SEATED PASSENGER		
CASUALTY	002 (001)	(56 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	SEATED PASSENGER		
VEHICLE	001 (000)	LONDON BUS BT - NOT REQ		(39 YRS - M - REDACT)		G/AHEAD - OTHER	(N TO S) DID NOT IMPACT	JOURNEY P/O WORK
V001	A	703 (ROAD LAYOUT (EG. BEND, WINDING ROAD, HILL CREST)						

9

01190168828	WED 13/03/2019 10:30		LIGHT	YARNTON WAY, NR JUNCT WTH ST KATHERINES WAY.			18 LINK 239-772	547994/179634
POLICE - AT SCENE		ROAD-DRY	FINE - H WIND	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(72 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(72 YRS - F - REDACT)		TURNING RIGHT	(N TO W) FRONT HIT FIRST	E/MAIN RD
V001	A	410 (LOSS OF CONTROL)						

10

01190168956	THU 14/03/2019 05:30		DARK	YARTON WAY, NR JUNCT WTH WALDRIST WAY.			18 LINK 239-772	548909/179417
POLICE - AT SCENE		ROAD-WET	RAINING	DUAL CWY	T/STAG JUN	STOP SGN	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(40 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	GOODS > 7.5T BT - NOT REQ		(32 YRS - M - REDACT)		MOVING OFF	(W TO E) O/S HIT FIRST	JOURNEY P/O WORK E/MAIN RD
VEHICLE	002 (000)	PED CYCLE BT - N/A		(40 YRS - F - REDACT)		G/AHEAD - OTHER	(W TO E) N/S HIT FIRST	COMMUTING JCT CLEARED
V001	A	710 (VEHICLE BLIND SPOT)						

11

01190183502	WED 22/05/2019 00:07		DARK	LOWER RD, 30 METRES WEST OF JUNCT WTH PICARDY ST.. NREST CLASSIFIED RD WAS B250			18 NODE 199	549496/179070
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M

(REDACTED)

CASUALTY	001 (001)	(21 YRS - M - REDA)	SERIOUS	PEDESTRIAN	S BOUND	FROM DRIVERS O/SIDE	
VEHICLE	001 (000)	CAR BT - NEG	(24 YRS - M - REDACT)	G/AHEAD - OTHER		(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

12

01190188594	FRI 21/06/2019 00:26		DARK	YARNTON WAY, 64 METRES NORTH OF JUNCT WTH NORMAN RD.		18 LINK 239-772	549555/179647
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	NO JUN IN 20M	NO XING FACIL IN 50M	NONE IN 50M

APPARENTLY VE001 STOPPED FOR POLICE JUST BEFORE HARTSLOCK DRIVE, (REDACTED), BEFORE OFFICERS COULD EXIT THEIR VEHICLE VE001 MADE OFF AT SPEED AND OUT OF SIGHT ALONG YARNTON WAY TOWARDS EASTERN WAY, AS THE VEHICLE APPROACHED THE JUNCTION TO NORMAN ROAD IT HAS LOST CONTROL CLIPPED A KERB, HIT A LAMPPOST CONTINUED ONTO THE OPPOSITE CARRIAGEWAY HITTING VE002 THAT WAS PARKED AND COMING TO A STOP ON A GRASS VERGE OPPOSITE 124 NORMAN ROAD.

CASUALTY	001 (001)	(32 YRS - M - REDA)	SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT PROVD	(32 YRS - M - REDACT)	G/AHEAD - OTHER		(SW TO NE) FRONT HIT FIRST	J/P - UNKN
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	PARKED		(P TO P) FRONT HIT FIRST	J/P - UNKN
V001	A	902 (VEHICLE IN COURSE OF CRIME)		V001	A	501 (IMPAIRED BY ALCOHOL)	
V001	A	410 (LOSS OF CONTROL)					

13

01190195222	TUE 16/07/2019 19:45		LIGHT	PICARDY ST, NR JUNCT WTH LOWER RD.			18 NODE 199	549480/179080
SELF-REPORTED		ROAD-DRY	WEATHER-OTHER	SINGLE CWY	UNKNOWN S/R	UNKNOWN S/R	ZEBRA XING	NONE IN 50M

I HAD JUST COME OUT OF ASDA WALKING TO CROSSING I LOOKED RUGHT AND NOTICED A (REDACTED) CAR AND 2 BIKES GOING FAST (REDACTED) THEY MANAGED TO STOP I STEPPED OUT AND AS I DID THE BIKE NEAREST TO THE KERB REVVED UP I TURNED A LITTLR TO LOOK WHERE HE STARTED TO DRIVE TOWARDS ME BUT WENT INTO MY RIGHT ARM KNOCKING ME TO FLOOR HE WWNT DOWN ON HIS RIGHT SIDE GOT UP AND DROVE OFF AS HE DROVE TO THE ROUND ABOUT DOING A LEFT

CASUALTY	001 (001)	(57 YRS - F - REDA)	SERIOUS	PEDESTRIAN	UNKNOWN	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	M/C <= 50CC BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R		(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

14

01190196257	FRI 26/07/2019 19:15		LIGHT	YARNTON WAY, NR JUNCT WTH KALE RD.			18 LINK 239-772	548271/179524
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M

VEHICLE 2 AND VEHICLE 3 WERE BEING FOLLOWED BY VEHICLE 1. VEHICLE 1 CRASHED INTO VEHICLE 2, KNOCKING IT OVER AND ONTO THE PAVEMENT. VEHICLE 1 THEN CRASHED INTO VEHICLE 3, ALL APPEARED TO BE DELIBERATE ACTS. VEHICLE MADE OFF FROM SCENE, FAILED TO STOP.

CASUALTY	001 (002)	(18 YRS - M - REDA)	SLIGHT	DRIVER/RIDER				
CASUALTY	002 (003)	(19 YRS - M - REDA)	SERIOUS	VEH/PILLION PAX				
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)		G/AHEAD - OTHER		(W TO E) FRONT HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	M/C 51-125CC BT - NOT REQ	(18 YRS - M - REDACT)		G/AHEAD - OTHER		(W TO E) BACK HIT FIRST	J/P - UNKN JCT APP
VEHICLE	003 (000)	M/C 51-125CC BT - DRV NOT CONTACTED	(? YRS - M - REDACT)		G/AHEAD - OTHER		(W TO E) BACK HIT FIRST	J/P - UNKN JCT APP
V001	A	601 (AGGRESSIVE DRIVING)			V003	A	901 (STOLEN VEHICLE)	

15

01190205059	FRI 13/09/2019 08:30		LIGHT	YARTON WAY, NR JUNCT WTH EASTERN WAY.			18 NODE 239	549554/179794
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	ROUNDABOUT	ROUNDABOUT	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (002)	(63 YRS - F - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	GOODS > 7.5T BT - NOT REQ	(43 YRS - M - REDACT)	ARTICULATED VEH	WAITING - HELD UP	(S TO N) N/S HIT FIRST	JOURNEY P/O WORK
VEHICLE	002 (000)	CAR BT - NOT PROVD	(63 YRS - F - REDACT)		WAITING - TURN LEFT	(S TO W) O/S HIT FIRST	SCHOOL - TAKING

V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)	V001	A	405 (FAILED TO LOOK PROPERLY)

16

01190212319	WED 16/10/2019 06:35		LIGHT	YARNTON WAY, NR JUNCT WTH EASTERN WAY.			18 NODE 239	549555/179803
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	DUAL CWY	ROUNDABOUT	UNKNOWN S/R	NO XING FACIL IN 50M	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (001)	(56 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(56 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	COMMUTING UNKNOWN S/R
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED	(? YRS - M - REDACT)	UNKNOWN S/R	G/AHEAD - OTHER	(NE TO SW) UNKNOWN S/R	J/P - UNKN

17

01190213895	FRI 25/10/2019 10:10		LIGHT	YARNTON WAY, 25 METRES NORTH OF JUNCT WTH HAILEY RD.			18 LINK 239-772	549508/179513
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	DUAL CWY	NO JUN IN 20M		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(31 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NEG		(31 YRS - M - REDACT)	G/AHEAD - L-HAND BEND		(SW TO N) FRONT HIT FIRST	COMMUTING
V001	A	410 (LOSS OF CONTROL)			V001	A	403 (POOR TURN OR MANOEUVRE)	
V001	A	103 (SLIPPERY ROAD (DUE TO WEATHER))						

18

01190221413	THU 28/11/2019 16:45		DARK	LOWER RD, 25 METRES WEST OF JUNCT WTH PICARDY ST.. NREST CLASSIFIED RD WAS B253. NREST CLASSIFIED RD WAS B253			18 LINK 199-701	549454/179095
POLICE - AT SCENE		ROAD-WET	RAINING	SINGLE CWY	NO JUN IN 20M		ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(62 YRS - F - REDA)		SLIGHT	PEDESTRIAN	E BOUND	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	CAR BT - NOT REQ		(38 YRS - F - REDACT)	G/AHEAD - OTHER		(E TO W) FRONT HIT FIRST	
C001	B	804 (WRONG USE OF PEDESTRIAN CROSSING FACILITY)						

19

01190221497	THU 28/11/2019 21:40		DARK	PICARDY ST, NR JUNCT WTH LOWER RD.				18 NODE 199	549481/179076
POLICE - AT SCENE		ROAD-WET	RAINING	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT		ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (002)	(33 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NOT REQ		(31 YRS - M - REDACT)		MOVING OFF		(P TO E) O/S HIT FIRST	COMMUTING E/MAIN RD
VEHICLE	002 (000)	M/C >500CC BT - NOT REQ		(33 YRS - M - REDACT)		G/AHEAD - OTHER		(N TO S) FRONT HIT FIRST	JCT APP
V001	A	402 (JUNCTION RESTART (MOVING OFF AT JUNCTION))				V001	B	707 (RAIN, SLEET, SNOW OR FOG)	

20

01200232268	THU 23/01/2020 15:30		LIGHT	YARNTON WAY, NR JUNCT WTH NORTHWOOD PLACE .				18 LINK 239-772	548533/179372
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	ROUNDABOUT	GIVEWAY /UNCONT		ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(13 YRS - M - REDA)		SLIGHT	PEDESTRIAN		E BOUND	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	CAR BT - NOT REQ		(57 YRS - F - REDACT)		G/AHEAD - OTHER		(SW TO NE) FRONT HIT FIRST	
V001	A	701 (STATIONARY OR PARKED VEHICLE(S))							

21

01200252891	TUE 23/06/2020 08:55		LIGHT	YARNTON WAY, NR JUNCT WTH NORMAN RD.			18 LINK 239-772	549497/179505
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(37 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	SEATED PASSENGER		
VEHICLE	001 (000)	LONDON BUS BT - NOT REQ		(61 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) DID NOT IMPACT	JOURNEY P/O WORK E/MAIN RD
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		MOVING OFF	(S TO N) DID NOT IMPACT	J/P - UNKN JCT MID
V002	B	602 (CARELESS, RECKLESS OR IN A HURRY)						

22

01200271310	FRI 02/10/2020 08:05		LIGHT	YARNTON WAY, 85 METRES EAST OF JUNCT WTH ALSIKE RD.			18 LINK 239-772	548408/179438
POLICE - AT SCENE		ROAD-WET	RAINING - H WIND	DUAL CWY	NO JUN IN 20M		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(12 YRS - M - REDA)		SLIGHT	PEDESTRIAN	UNKNOWN	FROM DRIVERS O/SIDE	
VEHICLE	001 (000)	CAR BT - NEG		(45 YRS - F - REDACT)		SLOWING/STOPPING	(NE TO SW) N/S HIT FIRST	SCHOOL - TAKING
V001	B	405 (FAILED TO LOOK PROPERLY)						

23

01200283450	TUE 08/12/2020 08:40		LIGHT	YARNTON WAY, NR JUNCT WTH EASTERN WAY.			18 NODE 239	549568/179804
SELF-REPORTED		ROAD-WET	WEATHER-OTHER	ROUNDABOUT	ROUNDABOUT	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(? YRS - M - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) BACK HIT FIRST	J/P - UNKN UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	J/P - UNKN L/ROUNDABOUT

24

01210287648	TUE 05/01/2021 20:58		DARK	EASTERN WAY, NR JUNCT WTH YARNTON WAY.			18 NODE 239	549552/179826
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	ROUNDABOUT	ROUNDABOUT	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(31 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(68 YRS - F - REDACT)		SLOWING/STOPPING	(S TO N) BACK HIT FIRST	J/P - UNKN
VEHICLE	002 (000)	CAR BT - NOT REQ		(31 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	J/P - UNKN
VEHICLE	003 (000)	CAR BT - NOT REQ		(47 YRS - M - REDACT)		MOVING OFF	(W TO E) BACK HIT FIRST	J/P - UNKN
V002 V002	B A	501 (IMPAIRED BY ALCOHOL) 306 (EXCEEDING SPEED LIMIT)				V002 A	401 (JUNCTION OVERSHOOT)	

25

01210308741	FRI 21/05/2021 20:06		LIGHT	YARNTON WAY, DA17, 118 METRES NORTH OF JUNCT WTH HAILEY RD.			18 LINK 239-772	549561/179704
POLICE - AT SCENE		ROAD-WET	WEATHER-OTHER	DUAL CWY	NO JUN IN 20M		PEDN PHASE ATS	CTRL - AUTH PERSON
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(27 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT PROVD		(27 YRS - M - REDACT)		MOVING OFF	(S TO N) FRONT HIT FIRST	J/P - UNKN
V001	B	103 (SLIPPERY ROAD (DUE TO WEATHER))				V001	A	410 (LOSS OF CONTROL)
V001	A	602 (CARELESS, RECKLESS OR IN A HURRY)				V001	A	410 (LOSS OF CONTROL)

26

01210318929	TUE 13/07/2021 15:27		LIGHT	STATION RD NORTH, 15 METRES EAST OF JUNCT WTH NORMAN RD.			18 CELL 549500/179000	549530/179244
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(68 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(57 YRS - F - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	JCT APP
VEHICLE	002 (000)	PED CYCLE BT - N/A		(68 YRS - M - REDACT)		G/AHEAD - R-HAND BEND	(E TO NW) FRONT HIT FIRST	J/P - UNKN JCT APP
V002	B	405 (FAILED TO LOOK PROPERLY)				V001	B	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)

27

01210321286	WED 28/07/2021 09:10	LIGHT	PICARDY ST, NR JUNCT WTH LOWER RD.			18 NODE 199		549497/179068
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(48 YRS - M - REDA)	SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NOT REQ	(77 YRS - F - REDACT)		MOVING OFF	(S TO N) FRONT HIT FIRST	E/MAIN RD	
VEHICLE	002 (000)	CAR BT - NOT REQ	(48 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) BACK HIT FIRST	JOURNEY P/O WORK JCT MID	
V001	A	405 (FAILED TO LOOK PROPERLY)			V001 A	403 (POOR TURN OR MANOEUVRE)		
V001	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)						

28

01210329731	MON 06/09/2021 15:00	LIGHT	CLYDESDALE WAY, NR JUNCT WTH YARNTON WAY.			18 NODE 239		549602/179807
SELF-REPORTED	ROAD-DRY	WEATHER-FINE	ROUNDABOUT	ROUNDABOUT	GIVEWAY /UNCONT	NO XING FACIL IN 50M		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(27 YRS - M - REDA)	SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - N/A	(27 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) BACK HIT FIRST	COMMUTING UNKNOWN S/R	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(74 YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R	

29

01210335596	MON 04/10/2021 16:00		LIGHT	PICARDY ST, NR JUNCT WTH B213.			18 NODE 199		549480/179069
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING		UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(31 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - N/A		(31 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	UNKNOWN S/R	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R	

30

01210343182	THU 11/11/2021 11:55		LIGHT	YARNTON WAY, NR JUNCT WTH NORMAN RD.			18 LINK 239-772		549508/179504
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	CROSSROADS	GIVEWAY /UNCONT	NO XING FACIL IN 50M		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(21 YRS - M - REDA)		SERIOUS	VEH/PILLION PAX	REAR SEAT PASSENGER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(26 YRS - M - REDACT)		G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	COMMUTING JCT APP	
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(38 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	JOURNEY P/O WORK JCT APP	
V002	A	405 (FAILED TO LOOK PROPERLY)				V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)	
V002	A	602 (CARELESS, RECKLESS OR IN A HURRY)							

31

01210349912	MON 13/12/2021 20:16	DARK	YARNTON WAY , NR JUNCT WTH WALDRIST WAY.			18 LINK 239-772		548865/179416
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	DUAL CWY	T/STAG JUN	GIVEWAY /UNCONT	PELICAN OR SIML		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(28 YRS - M - REDA)	SERIOUS	DRIVER/RIDER				
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NEG	(28 YRS - M - REDACT)		TURNING RIGHT	(E TO N) N/S HIT FIRST	COMMUTING JCT MID	
VEHICLE	002 (000)	M/C >500CC BT - NOT PROVD	(28 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT APP	
V002	A	306 (EXCEEDING SPEED LIMIT)			V002	A	601 (AGGRESSIVE DRIVING)	
V002	A	602 (CARELESS, RECKLESS OR IN A HURRY)						

32

01220354167	TUE 11/01/2022 19:05	DARK	LOWER RD, BELVEDERE, NR JUNCT WTH STATION RD, BELVEDERE.			18 NODE 199		549464/179094
POLICE - AT SCENE	ROAD-WET	RAINING	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING		CTRL - AUTH PERSON
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(16 YRS - M - REDA)	SLIGHT	PEDESTRIAN	STILL	FROM DRIVERS O/SIDE		
VEHICLE	001 (000)	CAR BT - NOT REQ	(26 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT APP	
V001	A	405 (FAILED TO LOOK PROPERLY)			V001	A	901 (STOLEN VEHICLE)	

33

01220354255	FRI 07/01/2022 05:50		DARK	YARNTON WAY, NR JUNCT WTH YARNTON WAY.			18 NODE 239	549566/179789
SELF-REPORTED		ROAD-WET	RAINING	DUAL CWY	ROUNDABOUT	GIVEWAY /UNCONT	PEDN PHASE ATS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(29 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	PED CYCLE BT - N/A		(29 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) BACK HIT FIRST	COMMUTING UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(57 YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

34

01220382136	MON 13/06/2022 18:54		LIGHT	YARNTON WAY, NR JUNCT WTH ALSIKE RD.			18 LINK 239-772	548325/179463
POLICE - AT SCENE		ROAD-DRY	WEATHER- FINE	ROUNDABOUT	ROUNDABOUT	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(52 YRS - M - REDA)		SLIGHT	VEH/PILLION PAX	SEATED PASSENGER		
CASUALTY	002 (001)	(42 YRS - M - REDA)		SLIGHT	VEH/PILLION PAX	SEATED PASSENGER		
CASUALTY	003 (001)	(56 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	SEATED PASSENGER		
VEHICLE	001 (000)	LONDON BUS BT - NOT REQ		(42 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) N/S HIT FIRST	JOURNEY P/O WORK
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED		(39 YRS - M - REDACT)		G/AHEAD - OTHER	(S TO N) FRONT HIT FIRST	J/P - UNKN

V002	A	302 (DISOBEYED 'GIVE WAY' OR 'STOP' SIGN OR MARKINGS)	V002	A	405 (FAILED TO LOOK PROPERLY)
V002	A	601 (AGGRESSIVE DRIVING)	V002	A	306 (EXCEEDING SPEED LIMIT)

35

01220385748	THU 30/06/2022 12:25		LIGHT	NORMAN RD, NR JUNCT WTH CALDY RD.			18 CELL 549500/179000		549508/179307
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(31 YRS - F - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(31 YRS - F - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	UNKNOWN S/R	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R	

Appendix G

TRICS Output Data

Calculation Reference: AUDIT-437201-220203-0248

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	BE	BEXLEY	1 days
	BN	BARNET	1 days
	BT	BRENT	2 days
	EG	EALING	2 days
	EN	ENFIELD	1 days
	GR	GREENWICH	1 days
	HD	HILLINGDON	1 days
	HO	HOUNSLOW	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 105 to 455 (units:)
Range Selected by User: 100 to 700 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 27/05/21

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

Selected survey days:

Monday	1 days
Tuesday	3 days
Wednesday	4 days
Thursday	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 undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	8
Edge of Town	2

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

Selected Location Sub Categories:

Development Zone	3
Residential Zone	5
No Sub Category	2

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,

Secondary Filtering 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 500m Range:

All Surveys Included

Population within 1 mile:

20,001 to 25,000	1 days
25,001 to 50,000	6 days
50,001 to 100,000	3 days

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

Population within 5 miles:

250,001 to 500,000	1 days
500,001 or More	9 days

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

Car ownership within 5 miles:

0.6 to 1.0	8 days
1.1 to 1.5	2 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	8 days
No	2 days

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

PTAL Rating:

1b Very poor	6 days
2 Poor	1 days
3 Moderate	1 days
6a Excellent	2 days

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

LIST OF SITES relevant to selection parameters

1 BE-03-M-01 FLATS & SEMI DETACHED BEXLEY
LARNER ROAD
ERITH

Edge of Town
Residential Zone
Total No of Dwellings: 343
Survey date: THURSDAY *20/09/18* *Survey Type: MANUAL*

2 BN-03-M-01 TERRACED & BLOCKS OF FLATS BARNET
MAYS LANE
BARNET

Edge of Town
Residential Zone
Total No of Dwellings: 105
Survey date: THURSDAY *09/03/17* *Survey Type: MANUAL*

3 BT-03-M-01 BLOCK OF FLATS BRENT
EMPIRE WAY
WEMBLEY

Suburban Area (PPS6 Out of Centre)
Development Zone
Total No of Dwellings: 284
Survey date: WEDNESDAY *03/06/15* *Survey Type: MANUAL*

4 BT-03-M-02 BLOCK OF FLATS BRENT
EMPIRE WAY
WEMBLEY

Suburban Area (PPS6 Out of Centre)
Development Zone
Total No of Dwellings: 232
Survey date: MONDAY *18/05/15* *Survey Type: MANUAL*

5 EG-03-M-04 BLOCKS OF FLATS EALING
BOLLO BRIDGE ROAD
ACTON
SOUTH ACTON
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total No of Dwellings: 167
Survey date: TUESDAY *13/06/17* *Survey Type: MANUAL*

6 EG-03-M-05 BLOCKS OF FLATS & HOUSES EALING
BOLLO BRIDGE ROAD
ACTON
SOUTH ACTON
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total No of Dwellings: 106
Survey date: WEDNESDAY *14/06/17* *Survey Type: MANUAL*

7 EN-03-M-01 BLOCKS OF FLATS & TERRACED ENFIELD
CARTERHATCH LANE
ENFIELD

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 220
Survey date: WEDNESDAY *22/06/16* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8	GR-03-M-02 CHRISTCHURCH WAY GREENWICH	BLOCKS OF FLATS		GREENWICH
	Suburban Area (PPS6 Out of Centre) Development Zone			
	Total No of Dwellings:		455	
	Survey date: TUESDAY		*13/12/16*	*Survey Type: MANUAL*
9	HD-03-M-05 JUDGE HEATH LANE HAYES	TERRACED & FLATS		HILLINGDON
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		261	
	Survey date: TUESDAY		*27/06/17*	*Survey Type: MANUAL*
10	HO-03-M-01 PUMP HOUSE CRESCENT BRENTFORD	BLOCKS OF FLATS		HOUNSLOW
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		336	
	Survey date: WEDNESDAY		*21/11/18*	*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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 3.31

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	251	0.037	10	251	0.111	10	251	0.148
08:00 - 09:00	10	251	0.068	10	251	0.151	10	251	0.219
09:00 - 10:00	10	251	0.060	10	251	0.075	10	251	0.135
10:00 - 11:00	10	251	0.047	10	251	0.054	10	251	0.101
11:00 - 12:00	10	251	0.053	10	251	0.057	10	251	0.110
12:00 - 13:00	10	251	0.059	10	251	0.070	10	251	0.129
13:00 - 14:00	10	251	0.063	10	251	0.063	10	251	0.126
14:00 - 15:00	10	251	0.045	10	251	0.064	10	251	0.109
15:00 - 16:00	10	251	0.088	10	251	0.073	10	251	0.161
16:00 - 17:00	10	251	0.084	10	251	0.062	10	251	0.146
17:00 - 18:00	10	251	0.104	10	251	0.072	10	251	0.176
18:00 - 19:00	10	251	0.112	10	251	0.066	10	251	0.178
19:00 - 20:00	10	251	0.096	10	251	0.070	10	251	0.166
20:00 - 21:00	10	251	0.079	10	251	0.043	10	251	0.122
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.995			1.031			2.026

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:	105 - 455 (units:)
Survey date date range:	01/01/13 - 27/05/21
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

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

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TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.86

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	251	0.069	10	251	0.408	10	251	0.477
08:00 - 09:00	10	251	0.127	10	251	0.627	10	251	0.754
09:00 - 10:00	10	251	0.142	10	251	0.222	10	251	0.364
10:00 - 11:00	10	251	0.104	10	251	0.143	10	251	0.247
11:00 - 12:00	10	251	0.142	10	251	0.159	10	251	0.301
12:00 - 13:00	10	251	0.146	10	251	0.184	10	251	0.330
13:00 - 14:00	10	251	0.157	10	251	0.156	10	251	0.313
14:00 - 15:00	10	251	0.140	10	251	0.176	10	251	0.316
15:00 - 16:00	10	251	0.385	10	251	0.208	10	251	0.593
16:00 - 17:00	10	251	0.349	10	251	0.174	10	251	0.523
17:00 - 18:00	10	251	0.336	10	251	0.197	10	251	0.533
18:00 - 19:00	10	251	0.365	10	251	0.169	10	251	0.534
19:00 - 20:00	10	251	0.284	10	251	0.159	10	251	0.443
20:00 - 21:00	10	251	0.238	10	251	0.100	10	251	0.338
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.984			3.082			6.066

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.*

Appendix H

Census Method of Travel to Work Data

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

population	All usual residents aged 16 and over in employment the week before the census
units	Persons
date	2011
usual residence	E02000066 : Bexley 002 (2011 super output area - middle layer)

ARDENT CONSULTING ENGINEERS

area of workplace : 2011 local authority: district / unitary	Driving a car or van	% of all Car Trips	A Yarnton Way (E) - Eastern Way	B Yarnton Way (W) - A2041 (N)	C Yarnton Way (W) - A2041 (S)	D Yarnton Way (E) - A2016 - B253 - Lower Road (W)	E Yarnton Way (E) - A2016	F Yarnton Way (E) - A2016 - Anderson Way	G Yarnton Way (E) - Eastern Way - Western Way	H Yarnton Way (W) - A2041 (N) - Western Way	I Yarnton Way (W) - Eynsham Drive	TOTAL ALL	A Yarnton Way (E) - Eastern Way	B Yarnton Way (W) - A2041 (N)	C Yarnton Way (W) - A2041 (S)	D Yarnton Way (E) - A2016 - B253 - Lower Road (W)	E Yarnton Way (E) - A2016	F Yarnton Way (E) - A2016 - Anderson Way	G Yarnton Way (E) - Eastern Way - Western Way	H Yarnton Way (W) - A2041 (N) - Western Way	I Yarnton Way (W) - Eynsham Drive	TOTAL ALL
Cherwell																						
E02000065 : Bexley 001	28	2.6%	50%	50%								**100%**	14	14	0	0	0	0	0	0	0	**28**
E02000066 : Bexley 002	21	2.0%			100%							**100%**	0	0	21	0	0	0	0	0	0	**21**
E02000067 : Bexley 003	41	3.8%				100%						**100%**	0	0	0	41	0	0	0	0	0	**41**
E02000068 : Bexley 004	55	5.2%						100%				**100%**	0	0	0	0	0	55	0	0	0	**55**
E02000069 : Bexley 005	11	1.0%				80%		20%				**100%**	0	0	0	9	0	2	0	0	0	**11**
E02000070 : Bexley 006	3	0.3%			50%	50%						**100%**	0	0	2	2	0	0	0	0	0	**3**
E02000071 : Bexley 007	13	1.2%				100%						**100%**	0	0	0	13	0	0	0	0	0	**13**
E02000072 : Bexley 008	23	2.2%					100%					**100%**	0	0	0	0	23	0	0	0	0	**23**
E02000073 : Bexley 009	4	0.4%			100%							**100%**	0	0	4	0	0	0	0	0	0	**4**
E02000074 : Bexley 010	6	0.6%				20%	80%					**100%**	0	0	0	1	5	0	0	0	0	**6**
E02000075 : Bexley 011	2	0.2%			50%	50%						**100%**	0	0	1	1	0	0	0	0	0	**2**
E02000077 : Bexley 013	2	0.2%			100%							**100%**	0	0	2	0	0	0	0	0	0	**2**
E02000078 : Bexley 014	8	0.8%					100%					**100%**	0	0	0	0	8	0	0	0	0	**8**
E02000079 : Bexley 015	48	4.5%			100%							**100%**	0	0	48	0	0	0	0	0	0	**48**
E02000080 : Bexley 016	5	0.5%			100%							**100%**	0	0	5	0	0	0	0	0	0	**5**
E02000081 : Bexley 017	8	0.8%			25%	25%	50%					**100%**	0	0	2	2	4	0	0	0	0	**8**
E02000082 : Bexley 018	2	0.2%			100%							**100%**	0	0	2	0	0	0	0	0	0	**2**
E02000083 : Bexley 019	21	2.0%				20%	80%					**100%**	0	0	0	4	17	0	0	0	0	**21**
E02000084 : Bexley 020	3	0.3%			100%							**100%**	0	0	3	0	0	0	0	0	0	**3**
E02000085 : Bexley 021	4	0.4%			100%							**100%**	0	0	4	0	0	0	0	0	0	**4**
E02000086 : Bexley 022	0	0.0%			100%							**100%**	0	0	0	0	0	0	0	0	0	**0**
E02000087 : Bexley 023	3	0.3%			50%		50%					**100%**	0	0	2	0	2	0	0	0	0	**3**
E02000088 : Bexley 024	0	0.0%			100%							**100%**	0	0	0	0	0	0	0	0	0	**0**
E02000089 : Bexley 025	2	0.2%			100%							**100%**	0	0	2	0	0	0	0	0	0	**2**
E02000090 : Bexley 026	10	0.9%			100%							**100%**	0	0	10	0	0	0	0	0	0	**10**
E02000091 : Bexley 027	9	0.8%			100%							**100%**	0	0	9	0	0	0	0	0	0	**9**
E02000092 : Bexley 028	9	0.8%			50%		50%					**100%**	0	0	5	0	5	0	0	0	0	**9**
E02006785 : Bexley 029	1	0.1%			100%							**100%**	0	0	1	0	0	0	0	0	0	**1**
Greenwich	298	28.0%							40%	40%	20%	**100%**	0	0	0	0	0	0	119	119	60	**298**
Dartford	84	7.9%					100%					**100%**	0	0	0	0	84	0	0	0	0	**84**
Lewisham	47	4.4%			33%				33%	33%		**100%**	0	0	16	0	0	0	16	16	0	**47**
Bromley	41	3.8%			100%							**100%**	0	0	41	0	0	0	0	0	0	**41**
Southwark	33	3.1%							40%	40%	20%	**100%**	0	0	0	0	0	0	13	13	7	**33**
Westminster,City of London	27	2.5%							40%	40%	20%	**100%**	0	0	0	0	0	0	11	11	5	**27**
Newham	23	2.2%							40%	40%	20%	**100%**	0	0	0	0	0	0	9	9	5	**23**
Tower Hamlets	19	1.8%							40%	40%	20%	**100%**	0	0	0	0	0	0	8	8	4	**19**
Lambeth	18	1.7%			70%				15%	15%		**100%**	0	0	13	0	0	0	3	3	0	**18**
Thurrock	14	1.3%					100%					**100%**	0	0	0	0	14	0	0	0	0	**14**
Sevenoaks	13	1.2%					100%					**100%**	0	0	0	0	13	0	0	0	0	**13**
Camden	11	1.0%							40%	40%	20%	**100%**	0	0	0	0	0	0	4	4	2	**11**
Havering	11	1.0%					100%					**100%**	0	0	0	0	11	0	0	0	0	**11**
Wandsworth	11	1.0%			70%				15%	15%		**100%**	0	0	8	0	0	0	2	2	0	**11**
Medway	11	1.0%					100%					**100%**	0	0	0	0	11	0	0	0	0	**11**
Barking and Dagenham	9	0.8%					100%					**100%**	0	0	0	0	9	0	0	0	0	**9**
Hackney	9	0.8%							40%	40%	20%	**100%**	0	0	0	0	0	0	4	4	2	**9**
Islington	9	0.8%							40%	40%	20%	**100%**	0	0	0	0	0	0	4	4	2	**9**
Gravesham	9	0.8%					100%					**100%**	0	0	0	0	9	0	0	0	0	**9**
Maidstone	9	0.8%					100%					**100%**	0	0	0	0	9	0	0	0	0	**9**
Waltham Forest	8	0.8%							40%	40%	20%	**100%**	0	0	0	0	0	0	3	3	2	**8**
Tonbridge and Malling	6	0.6%					100%					**100%**	0	0	0	0	6	0	0	0	0	**6**
Redbridge	4	0.4%							40%	40%	20%	**100%**	0	0	0	0	0	0	2	2	1	**4**
Total	**1,066**	**100.0%**																				
													14	14	198	73	229	57	196	196	88	**1,066**
													1.3%	**1.3%**	**18.6%**	**6.8%**	**21.4%**	**5.4%**	**18.4%**	**18.4%**	**8.3%**	**100.0%**

PERCENTAGE DISTRIBUTION

QS701EW - Method of travel to work

population	All usual residents aged 16 to 74
units	Persons
area type	2011 super output areas - middle layer
area name	E02000066 : Bexley 002
rural urban	Total

Method of Travel to Work	2011
Underground, metro, light rail,	303
Train	1,104
Bus, minibus or coach	737
Taxi	12
Motorcycle, scooter or moped	45
Driving a car or van	1,392
Passenger in a car or van	100
Bicycle	45
On foot	181
Other method of travel to work	15

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

Appendix I

Junction Modelling Output

Junction 1

Yarnton Way / Site Access Junction

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.1.1519

For sales and distribution information, program advice and maintenance, contact TRL Software:
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

Filename: J1 - Site Access Junction 23-08-24.j10
Path: Y:\ARDENT PROJECTS\194180 - Yarnton Way, Belvedere\Transport\PICADY\J1 - Site Access
Report generation date: 24/08/2023 16:34:27

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2028 with Dev									
Stream B-AC	0.3	11.37	0.23	B	0.90	0.1	7.58	0.06	A	0.44
Stream C-AB	0.0	6.20	0.01	A		0.0	5.41	0.04	A	
	2028 with Dev + Com Dev									
Stream B-AC	0.3	11.59	0.24	B	0.90	0.1	7.67	0.06	A	0.43
Stream C-AB	0.0	6.26	0.02	A		0.0	5.45	0.04	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	23/06/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ARDENTCE\Transportation
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2022	AM	ONE HOUR	07:45	09:15	15			
D2	2022	PM	ONE HOUR	16:45	18:15	15			
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15		Simple	D1*1.0486
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15		Simple	D2*1.0489
D5	Dev Traffic	AM	ONE HOUR	07:45	09:15	15			
D6	Dev Traffic	PM	ONE HOUR	16:45	18:15	15			
D7	Com Dev	AM	ONE HOUR	07:45	09:15	15			
D8	Com Dev	PM	ONE HOUR	16:45	18:15	15			
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

Analysis Set Details

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

2028 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.90	A

Arms

Arms

Arm	Name	Description	Arm type
A	Yarnton Way East		Major
B	Site Access		Minor
C	Yarnton Way West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Yarnton Way West	7.00	✓	4.38	✓	3.50	234.0	✓	11.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	3.42	80	46

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	602	0.096	0.242	0.152	0.345
B-C	680	0.100	0.252	-	-
C-B	810	0.300	0.300	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Yarnton Way East		ONE HOUR	✓	667	100.000
B - Site Access		ONE HOUR	✓	87	100.000
C - Yarnton Way West		ONE HOUR	✓	398	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Yarnton Way East	B - Site Access	C - Yarnton Way West
From	A - Yarnton Way East	0	10	657
	B - Site Access	46	0	41
	C - Yarnton Way West	390	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Yarnton Way East	B - Site Access	C - Yarnton Way West
From	A - Yarnton Way East	0	0	2
	B - Site Access	0	0	0
	C - Yarnton Way West	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.23	11.37	0.3	B	80	120
C-AB	0.01	6.20	0.0	A	7	11
C-A					358	537
A-B					9	14
A-C					603	905

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	484	0.135	65	0.0	0.2	8.568	A
C-AB	6	2	659	0.009	6	0.0	0.0	5.511	A
C-A	294	73			294				
A-B	8	2			8				
A-C	495	124			495				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	20	454	0.172	78	0.2	0.2	9.560	A
C-AB	7	2	630	0.011	7	0.0	0.0	5.781	A
C-A	350	88			350				
A-B	9	2			9				
A-C	591	148			591				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	412	0.232	95	0.2	0.3	11.345	B
C-AB	9	2	589	0.015	9	0.0	0.0	6.199	A
C-A	429	107			429				
A-B	11	3			11				
A-C	724	181			724				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	412	0.232	96	0.3	0.3	11.371	B
C-AB	9	2	589	0.015	9	0.0	0.0	6.199	A
C-A	429	107			429				
A-B	11	3			11				
A-C	724	181			724				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	20	454	0.172	79	0.3	0.2	9.589	A
C-AB	7	2	630	0.011	7	0.0	0.0	5.783	A
C-A	350	88			350				
A-B	9	2			9				
A-C	591	148			591				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	484	0.135	66	0.2	0.2	8.600	A
C-AB	6	2	659	0.009	6	0.0	0.0	5.511	A
C-A	294	73			294				
A-B	8	2			8				
A-C	495	124			495				

2028 with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.44	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.44	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Yarnton Way East		ONE HOUR	✓	363	100.000
B - Site Access		ONE HOUR	✓	27	100.000
C - Yarnton Way West		ONE HOUR	✓	342	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Yarnton Way East	B - Site Access	C - Yarnton Way West
From	A - Yarnton Way East	0	25	338
	B - Site Access	14	0	13
	C - Yarnton Way West	320	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Yarnton Way East	B - Site Access	C - Yarnton Way West
From	A - Yarnton Way East	0	0	1
	B - Site Access	0	0	0
	C - Yarnton Way West	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	7.58	0.1	A	25	37
C-AB	0.04	5.41	0.0	A	20	30
C-A					294	440
A-B					23	34
A-C					310	465

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	5	547	0.037	20	0.0	0.0	6.830	A
C-AB	17	4	728	0.023	16	0.0	0.0	5.060	A
C-A	241	60			241				
A-B	19	5			19				
A-C	254	64			254				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	529	0.046	24	0.0	0.0	7.128	A
C-AB	20	5	712	0.028	20	0.0	0.0	5.200	A
C-A	288	72			288				
A-B	22	6			22				
A-C	304	76			304				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	7	504	0.059	30	0.0	0.1	7.583	A
C-AB	24	6	690	0.035	24	0.0	0.0	5.406	A
C-A	352	88			352				
A-B	28	7			28				
A-C	372	93			372				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	7	504	0.059	30	0.1	0.1	7.583	A
C-AB	24	6	690	0.035	24	0.0	0.0	5.406	A
C-A	352	88			352				
A-B	28	7			28				
A-C	372	93			372				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	529	0.046	24	0.1	0.0	7.129	A
C-AB	20	5	712	0.028	20	0.0	0.0	5.202	A
C-A	288	72			288				
A-B	22	6			22				
A-C	304	76			304				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	5	547	0.037	20	0.0	0.0	6.836	A
C-AB	17	4	728	0.023	17	0.0	0.0	5.060	A
C-A	241	60			241				
A-B	19	5			19				
A-C	254	64			254				

2028 with Dev + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.90	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Yarnton Way East		ONE HOUR	✓	684	100.000
B - Site Access		ONE HOUR	✓	87	100.000
C - Yarnton Way West		ONE HOUR	✓	409	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Yarnton Way East	B - Site Access	C - Yarnton Way West
From	A - Yarnton Way East	0	10	674
	B - Site Access	46	0	41
	C - Yarnton Way West	401	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Yarnton Way East	B - Site Access	C - Yarnton Way West
From	A - Yarnton Way East	0	0	2
	B - Site Access	0	0	0
	C - Yarnton Way West	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.24	11.59	0.3	B	80	120
C-AB	0.02	6.26	0.0	A	7	11
C-A					368	552
A-B					9	14
A-C					619	928

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	480	0.136	65	0.0	0.2	8.649	A
C-AB	6	2	655	0.009	6	0.0	0.0	5.544	A
C-A	302	75			302				
A-B	8	2			8				
A-C	508	127			508				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	20	450	0.174	78	0.2	0.2	9.684	A
C-AB	7	2	625	0.012	7	0.0	0.0	5.823	A
C-A	360	90			360				
A-B	9	2			9				
A-C	606	152			606				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	406	0.236	95	0.2	0.3	11.564	B
C-AB	9	2	584	0.015	9	0.0	0.0	6.260	A
C-A	441	110			441				
A-B	11	3			11				
A-C	742	186			742				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	406	0.236	96	0.3	0.3	11.591	B
C-AB	9	2	584	0.015	9	0.0	0.0	6.260	A
C-A	441	110			441				
A-B	11	3			11				
A-C	742	186			742				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	20	450	0.174	79	0.3	0.2	9.713	A
C-AB	7	2	625	0.012	7	0.0	0.0	5.824	A
C-A	360	90			360				
A-B	9	2			9				
A-C	606	152			606				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	480	0.136	66	0.2	0.2	8.685	A
C-AB	6	2	655	0.009	6	0.0	0.0	5.544	A
C-A	302	75			302				
A-B	8	2			8				
A-C	508	127			508				

2028 with Dev + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.43	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.43	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Yarnton Way East		ONE HOUR	✓	378	100.000
B - Site Access		ONE HOUR	✓	27	100.000
C - Yarnton Way West		ONE HOUR	✓	354	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Yarnton Way East	B - Site Access	C - Yarnton Way West
From	A - Yarnton Way East	0	25	353
	B - Site Access	14	0	13
	C - Yarnton Way West	332	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Yarnton Way East	B - Site Access	C - Yarnton Way West
From	A - Yarnton Way East	0	0	1
	B - Site Access	0	0	0
	C - Yarnton Way West	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	7.67	0.1	A	25	37
C-AB	0.04	5.45	0.0	A	20	30
C-A					305	457
A-B					23	34
A-C					324	486

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	5	543	0.037	20	0.0	0.0	6.878	A
C-AB	17	4	725	0.023	16	0.0	0.0	5.084	A
C-A	250	62			250				
A-B	19	5			19				
A-C	266	66			266				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	525	0.046	24	0.0	0.0	7.190	A
C-AB	20	5	708	0.028	20	0.0	0.0	5.230	A
C-A	298	75			298				
A-B	22	6			22				
A-C	317	79			317				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	7	499	0.060	30	0.0	0.1	7.671	A
C-AB	24	6	685	0.035	24	0.0	0.0	5.447	A
C-A	366	91			366				
A-B	28	7			28				
A-C	388	97			388				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	7	499	0.060	30	0.1	0.1	7.671	A
C-AB	24	6	685	0.035	24	0.0	0.0	5.447	A
C-A	366	91			366				
A-B	28	7			28				
A-C	388	97			388				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	525	0.046	24	0.1	0.0	7.195	A
C-AB	20	5	708	0.028	20	0.0	0.0	5.233	A
C-A	298	75			298				
A-B	22	6			22				
A-C	317	79			317				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	5	543	0.037	20	0.0	0.0	6.884	A
C-AB	17	4	725	0.023	17	0.0	0.0	5.085	A
C-A	250	62			250				
A-B	19	5			19				
A-C	266	66			266				

Junction 2

A2041 / Yarnton Way / Eynsham Drive Roundabout

Junctions 10

ARCADY 10 - Roundabout Module

Filename: J2 - Yarnton Wy-Eynsham Dr-A2041 23-08-07.j10
Path: Y:\ARDENT PROJECTS\194180 - Yarnton Way, Belvedere\Transport\ARCADY\J2 - Yarnton Wy-Eynsham Dr-A2041
Report generation date: 07/08/2023 17:34:37

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2022									
1 - Harrow Manorway North	2.9	8.45	0.74	A	7.34	0.9	4.08	0.49	A	4.25
2 - Yarnton Way	0.8	5.42	0.45	A		0.4	3.59	0.30	A	
3 - Harrow Manorway South	2.0	7.97	0.66	A		1.1	4.87	0.52	A	
4 - Eynsham Drive	0.8	5.65	0.44	A		0.4	4.01	0.29	A	
	2028 Base									
1 - Harrow Manorway North	3.6	10.10	0.78	B	8.52	1.1	4.32	0.51	A	4.51
2 - Yarnton Way	1.0	5.95	0.49	A		0.5	3.75	0.32	A	
3 - Harrow Manorway South	2.4	9.32	0.71	A		1.2	5.25	0.55	A	
4 - Eynsham Drive	0.9	6.17	0.48	A		0.5	4.21	0.31	A	
	2028 with Dev									
1 - Harrow Manorway North	3.6	10.29	0.78	B	8.80	1.1	4.42	0.52	A	4.60
2 - Yarnton Way	1.1	6.40	0.52	A		0.5	3.80	0.33	A	
3 - Harrow Manorway South	2.5	9.79	0.72	A		1.3	5.36	0.56	A	
4 - Eynsham Drive	1.0	6.31	0.48	A		0.5	4.28	0.32	A	
	2028 with Dev + Com Dev									
1 - Harrow Manorway North	3.8	10.74	0.79	B	9.39	1.1	4.56	0.53	A	4.73
2 - Yarnton Way	1.2	6.67	0.54	A		0.5	3.91	0.34	A	
3 - Harrow Manorway South	2.9	10.93	0.74	B		1.4	5.52	0.57	A	
4 - Eynsham Drive	1.0	6.61	0.49	A		0.5	4.35	0.32	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	J2 Yarton Way/ Eynsham Drive/Harrow Manorway
Location	
Site number	194180
Date	21/06/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ARDENTCE\Transportation
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489
D5	Dev Traffic	AM	ONE HOUR	07:45	09:15	15			
D6	Dev Traffic	PM	ONE HOUR	16:45	18:15	15			
D7	Com Dev	AM	ONE HOUR	07:45	09:15	15			
D8	Com Dev	PM	ONE HOUR	16:45	18:15	15			
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

Analysis Set Details

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

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.34	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.34	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Harrow Manorway North		
2	Yarnton Way		
3	Harrow Manorway South		
4	Eynsham Drive		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Harrow Manorway North	7.12	7.52	0.8	9.2	60.0	49.7		
2 - Yarnton Way	6.25	7.60	6.0	16.8	60.0	57.1		
3 - Harrow Manorway South	4.83	8.53	5.7	46.2	60.0	37.2		
4 - Eynsham Drive	3.69	6.56	13.7	38.7	60.0	11.2		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Harrow Manorway North	0.563	1927
2 - Yarnton Way	0.567	1911
3 - Harrow Manorway South	0.581	1833
4 - Eynsham Drive	0.595	1784

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Harrow Manorway North		ONE HOUR	✓	1127	100.000
2 - Yarnton Way		ONE HOUR	✓	508	100.000
3 - Harrow Manorway South		ONE HOUR	✓	813	100.000
4 - Eynsham Drive		ONE HOUR	✓	474	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	13	157	525	433
	2 - Yarnton Way	221	0	205	83
	3 - Harrow Manorway South	525	169	0	118
	4 - Eynsham Drive	246	112	115	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	0	3	3	4
	2 - Yarnton Way	2	0	1	2
	3 - Harrow Manorway South	2	1	0	1
	4 - Eynsham Drive	3	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Harrow Manorway North	0.74	8.45	2.9	A	1035	1552
2 - Yarnton Way	0.45	5.42	0.8	A	466	699
3 - Harrow Manorway South	0.66	7.97	2.0	A	746	1119
4 - Eynsham Drive	0.44	5.65	0.8	A	435	652

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	849	212	297	1759	0.482	845	753	0.0	1.0	4.052	A
2 - Yarnton Way	382	96	814	1450	0.264	381	328	0.0	0.4	3.416	A
3 - Harrow Manorway South	612	153	562	1507	0.406	609	633	0.0	0.7	4.066	A
4 - Eynsham Drive	357	89	696	1370	0.260	355	475	0.0	0.4	3.639	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1014	253	356	1726	0.587	1012	902	1.0	1.4	5.191	A
2 - Yarnton Way	457	114	974	1359	0.336	456	393	0.4	0.5	4.046	A
3 - Harrow Manorway South	731	183	673	1442	0.507	730	758	0.7	1.0	5.125	A
4 - Eynsham Drive	426	106	833	1289	0.330	425	569	0.4	0.5	4.281	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1241	310	436	1681	0.738	1236	1103	1.4	2.8	8.247	A
2 - Yarnton Way	559	140	1191	1237	0.452	558	481	0.5	0.8	5.378	A
3 - Harrow Manorway South	895	224	822	1355	0.660	892	926	1.0	1.9	7.829	A
4 - Eynsham Drive	522	130	1018	1178	0.443	520	695	0.5	0.8	5.611	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1241	310	437	1681	0.739	1241	1107	2.8	2.9	8.453	A
2 - Yarnton Way	559	140	1196	1234	0.453	559	482	0.8	0.8	5.418	A
3 - Harrow Manorway South	895	224	825	1354	0.661	895	930	1.9	2.0	7.973	A
4 - Eynsham Drive	522	130	1022	1176	0.443	522	698	0.8	0.8	5.649	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1014	253	358	1725	0.588	1019	907	2.9	1.5	5.310	A
2 - Yarnton Way	457	114	981	1355	0.337	458	396	0.8	0.5	4.081	A
3 - Harrow Manorway South	731	183	677	1440	0.508	734	762	2.0	1.1	5.212	A
4 - Eynsham Drive	426	106	838	1286	0.331	427	573	0.8	0.5	4.314	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	849	212	299	1758	0.483	851	758	1.5	1.0	4.109	A
2 - Yarnton Way	382	96	820	1447	0.264	383	331	0.5	0.4	3.438	A
3 - Harrow Manorway South	612	153	565	1504	0.407	613	637	1.1	0.7	4.113	A
4 - Eynsham Drive	357	89	700	1368	0.261	357	479	0.5	0.4	3.665	A

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.25	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.25	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Harrow Manorway North		ONE HOUR	✓	762	100.000
2 - Yarnton Way		ONE HOUR	✓	393	100.000
3 - Harrow Manorway South		ONE HOUR	✓	747	100.000
4 - Eynsham Drive		ONE HOUR	✓	338	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	2	113	450	197
	2 - Yarnton Way	138	0	179	76
	3 - Harrow Manorway South	503	110	12	123
	4 - Eynsham Drive	137	113	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	0	2	0	1
	2 - Yarnton Way	1	0	1	0
	3 - Harrow Manorway South	1	1	0	1
	4 - Eynsham Drive	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Harrow Manorway North	0.49	4.08	0.9	A	699	1049
2 - Yarnton Way	0.30	3.59	0.4	A	361	541
3 - Harrow Manorway South	0.52	4.87	1.1	A	685	1028
4 - Eynsham Drive	0.29	4.01	0.4	A	310	465

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	574	143	242	1790	0.320	572	585	0.0	0.5	2.966	A
2 - Yarnton Way	296	74	562	1593	0.186	295	251	0.0	0.2	2.796	A
3 - Harrow Manorway South	562	141	310	1653	0.340	560	547	0.0	0.5	3.323	A
4 - Eynsham Drive	254	64	574	1443	0.176	254	297	0.0	0.2	3.074	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	685	171	290	1764	0.388	684	700	0.5	0.6	3.352	A
2 - Yarnton Way	353	88	673	1530	0.231	353	301	0.2	0.3	3.084	A
3 - Harrow Manorway South	672	168	371	1617	0.415	671	655	0.5	0.7	3.838	A
4 - Eynsham Drive	304	76	687	1376	0.221	304	356	0.2	0.3	3.411	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	839	210	355	1727	0.486	838	857	0.6	0.9	4.063	A
2 - Yarnton Way	433	108	824	1444	0.300	432	368	0.3	0.4	3.584	A
3 - Harrow Manorway South	822	206	455	1569	0.524	821	802	0.7	1.1	4.851	A
4 - Eynsham Drive	372	93	840	1284	0.290	372	435	0.3	0.4	4.006	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	839	210	355	1727	0.486	839	859	0.9	0.9	4.076	A
2 - Yarnton Way	433	108	825	1444	0.300	433	369	0.4	0.4	3.589	A
3 - Harrow Manorway South	822	206	455	1568	0.524	822	803	1.1	1.1	4.873	A
4 - Eynsham Drive	372	93	842	1283	0.290	372	436	0.4	0.4	4.013	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	685	171	291	1763	0.388	686	703	0.9	0.6	3.363	A
2 - Yarnton Way	353	88	675	1529	0.231	354	302	0.4	0.3	3.091	A
3 - Harrow Manorway South	672	168	372	1617	0.415	673	657	1.1	0.7	3.859	A
4 - Eynsham Drive	304	76	689	1374	0.221	304	357	0.4	0.3	3.421	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	574	143	243	1790	0.320	574	588	0.6	0.5	2.978	A
2 - Yarnton Way	296	74	565	1591	0.186	296	252	0.3	0.2	2.802	A
3 - Harrow Manorway South	562	141	312	1652	0.340	563	550	0.7	0.5	3.340	A
4 - Eynsham Drive	254	64	576	1441	0.177	255	298	0.3	0.2	3.082	A

2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	8.52	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.52	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Harrow Manorway North		ONE HOUR	✓	1182	100.000
2 - Yarnton Way		ONE HOUR	✓	532	100.000
3 - Harrow Manorway South		ONE HOUR	✓	853	100.000
4 - Eynsham Drive		ONE HOUR	✓	497	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	14	164	550	454
	2 - Yarnton Way	231	0	215	87
	3 - Harrow Manorway South	551	178	0	124
	4 - Eynsham Drive	258	118	121	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	0	3	3	4
	2 - Yarnton Way	2	0	1	2
	3 - Harrow Manorway South	2	1	0	1
	4 - Eynsham Drive	3	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Harrow Manorway North	0.78	10.10	3.6	B	1085	1627
2 - Yarnton Way	0.49	5.95	1.0	A	489	733
3 - Harrow Manorway South	0.71	9.32	2.4	A	782	1173
4 - Eynsham Drive	0.48	6.17	0.9	A	456	684

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	890	223	312	1751	0.508	886	790	0.0	1.1	4.279	A
2 - Yarnton Way	401	100	853	1428	0.281	399	344	0.0	0.4	3.552	A
3 - Harrow Manorway South	642	160	589	1491	0.431	639	664	0.0	0.8	4.279	A
4 - Eynsham Drive	374	93	729	1350	0.277	372	498	0.0	0.4	3.776	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1063	266	373	1716	0.619	1060	946	1.1	1.7	5.650	A
2 - Yarnton Way	479	120	1022	1333	0.359	478	412	0.4	0.6	4.276	A
3 - Harrow Manorway South	766	192	705	1423	0.538	765	794	0.8	1.2	5.543	A
4 - Eynsham Drive	447	112	873	1265	0.353	446	597	0.4	0.6	4.513	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1302	325	456	1670	0.780	1294	1156	1.7	3.5	9.723	A
2 - Yarnton Way	586	147	1247	1205	0.487	585	504	0.6	1.0	5.885	A
3 - Harrow Manorway South	939	235	861	1333	0.704	934	970	1.2	2.3	9.074	A
4 - Eynsham Drive	547	137	1067	1150	0.476	545	728	0.6	0.9	6.109	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1302	325	458	1669	0.780	1301	1160	3.5	3.6	10.099	B
2 - Yarnton Way	586	147	1254	1201	0.488	586	506	1.0	1.0	5.947	A
3 - Harrow Manorway South	939	235	865	1330	0.706	938	975	2.3	2.4	9.324	A
4 - Eynsham Drive	547	137	1071	1147	0.477	547	732	0.9	0.9	6.165	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1063	266	376	1715	0.620	1070	952	3.6	1.7	5.835	A
2 - Yarnton Way	479	120	1031	1327	0.361	480	415	1.0	0.6	4.324	A
3 - Harrow Manorway South	766	192	710	1420	0.540	771	800	2.4	1.2	5.678	A
4 - Eynsham Drive	447	112	880	1261	0.354	448	602	0.9	0.6	4.558	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	890	223	314	1750	0.509	893	795	1.7	1.1	4.351	A
2 - Yarnton Way	401	100	860	1424	0.281	402	347	0.6	0.4	3.577	A
3 - Harrow Manorway South	642	160	593	1488	0.431	644	668	1.2	0.8	4.339	A
4 - Eynsham Drive	374	93	735	1347	0.278	375	502	0.6	0.4	3.805	A

2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.51	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.51	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Harrow Manorway North		ONE HOUR	✓	799	100.000
2 - Yarnton Way		ONE HOUR	✓	412	100.000
3 - Harrow Manorway South		ONE HOUR	✓	784	100.000
4 - Eynsham Drive		ONE HOUR	✓	355	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	2	118	472	207
	2 - Yarnton Way	145	0	188	80
	3 - Harrow Manorway South	527	115	13	129
	4 - Eynsham Drive	143	118	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	0	2	0	1
	2 - Yarnton Way	1	0	1	0
	3 - Harrow Manorway South	1	1	0	1
	4 - Eynsham Drive	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Harrow Manorway North	0.51	4.32	1.1	A	733	1100
2 - Yarnton Way	0.32	3.75	0.5	A	378	568
3 - Harrow Manorway South	0.55	5.25	1.2	A	719	1078
4 - Eynsham Drive	0.31	4.21	0.5	A	325	488

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	602	150	254	1784	0.337	600	614	0.0	0.5	3.051	A
2 - Yarnton Way	310	78	590	1577	0.197	310	264	0.0	0.2	2.863	A
3 - Harrow Manorway South	590	147	325	1644	0.359	588	574	0.0	0.6	3.435	A
4 - Eynsham Drive	267	67	602	1426	0.187	266	312	0.0	0.2	3.148	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	718	180	304	1756	0.409	718	735	0.5	0.7	3.486	A
2 - Yarnton Way	371	93	706	1511	0.245	370	315	0.2	0.3	3.181	A
3 - Harrow Manorway South	704	176	390	1607	0.438	703	687	0.6	0.8	4.021	A
4 - Eynsham Drive	319	80	720	1356	0.235	318	373	0.2	0.3	3.525	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	880	220	372	1717	0.512	878	899	0.7	1.0	4.308	A
2 - Yarnton Way	454	114	864	1422	0.319	454	386	0.3	0.5	3.746	A
3 - Harrow Manorway South	863	216	477	1556	0.554	861	841	0.8	1.2	5.217	A
4 - Eynsham Drive	390	98	881	1260	0.310	390	456	0.3	0.5	4.200	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	880	220	373	1717	0.512	880	901	1.0	1.1	4.323	A
2 - Yarnton Way	454	114	866	1421	0.320	454	387	0.5	0.5	3.752	A
3 - Harrow Manorway South	863	216	478	1555	0.555	863	842	1.2	1.2	5.246	A
4 - Eynsham Drive	390	98	883	1259	0.310	390	457	0.5	0.5	4.210	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	718	180	305	1755	0.409	720	737	1.1	0.7	3.500	A
2 - Yarnton Way	371	93	708	1510	0.246	371	316	0.5	0.3	3.187	A
3 - Harrow Manorway South	704	176	391	1606	0.439	706	689	1.2	0.8	4.048	A
4 - Eynsham Drive	319	80	723	1354	0.235	319	374	0.5	0.3	3.534	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	602	150	255	1783	0.337	602	617	0.7	0.5	3.066	A
2 - Yarnton Way	310	78	593	1576	0.197	311	265	0.3	0.2	2.869	A
3 - Harrow Manorway South	590	147	327	1643	0.359	591	577	0.8	0.6	3.459	A
4 - Eynsham Drive	267	67	605	1425	0.187	267	313	0.3	0.2	3.162	A

2028 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	8.80	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.80	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Harrow Manorway North		ONE HOUR	✓	1186	100.000
2 - Yarnton Way		ONE HOUR	✓	572	100.000
3 - Harrow Manorway South		ONE HOUR	✓	856	100.000
4 - Eynsham Drive		ONE HOUR	✓	498	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	14	168	550	454
	2 - Yarnton Way	248	0	231	94
	3 - Harrow Manorway South	551	181	0	124
	4 - Eynsham Drive	258	119	121	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	0	3	3	4
	2 - Yarnton Way	2	0	1	2
	3 - Harrow Manorway South	2	1	0	1
	4 - Eynsham Drive	3	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Harrow Manorway North	0.78	10.29	3.6	B	1088	1633
2 - Yarnton Way	0.52	6.40	1.1	A	525	788
3 - Harrow Manorway South	0.72	9.79	2.5	A	785	1178
4 - Eynsham Drive	0.48	6.31	1.0	A	457	685

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	893	223	315	1749	0.510	889	803	0.0	1.1	4.301	A
2 - Yarnton Way	431	108	853	1428	0.302	429	350	0.0	0.4	3.652	A
3 - Harrow Manorway South	644	161	607	1480	0.435	641	676	0.0	0.8	4.344	A
4 - Eynsham Drive	375	94	744	1341	0.279	373	504	0.0	0.4	3.813	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1066	267	377	1714	0.622	1064	961	1.1	1.7	5.696	A
2 - Yarnton Way	515	129	1021	1333	0.386	514	419	0.4	0.6	4.459	A
3 - Harrow Manorway South	769	192	727	1411	0.545	767	809	0.8	1.2	5.671	A
4 - Eynsham Drive	447	112	891	1254	0.357	447	603	0.4	0.6	4.578	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1306	327	461	1667	0.783	1298	1174	1.7	3.6	9.889	A
2 - Yarnton Way	630	158	1247	1205	0.523	628	512	0.6	1.1	6.318	A
3 - Harrow Manorway South	942	235	888	1317	0.715	937	988	1.2	2.5	9.492	A
4 - Eynsham Drive	548	137	1088	1137	0.482	546	736	0.6	0.9	6.251	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1306	327	462	1666	0.784	1306	1179	3.6	3.6	10.287	B
2 - Yarnton Way	630	158	1253	1201	0.525	630	515	1.1	1.1	6.399	A
3 - Harrow Manorway South	942	235	891	1315	0.716	942	992	2.5	2.5	9.785	A
4 - Eynsham Drive	548	137	1093	1134	0.483	548	740	0.9	1.0	6.314	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1066	267	379	1713	0.623	1074	968	3.6	1.7	5.891	A
2 - Yarnton Way	515	129	1031	1327	0.388	516	423	1.1	0.6	4.517	A
3 - Harrow Manorway South	769	192	732	1408	0.546	774	815	2.5	1.2	5.821	A
4 - Eynsham Drive	447	112	898	1250	0.358	449	608	1.0	0.6	4.626	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	893	223	317	1748	0.511	896	808	1.7	1.1	4.377	A
2 - Yarnton Way	431	108	860	1424	0.303	432	353	0.6	0.4	3.683	A
3 - Harrow Manorway South	644	161	611	1478	0.436	646	680	1.2	0.8	4.408	A
4 - Eynsham Drive	375	94	750	1338	0.280	375	507	0.6	0.4	3.844	A

2028 with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.60	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.60	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Harrow Manorway North		ONE HOUR	✓	808	100.000
2 - Yarnton Way		ONE HOUR	✓	424	100.000
3 - Harrow Manorway South		ONE HOUR	✓	793	100.000
4 - Eynsham Drive		ONE HOUR	✓	359	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	2	127	472	207
	2 - Yarnton Way	150	0	193	82
	3 - Harrow Manorway South	527	124	13	129
	4 - Eynsham Drive	143	122	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	0	2	0	1
	2 - Yarnton Way	1	0	1	0
	3 - Harrow Manorway South	1	1	0	1
	4 - Eynsham Drive	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Harrow Manorway North	0.52	4.42	1.1	A	741	1112
2 - Yarnton Way	0.33	3.80	0.5	A	389	584
3 - Harrow Manorway South	0.56	5.36	1.3	A	727	1091
4 - Eynsham Drive	0.32	4.28	0.5	A	329	493

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	608	152	264	1778	0.342	606	617	0.0	0.5	3.083	A
2 - Yarnton Way	320	80	590	1577	0.203	319	280	0.0	0.3	2.880	A
3 - Harrow Manorway South	597	149	331	1641	0.364	594	578	0.0	0.6	3.466	A
4 - Eynsham Drive	270	67	612	1420	0.190	269	313	0.0	0.2	3.173	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	726	182	316	1749	0.415	726	739	0.5	0.7	3.536	A
2 - Yarnton Way	382	95	706	1511	0.252	381	335	0.3	0.3	3.210	A
3 - Harrow Manorway South	712	178	396	1603	0.444	712	691	0.6	0.8	4.073	A
4 - Eynsham Drive	322	81	733	1348	0.239	322	375	0.2	0.3	3.562	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	890	222	386	1709	0.521	888	904	0.7	1.1	4.400	A
2 - Yarnton Way	467	117	864	1422	0.329	467	410	0.3	0.5	3.797	A
3 - Harrow Manorway South	873	218	485	1551	0.562	871	846	0.8	1.3	5.324	A
4 - Eynsham Drive	395	99	897	1251	0.316	394	459	0.3	0.5	4.266	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	890	222	387	1709	0.521	890	906	1.1	1.1	4.418	A
2 - Yarnton Way	467	117	866	1421	0.329	467	411	0.5	0.5	3.803	A
3 - Harrow Manorway South	873	218	485	1551	0.563	873	848	1.3	1.3	5.357	A
4 - Eynsham Drive	395	99	898	1250	0.316	395	459	0.5	0.5	4.276	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	726	182	317	1748	0.415	728	742	1.1	0.7	3.553	A
2 - Yarnton Way	382	95	708	1510	0.253	382	336	0.5	0.3	3.220	A
3 - Harrow Manorway South	712	178	397	1602	0.445	714	693	1.3	0.8	4.103	A
4 - Eynsham Drive	322	81	735	1347	0.239	323	376	0.5	0.3	3.572	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	608	152	265	1778	0.342	609	621	0.7	0.5	3.101	A
2 - Yarnton Way	320	80	593	1575	0.203	320	281	0.3	0.3	2.891	A
3 - Harrow Manorway South	597	149	332	1640	0.364	598	580	0.8	0.6	3.492	A
4 - Eynsham Drive	270	67	615	1418	0.190	270	315	0.3	0.2	3.185	A

2028 with Dev + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	9.39	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.39	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Harrow Manorway North		ONE HOUR	✓	1194	100.000
2 - Yarnton Way		ONE HOUR	✓	589	100.000
3 - Harrow Manorway South		ONE HOUR	✓	885	100.000
4 - Eynsham Drive		ONE HOUR	✓	498	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	14	169	557	454
	2 - Yarnton Way	259	1	236	94
	3 - Harrow Manorway South	569	190	1	125
	4 - Eynsham Drive	258	119	121	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	0	3	3	4
	2 - Yarnton Way	2	0	1	2
	3 - Harrow Manorway South	2	1	0	1
	4 - Eynsham Drive	3	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Harrow Manorway North	0.79	10.74	3.8	B	1096	1644
2 - Yarnton Way	0.54	6.67	1.2	A	541	811
3 - Harrow Manorway South	0.74	10.93	2.9	B	812	1217
4 - Eynsham Drive	0.49	6.61	1.0	A	457	685

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	899	225	323	1745	0.515	895	824	0.0	1.1	4.354	A
2 - Yarnton Way	444	111	859	1424	0.312	442	359	0.0	0.5	3.711	A
3 - Harrow Manorway South	666	166	616	1475	0.451	663	685	0.0	0.8	4.483	A
4 - Eynsham Drive	375	94	774	1324	0.283	373	504	0.0	0.4	3.885	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1074	268	387	1709	0.628	1071	987	1.1	1.7	5.807	A
2 - Yarnton Way	530	132	1029	1329	0.399	529	429	0.5	0.7	4.563	A
3 - Harrow Manorway South	795	199	737	1405	0.566	793	820	0.8	1.3	5.962	A
4 - Eynsham Drive	447	112	927	1233	0.363	447	604	0.4	0.6	4.702	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1315	329	473	1661	0.792	1307	1205	1.7	3.7	10.283	B
2 - Yarnton Way	649	162	1255	1200	0.541	647	524	0.7	1.2	6.579	A
3 - Harrow Manorway South	974	243	900	1310	0.743	968	1002	1.3	2.8	10.509	B
4 - Eynsham Drive	548	137	1132	1111	0.493	546	737	0.6	1.0	6.532	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1315	329	475	1659	0.792	1314	1211	3.7	3.8	10.744	B
2 - Yarnton Way	649	162	1262	1196	0.543	649	527	1.2	1.2	6.673	A
3 - Harrow Manorway South	974	243	905	1307	0.745	974	1007	2.8	2.9	10.928	B
4 - Eynsham Drive	548	137	1137	1108	0.495	548	741	1.0	1.0	6.609	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	1074	268	390	1707	0.629	1082	995	3.8	1.8	6.023	A
2 - Yarnton Way	530	132	1038	1323	0.401	532	433	1.2	0.7	4.627	A
3 - Harrow Manorway South	795	199	743	1401	0.567	801	827	2.9	1.4	6.159	A
4 - Eynsham Drive	447	112	935	1228	0.364	449	609	1.0	0.6	4.759	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	899	225	325	1744	0.516	902	830	1.8	1.1	4.433	A
2 - Yarnton Way	444	111	866	1421	0.312	445	361	0.7	0.5	3.743	A
3 - Harrow Manorway South	666	166	620	1473	0.452	668	690	1.4	0.8	4.557	A
4 - Eynsham Drive	375	94	780	1320	0.284	375	508	0.6	0.4	3.919	A

2028 with Dev + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.73	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.73	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Harrow Manorway North		ONE HOUR	✓	826	100.000
2 - Yarnton Way		ONE HOUR	✓	439	100.000
3 - Harrow Manorway South		ONE HOUR	✓	807	100.000
4 - Eynsham Drive		ONE HOUR	✓	360	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	2	135	482	207
	2 - Yarnton Way	157	0	201	82
	3 - Harrow Manorway South	532	127	19	129
	4 - Eynsham Drive	143	123	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Harrow Manorway North	2 - Yarnton Way	3 - Harrow Manorway South	4 - Eynsham Drive
From	1 - Harrow Manorway North	0	2	0	1
	2 - Yarnton Way	1	0	1	0
	3 - Harrow Manorway South	1	1	0	1
	4 - Eynsham Drive	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Harrow Manorway North	0.53	4.56	1.1	A	758	1137
2 - Yarnton Way	0.34	3.91	0.5	A	403	605
3 - Harrow Manorway South	0.57	5.52	1.4	A	740	1110
4 - Eynsham Drive	0.32	4.35	0.5	A	330	495

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	622	155	271	1774	0.351	620	626	0.0	0.5	3.130	A
2 - Yarnton Way	331	83	602	1570	0.211	330	289	0.0	0.3	2.921	A
3 - Harrow Manorway South	607	152	336	1638	0.371	605	596	0.0	0.6	3.512	A
4 - Eynsham Drive	271	68	628	1411	0.192	270	313	0.0	0.2	3.201	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	743	186	325	1744	0.426	742	750	0.5	0.7	3.607	A
2 - Yarnton Way	395	99	720	1503	0.263	395	346	0.3	0.4	3.272	A
3 - Harrow Manorway South	725	181	402	1599	0.453	724	713	0.6	0.8	4.148	A
4 - Eynsham Drive	323	81	752	1337	0.242	323	375	0.2	0.3	3.605	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	910	227	397	1703	0.534	908	918	0.7	1.1	4.542	A
2 - Yarnton Way	484	121	882	1412	0.343	483	423	0.4	0.5	3.904	A
3 - Harrow Manorway South	888	222	492	1547	0.574	886	873	0.8	1.3	5.482	A
4 - Eynsham Drive	396	99	920	1237	0.320	395	459	0.3	0.5	4.340	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	910	227	398	1703	0.534	909	919	1.1	1.1	4.562	A
2 - Yarnton Way	484	121	883	1411	0.343	484	424	0.5	0.5	3.912	A
3 - Harrow Manorway South	888	222	493	1547	0.574	888	874	1.3	1.4	5.518	A
4 - Eynsham Drive	396	99	922	1236	0.320	396	459	0.5	0.5	4.351	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	743	186	326	1743	0.426	744	752	1.1	0.8	3.629	A
2 - Yarnton Way	395	99	723	1502	0.263	396	347	0.5	0.4	3.282	A
3 - Harrow Manorway South	725	181	403	1599	0.454	727	715	1.4	0.8	4.179	A
4 - Eynsham Drive	323	81	754	1335	0.242	324	376	0.5	0.3	3.615	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Harrow Manorway North	622	155	273	1773	0.351	623	630	0.8	0.5	3.149	A
2 - Yarnton Way	331	83	605	1569	0.211	331	290	0.4	0.3	2.933	A
3 - Harrow Manorway South	607	152	337	1637	0.371	608	598	0.8	0.6	3.538	A
4 - Eynsham Drive	271	68	631	1409	0.192	271	315	0.3	0.2	3.213	A

Junction 3

A2041 / Eastern Way Roundabout

Junctions 10

ARCADY 10 - Roundabout Module

Filename: J3 - A2041-Eastern Wy 23-08-07.j10
Path: Y:\ARDENT PROJECTS\194180 - Yarnton Way, Belvedere\Transport\ARCADY\J3 - A2041-Eastern Wy
Report generation date: 07/08/2023 17:36:44

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2022									
1 - Carlyle Road	0.5	2.11	0.35	A	3.00	0.3	1.72	0.25	A	2.38
2 - Eastern Way (E)	0.2	2.60	0.17	A		0.2	2.16	0.15	A	
3 - Harrow Manorway	0.9	3.00	0.47	A		0.6	2.43	0.37	A	
4 - Eastern Way (W)	0.9	4.21	0.47	A		0.5	3.27	0.33	A	
	2028 Base									
1 - Carlyle Road	0.6	2.19	0.37	A	3.17	0.4	1.76	0.26	A	2.46
2 - Eastern Way (E)	0.2	2.69	0.18	A		0.2	2.21	0.16	A	
3 - Harrow Manorway	1.0	3.16	0.50	A		0.6	2.52	0.39	A	
4 - Eastern Way (W)	1.0	4.50	0.49	A		0.5	3.41	0.35	A	
	2028 with Dev									
1 - Carlyle Road	0.6	2.19	0.37	A	3.19	0.4	1.76	0.26	A	2.48
2 - Eastern Way (E)	0.2	2.69	0.18	A		0.2	2.22	0.16	A	
3 - Harrow Manorway	1.0	3.21	0.50	A		0.6	2.53	0.39	A	
4 - Eastern Way (W)	1.0	4.52	0.50	A		0.6	3.44	0.35	A	
	2028 with Dev + Com Dev									
1 - Carlyle Road	0.6	2.20	0.37	A	3.24	0.4	1.77	0.26	A	2.51
2 - Eastern Way (E)	0.2	2.70	0.18	A		0.2	2.23	0.16	A	
3 - Harrow Manorway	1.1	3.30	0.52	A		0.7	2.55	0.40	A	
4 - Eastern Way (W)	1.0	4.56	0.50	A		0.6	3.50	0.36	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	J3 Eastern Way/ Carlye Road/Western Way/ Harrow Manorway
Location	
Site number	194180
Date	21/06/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	194180
Enumerator	ARDENTCE\Transportation
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489
D5	Dev Traffic	AM	ONE HOUR	07:45	09:15	15			
D6	Dev Traffic	PM	ONE HOUR	16:45	18:15	15			
D7	Com Dev	AM	ONE HOUR	07:45	09:15	15			
D8	Com Dev	PM	ONE HOUR	16:45	18:15	15			
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

Analysis Set Details

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

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Carlyle Road - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	2 - Eastern Way (E) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	3 - Harrow Manorway - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	4 - Eastern Way (W) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.00	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Carlyle Road		
2	Eastern Way (E)		
3	Harrow Manorway		
4	Eastern Way (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Carlyle Road	11.10	11.60	0.1	11.9	150.0	44.2		
2 - Eastern Way (E)	8.46	9.06	0.7	11.8	150.0	36.0		
3 - Harrow Manorway	7.70	8.93	3.6	20.6	150.0	26.5		
4 - Eastern Way (W)	6.71	8.39	0.7	21.0	150.0	38.4		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Carlyle Road	0.622	3094
2 - Eastern Way (E)	0.541	2469
3 - Harrow Manorway	0.566	2545
4 - Eastern Way (W)	0.487	2036

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Carlyle Road		ONE HOUR	✓	830	100.000
2 - Eastern Way (E)		ONE HOUR	✓	264	100.000
3 - Harrow Manorway		ONE HOUR	✓	995	100.000
4 - Eastern Way (W)		ONE HOUR	✓	704	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	177	498	155
	2 - Eastern Way (E)	178	0	86	0
	3 - Harrow Manorway	416	98	2	479
	4 - Eastern Way (W)	135	2	549	18

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	1	1	0
	2 - Eastern Way (E)	4	0	6	0
	3 - Harrow Manorway	1	8	100	3
	4 - Eastern Way (W)	0	100	4	45

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Carlyle Road	0.35	2.11	0.5	A	762	1143
2 - Eastern Way (E)	0.17	2.60	0.2	A	242	363
3 - Harrow Manorway	0.47	3.00	0.9	A	913	1369
4 - Eastern Way (W)	0.47	4.21	0.9	A	646	969

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	625	156	503	2781	0.225	624	547	0.0	0.3	1.682	A
2 - Eastern Way (E)	198	50	918	1973	0.101	198	209	0.0	0.1	2.123	A
3 - Harrow Manorway	749	187	263	2397	0.312	747	853	0.0	0.5	2.240	A
4 - Eastern Way (W)	530	133	521	1782	0.297	528	489	0.0	0.4	2.985	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	746	187	601	2720	0.274	746	654	0.3	0.4	1.837	A
2 - Eastern Way (E)	237	59	1098	1875	0.126	237	249	0.1	0.2	2.299	A
3 - Harrow Manorway	894	224	314	2367	0.378	894	1020	0.5	0.6	2.508	A
4 - Eastern Way (W)	633	158	623	1732	0.365	632	585	0.4	0.6	3.404	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	914	228	736	2636	0.347	913	801	0.4	0.5	2.106	A
2 - Eastern Way (E)	290	73	1344	1742	0.167	290	305	0.2	0.2	2.594	A
3 - Harrow Manorway	1095	274	385	2328	0.471	1094	1249	0.6	0.9	2.995	A
4 - Eastern Way (W)	775	194	763	1664	0.466	774	716	0.6	0.9	4.202	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	914	228	737	2636	0.347	914	802	0.5	0.5	2.107	A
2 - Eastern Way (E)	290	73	1346	1741	0.167	290	306	0.2	0.2	2.595	A
3 - Harrow Manorway	1095	274	385	2327	0.471	1095	1251	0.9	0.9	3.000	A
4 - Eastern Way (W)	775	194	764	1664	0.466	775	717	0.9	0.9	4.215	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	746	187	603	2719	0.274	747	655	0.5	0.4	1.839	A
2 - Eastern Way (E)	237	59	1100	1874	0.126	237	250	0.2	0.2	2.301	A
3 - Harrow Manorway	894	224	315	2367	0.378	895	1023	0.9	0.6	2.516	A
4 - Eastern Way (W)	633	158	624	1732	0.365	634	586	0.9	0.6	3.419	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	625	156	505	2780	0.225	625	549	0.4	0.3	1.686	A
2 - Eastern Way (E)	198	50	921	1971	0.101	199	209	0.2	0.1	2.127	A
3 - Harrow Manorway	749	187	264	2396	0.313	749	856	0.6	0.5	2.246	A
4 - Eastern Way (W)	530	133	523	1781	0.298	531	490	0.6	0.4	2.999	A

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Carlyle Road - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	2 - Eastern Way (E) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	3 - Harrow Manorway - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	4 - Eastern Way (W) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.38	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.38	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Carlyle Road		ONE HOUR	✓	635	100.000
2 - Eastern Way (E)		ONE HOUR	✓	265	100.000
3 - Harrow Manorway		ONE HOUR	✓	795	100.000
4 - Eastern Way (W)		ONE HOUR	✓	497	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	148	407	80
	2 - Eastern Way (E)	196	0	69	0
	3 - Harrow Manorway	402	82	0	311
	4 - Eastern Way (W)	174	0	307	17

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	1	1	1
	2 - Eastern Way (E)	2	0	1	0
	3 - Harrow Manorway	1	1	0	0
	4 - Eastern Way (W)	1	0	1	63

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Carlyle Road	0.25	1.72	0.3	A	582	873
2 - Eastern Way (E)	0.15	2.16	0.2	A	243	364
3 - Harrow Manorway	0.37	2.43	0.6	A	730	1094
4 - Eastern Way (W)	0.33	3.27	0.5	A	456	684

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	478	119	305	2905	0.164	477	579	0.0	0.2	1.497	A
2 - Eastern Way (E)	199	50	608	2140	0.093	199	173	0.0	0.1	1.886	A
3 - Harrow Manorway	599	150	219	2421	0.247	597	588	0.0	0.3	1.985	A
4 - Eastern Way (W)	374	94	511	1787	0.209	373	306	0.0	0.3	2.603	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	570	143	364	2867	0.199	570	693	0.2	0.3	1.582	A
2 - Eastern Way (E)	238	60	728	2075	0.115	238	207	0.1	0.1	1.993	A
3 - Harrow Manorway	715	179	262	2397	0.298	714	703	0.3	0.4	2.152	A
4 - Eastern Way (W)	447	112	611	1739	0.257	446	366	0.3	0.4	2.850	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	699	175	446	2817	0.248	698	848	0.3	0.3	1.716	A
2 - Eastern Way (E)	292	73	891	1987	0.147	291	254	0.1	0.2	2.159	A
3 - Harrow Manorway	875	219	321	2364	0.370	875	861	0.4	0.6	2.431	A
4 - Eastern Way (W)	547	137	748	1672	0.327	547	448	0.4	0.5	3.271	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	699	175	447	2816	0.248	699	849	0.3	0.3	1.716	A
2 - Eastern Way (E)	292	73	892	1987	0.147	292	254	0.2	0.2	2.160	A
3 - Harrow Manorway	875	219	321	2364	0.370	875	862	0.6	0.6	2.433	A
4 - Eastern Way (W)	547	137	748	1672	0.327	547	448	0.5	0.5	3.274	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	570	143	365	2867	0.199	571	694	0.3	0.3	1.583	A
2 - Eastern Way (E)	238	60	729	2075	0.115	238	207	0.2	0.1	1.994	A
3 - Harrow Manorway	715	179	262	2397	0.298	715	704	0.6	0.4	2.156	A
4 - Eastern Way (W)	447	112	611	1738	0.257	447	366	0.5	0.4	2.853	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	478	119	306	2904	0.165	478	581	0.3	0.2	1.500	A
2 - Eastern Way (E)	199	50	610	2139	0.093	199	174	0.1	0.1	1.890	A
3 - Harrow Manorway	599	150	220	2421	0.247	599	590	0.4	0.3	1.987	A
4 - Eastern Way (W)	374	94	512	1787	0.209	375	307	0.4	0.3	2.607	A

2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Carlyle Road - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	2 - Eastern Way (E) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	3 - Harrow Manorway - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	4 - Eastern Way (W) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.17	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Carlyle Road		ONE HOUR	✓	870	100.000
2 - Eastern Way (E)		ONE HOUR	✓	276	100.000
3 - Harrow Manorway		ONE HOUR	✓	1043	100.000
4 - Eastern Way (W)		ONE HOUR	✓	738	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	186	523	162
	2 - Eastern Way (E)	186	0	90	0
	3 - Harrow Manorway	436	103	2	502
	4 - Eastern Way (W)	142	2	576	18

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	1	1	0
	2 - Eastern Way (E)	4	0	6	0
	3 - Harrow Manorway	1	8	100	3
	4 - Eastern Way (W)	0	100	4	45

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Carlyle Road	0.37	2.19	0.6	A	799	1198
2 - Eastern Way (E)	0.18	2.69	0.2	A	254	380
3 - Harrow Manorway	0.50	3.16	1.0	A	957	1436
4 - Eastern Way (W)	0.49	4.50	1.0	A	677	1016

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	655	164	527	2766	0.237	654	573	0.0	0.3	1.718	A
2 - Eastern Way (E)	208	52	962	1948	0.107	208	219	0.0	0.1	2.164	A
3 - Harrow Manorway	785	196	276	2389	0.329	783	894	0.0	0.5	2.299	A
4 - Eastern Way (W)	556	139	546	1770	0.314	554	513	0.0	0.5	3.078	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	783	196	631	2702	0.290	782	686	0.3	0.4	1.889	A
2 - Eastern Way (E)	248	62	1151	1846	0.135	248	262	0.1	0.2	2.357	A
3 - Harrow Manorway	938	234	330	2359	0.398	937	1070	0.5	0.7	2.599	A
4 - Eastern Way (W)	664	166	653	1718	0.386	663	613	0.5	0.7	3.551	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	958	240	772	2614	0.367	958	840	0.4	0.6	2.189	A
2 - Eastern Way (E)	304	76	1409	1707	0.178	304	320	0.2	0.2	2.685	A
3 - Harrow Manorway	1148	287	404	2317	0.496	1147	1310	0.7	1.0	3.159	A
4 - Eastern Way (W)	813	203	800	1646	0.494	811	751	0.7	1.0	4.481	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	958	240	773	2613	0.367	958	841	0.6	0.6	2.192	A
2 - Eastern Way (E)	304	76	1411	1706	0.178	304	320	0.2	0.2	2.687	A
3 - Harrow Manorway	1148	287	404	2317	0.496	1148	1311	1.0	1.0	3.164	A
4 - Eastern Way (W)	813	203	801	1646	0.494	813	751	1.0	1.0	4.497	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	783	196	632	2701	0.290	783	687	0.6	0.4	1.895	A
2 - Eastern Way (E)	248	62	1154	1845	0.135	249	262	0.2	0.2	2.360	A
3 - Harrow Manorway	938	234	330	2358	0.398	939	1072	1.0	0.7	2.609	A
4 - Eastern Way (W)	664	166	655	1717	0.386	665	614	1.0	0.7	3.565	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	655	164	529	2765	0.237	656	575	0.4	0.3	1.722	A
2 - Eastern Way (E)	208	52	966	1947	0.107	208	219	0.2	0.1	2.168	A
3 - Harrow Manorway	785	196	276	2389	0.329	786	898	0.7	0.5	2.307	A
4 - Eastern Way (W)	556	139	548	1769	0.314	556	514	0.7	0.5	3.094	A

2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Carlyle Road - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	2 - Eastern Way (E) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	3 - Harrow Manorway - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	4 - Eastern Way (W) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.46	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.46	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Carlyle Road		ONE HOUR	✓	666	100.000
2 - Eastern Way (E)		ONE HOUR	✓	278	100.000
3 - Harrow Manorway		ONE HOUR	✓	834	100.000
4 - Eastern Way (W)		ONE HOUR	✓	521	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	156	427	83
	2 - Eastern Way (E)	205	0	72	0
	3 - Harrow Manorway	421	86	0	326
	4 - Eastern Way (W)	182	0	322	17

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	1	1	1
	2 - Eastern Way (E)	2	0	1	0
	3 - Harrow Manorway	1	1	0	0
	4 - Eastern Way (W)	1	0	1	63

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Carlyle Road	0.26	1.76	0.4	A	611	916
2 - Eastern Way (E)	0.16	2.21	0.2	A	255	382
3 - Harrow Manorway	0.39	2.52	0.6	A	765	1148
4 - Eastern Way (W)	0.35	3.41	0.5	A	478	718

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	501	125	319	2895	0.173	500	607	0.0	0.2	1.518	A
2 - Eastern Way (E)	209	52	638	2124	0.098	209	182	0.0	0.1	1.911	A
3 - Harrow Manorway	628	157	230	2415	0.260	626	617	0.0	0.4	2.022	A
4 - Eastern Way (W)	392	98	535	1775	0.221	391	321	0.0	0.3	2.658	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	598	150	382	2856	0.210	598	727	0.2	0.3	1.609	A
2 - Eastern Way (E)	250	62	763	2056	0.121	250	217	0.1	0.1	2.027	A
3 - Harrow Manorway	750	187	275	2390	0.314	749	738	0.4	0.5	2.208	A
4 - Eastern Way (W)	469	117	640	1724	0.272	468	384	0.3	0.4	2.932	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	733	183	468	2803	0.261	733	890	0.3	0.4	1.755	A
2 - Eastern Way (E)	306	76	935	1963	0.156	306	266	0.1	0.2	2.209	A
3 - Harrow Manorway	918	230	337	2355	0.390	917	903	0.5	0.6	2.518	A
4 - Eastern Way (W)	574	143	784	1654	0.347	573	470	0.4	0.5	3.405	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	733	183	468	2803	0.261	733	890	0.4	0.4	1.755	A
2 - Eastern Way (E)	306	76	935	1963	0.156	306	266	0.2	0.2	2.209	A
3 - Harrow Manorway	918	230	337	2355	0.390	918	904	0.6	0.6	2.520	A
4 - Eastern Way (W)	574	143	785	1654	0.347	574	470	0.5	0.5	3.409	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	598	150	383	2856	0.210	599	728	0.4	0.3	1.610	A
2 - Eastern Way (E)	250	62	764	2056	0.121	250	217	0.2	0.1	2.029	A
3 - Harrow Manorway	750	187	275	2390	0.314	750	739	0.6	0.5	2.210	A
4 - Eastern Way (W)	469	117	641	1724	0.272	469	384	0.5	0.4	2.936	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	501	125	321	2895	0.173	501	609	0.3	0.2	1.518	A
2 - Eastern Way (E)	209	52	640	2123	0.099	209	182	0.1	0.1	1.916	A
3 - Harrow Manorway	628	157	230	2415	0.260	628	619	0.5	0.4	2.028	A
4 - Eastern Way (W)	392	98	537	1774	0.221	393	322	0.4	0.3	2.665	A

2028 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Carlyle Road - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	2 - Eastern Way (E) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	3 - Harrow Manorway - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	4 - Eastern Way (W) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.19	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.19	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Carlyle Road		ONE HOUR	✓	870	100.000
2 - Eastern Way (E)		ONE HOUR	✓	276	100.000
3 - Harrow Manorway		ONE HOUR	✓	1060	100.000
4 - Eastern Way (W)		ONE HOUR	✓	741	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	186	523	162
	2 - Eastern Way (E)	186	0	90	0
	3 - Harrow Manorway	437	103	2	518
	4 - Eastern Way (W)	142	2	579	18

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	1	1	0
	2 - Eastern Way (E)	4	0	6	0
	3 - Harrow Manorway	1	8	100	3
	4 - Eastern Way (W)	0	100	4	45

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Carlyle Road	0.37	2.19	0.6	A	799	1198
2 - Eastern Way (E)	0.18	2.69	0.2	A	254	380
3 - Harrow Manorway	0.50	3.21	1.0	A	973	1459
4 - Eastern Way (W)	0.50	4.52	1.0	A	680	1020

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	655	164	529	2765	0.237	654	574	0.0	0.3	1.719	A
2 - Eastern Way (E)	208	52	965	1947	0.107	208	219	0.0	0.1	2.165	A
3 - Harrow Manorway	798	200	276	2389	0.334	796	897	0.0	0.5	2.317	A
4 - Eastern Way (W)	558	140	547	1770	0.315	556	525	0.0	0.5	3.088	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	783	196	633	2700	0.290	782	687	0.3	0.4	1.891	A
2 - Eastern Way (E)	248	62	1154	1845	0.135	248	262	0.1	0.2	2.359	A
3 - Harrow Manorway	953	238	330	2359	0.404	952	1073	0.5	0.7	2.627	A
4 - Eastern Way (W)	666	167	654	1717	0.388	666	627	0.5	0.7	3.561	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	958	240	775	2612	0.367	958	841	0.4	0.6	2.192	A
2 - Eastern Way (E)	304	76	1413	1705	0.179	304	320	0.2	0.2	2.689	A
3 - Harrow Manorway	1167	292	404	2317	0.504	1166	1313	0.7	1.0	3.206	A
4 - Eastern Way (W)	816	204	801	1646	0.496	815	768	0.7	1.0	4.500	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	958	240	776	2611	0.367	958	842	0.6	0.6	2.195	A
2 - Eastern Way (E)	304	76	1414	1704	0.179	304	320	0.2	0.2	2.690	A
3 - Harrow Manorway	1167	292	404	2317	0.504	1167	1315	1.0	1.0	3.214	A
4 - Eastern Way (W)	816	204	802	1645	0.496	816	769	1.0	1.0	4.517	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	783	196	635	2699	0.290	783	688	0.6	0.4	1.894	A
2 - Eastern Way (E)	248	62	1156	1843	0.135	249	262	0.2	0.2	2.364	A
3 - Harrow Manorway	953	238	330	2358	0.404	954	1075	1.0	0.7	2.634	A
4 - Eastern Way (W)	666	167	656	1717	0.388	668	629	1.0	0.7	3.576	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	655	164	532	2763	0.237	656	576	0.4	0.3	1.721	A
2 - Eastern Way (E)	208	52	968	1945	0.107	208	219	0.2	0.1	2.170	A
3 - Harrow Manorway	798	200	276	2389	0.334	799	900	0.7	0.5	2.327	A
4 - Eastern Way (W)	558	140	549	1769	0.316	559	526	0.7	0.5	3.100	A

2028 with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Carlyle Road - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	2 - Eastern Way (E) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	3 - Harrow Manorway - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	4 - Eastern Way (W) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.48	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.48	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Carlyle Road		ONE HOUR	✓	667	100.000
2 - Eastern Way (E)		ONE HOUR	✓	278	100.000
3 - Harrow Manorway		ONE HOUR	✓	839	100.000
4 - Eastern Way (W)		ONE HOUR	✓	530	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	156	428	83
	2 - Eastern Way (E)	205	0	72	0
	3 - Harrow Manorway	421	86	0	331
	4 - Eastern Way (W)	182	0	331	17

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	1	1	1
	2 - Eastern Way (E)	2	0	1	0
	3 - Harrow Manorway	1	1	0	0
	4 - Eastern Way (W)	1	0	1	63

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Carlyle Road	0.26	1.76	0.4	A	612	918
2 - Eastern Way (E)	0.16	2.22	0.2	A	255	382
3 - Harrow Manorway	0.39	2.53	0.6	A	770	1155
4 - Eastern Way (W)	0.35	3.44	0.6	A	487	730

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	502	125	326	2891	0.174	501	607	0.0	0.2	1.521	A
2 - Eastern Way (E)	209	52	646	2120	0.099	209	182	0.0	0.1	1.915	A
3 - Harrow Manorway	632	158	230	2415	0.261	630	624	0.0	0.4	2.027	A
4 - Eastern Way (W)	399	100	535	1775	0.225	398	325	0.0	0.3	2.670	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	599	150	390	2851	0.210	599	727	0.2	0.3	1.613	A
2 - Eastern Way (E)	250	62	772	2051	0.122	250	217	0.1	0.1	2.032	A
3 - Harrow Manorway	754	189	275	2390	0.316	754	747	0.4	0.5	2.213	A
4 - Eastern Way (W)	477	119	640	1724	0.277	476	388	0.3	0.4	2.950	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	734	183	478	2797	0.262	734	890	0.3	0.4	1.761	A
2 - Eastern Way (E)	306	76	946	1958	0.156	306	266	0.1	0.2	2.217	A
3 - Harrow Manorway	924	231	337	2355	0.392	923	914	0.5	0.6	2.528	A
4 - Eastern Way (W)	584	146	784	1654	0.353	583	475	0.4	0.6	3.436	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	734	183	478	2797	0.262	734	890	0.4	0.4	1.761	A
2 - Eastern Way (E)	306	76	946	1957	0.156	306	266	0.2	0.2	2.217	A
3 - Harrow Manorway	924	231	337	2355	0.392	924	915	0.6	0.6	2.530	A
4 - Eastern Way (W)	584	146	785	1654	0.353	584	476	0.6	0.6	3.439	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	599	150	391	2851	0.210	600	728	0.4	0.3	1.617	A
2 - Eastern Way (E)	250	62	773	2051	0.122	250	217	0.2	0.1	2.033	A
3 - Harrow Manorway	754	189	275	2389	0.316	755	748	0.6	0.5	2.216	A
4 - Eastern Way (W)	477	119	641	1724	0.277	477	389	0.6	0.4	2.957	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	502	125	327	2890	0.174	502	609	0.3	0.2	1.521	A
2 - Eastern Way (E)	209	52	647	2119	0.099	209	182	0.1	0.1	1.917	A
3 - Harrow Manorway	632	158	230	2415	0.262	632	626	0.5	0.4	2.031	A
4 - Eastern Way (W)	399	100	537	1774	0.225	400	325	0.4	0.3	2.677	A

2028 with Dev + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Carlyle Road - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	2 - Eastern Way (E) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	3 - Harrow Manorway - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	4 - Eastern Way (W) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.24	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.24	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Carlyle Road		ONE HOUR	✓	871	100.000
2 - Eastern Way (E)		ONE HOUR	✓	276	100.000
3 - Harrow Manorway		ONE HOUR	✓	1089	100.000
4 - Eastern Way (W)		ONE HOUR	✓	748	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	186	524	162
	2 - Eastern Way (E)	186	0	90	0
	3 - Harrow Manorway	439	103	2	545
	4 - Eastern Way (W)	142	2	586	18

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	1	1	0
	2 - Eastern Way (E)	4	0	6	0
	3 - Harrow Manorway	1	8	100	3
	4 - Eastern Way (W)	0	100	4	45

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Carlyle Road	0.37	2.20	0.6	A	800	1199
2 - Eastern Way (E)	0.18	2.70	0.2	A	254	380
3 - Harrow Manorway	0.52	3.30	1.1	A	999	1499
4 - Eastern Way (W)	0.50	4.56	1.0	A	687	1030

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	656	164	534	2762	0.238	655	575	0.0	0.3	1.722	A
2 - Eastern Way (E)	208	52	971	1944	0.107	208	219	0.0	0.1	2.169	A
3 - Harrow Manorway	820	205	276	2389	0.343	818	903	0.0	0.5	2.347	A
4 - Eastern Way (W)	563	141	548	1769	0.318	561	545	0.0	0.5	3.096	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	783	196	640	2696	0.291	783	689	0.3	0.4	1.896	A
2 - Eastern Way (E)	248	62	1161	1841	0.135	248	262	0.1	0.2	2.365	A
3 - Harrow Manorway	979	245	330	2359	0.415	978	1080	0.5	0.7	2.674	A
4 - Eastern Way (W)	673	168	656	1716	0.392	672	652	0.5	0.7	3.584	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	959	240	783	2607	0.368	959	843	0.4	0.6	2.200	A
2 - Eastern Way (E)	304	76	1421	1700	0.179	304	320	0.2	0.2	2.698	A
3 - Harrow Manorway	1199	300	404	2317	0.518	1198	1322	0.7	1.1	3.296	A
4 - Eastern Way (W)	824	206	803	1645	0.501	822	798	0.7	1.0	4.545	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	959	240	784	2606	0.368	959	844	0.6	0.6	2.203	A
2 - Eastern Way (E)	304	76	1423	1699	0.179	304	320	0.2	0.2	2.699	A
3 - Harrow Manorway	1199	300	404	2317	0.518	1199	1324	1.1	1.1	3.304	A
4 - Eastern Way (W)	824	206	804	1644	0.501	824	799	1.0	1.0	4.563	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	783	196	642	2695	0.291	784	690	0.6	0.4	1.901	A
2 - Eastern Way (E)	248	62	1164	1840	0.135	249	262	0.2	0.2	2.369	A
3 - Harrow Manorway	979	245	330	2358	0.415	980	1082	1.1	0.7	2.685	A
4 - Eastern Way (W)	673	168	658	1716	0.392	674	653	1.0	0.7	3.599	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	656	164	537	2760	0.238	656	578	0.4	0.3	1.727	A
2 - Eastern Way (E)	208	52	974	1942	0.107	208	219	0.2	0.1	2.172	A
3 - Harrow Manorway	820	205	276	2389	0.343	821	906	0.7	0.5	2.358	A
4 - Eastern Way (W)	563	141	550	1768	0.319	564	547	0.7	0.5	3.112	A

2028 with Dev + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Carlyle Road - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	2 - Eastern Way (E) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	3 - Harrow Manorway - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Geometry	4 - Eastern Way (W) - Roundabout Geometry	Roundabout diameter is over 130m; roundabout should be treated as a Grade Separated and/or Large Roundabout
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.51	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.51	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Carlyle Road		ONE HOUR	✓	668	100.000
2 - Eastern Way (E)		ONE HOUR	✓	278	100.000
3 - Harrow Manorway		ONE HOUR	✓	851	100.000
4 - Eastern Way (W)		ONE HOUR	✓	547	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	156	429	83
	2 - Eastern Way (E)	205	0	72	0
	3 - Harrow Manorway	422	86	0	342
	4 - Eastern Way (W)	182	0	348	17

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Carlyle Road	2 - Eastern Way (E)	3 - Harrow Manorway	4 - Eastern Way (W)
From	1 - Carlyle Road	0	1	1	1
	2 - Eastern Way (E)	2	0	1	0
	3 - Harrow Manorway	1	1	0	0
	4 - Eastern Way (W)	1	0	1	63

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Carlyle Road	0.26	1.77	0.4	A	613	919
2 - Eastern Way (E)	0.16	2.23	0.2	A	255	382
3 - Harrow Manorway	0.40	2.55	0.7	A	781	1171
4 - Eastern Way (W)	0.36	3.50	0.6	A	502	753

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	503	126	339	2883	0.174	502	608	0.0	0.2	1.526	A
2 - Eastern Way (E)	209	52	659	2112	0.099	209	182	0.0	0.1	1.924	A
3 - Harrow Manorway	641	160	230	2415	0.265	639	638	0.0	0.4	2.037	A
4 - Eastern Way (W)	412	103	536	1775	0.232	411	333	0.0	0.3	2.694	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	600	150	406	2842	0.211	600	727	0.2	0.3	1.621	A
2 - Eastern Way (E)	250	62	788	2043	0.122	250	217	0.1	0.1	2.042	A
3 - Harrow Manorway	765	191	275	2390	0.320	764	763	0.4	0.5	2.228	A
4 - Eastern Way (W)	492	123	641	1724	0.285	492	398	0.3	0.4	2.986	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	735	184	496	2785	0.264	735	891	0.3	0.4	1.772	A
2 - Eastern Way (E)	306	76	965	1947	0.157	306	266	0.1	0.2	2.231	A
3 - Harrow Manorway	937	234	337	2355	0.398	936	934	0.5	0.7	2.551	A
4 - Eastern Way (W)	603	151	785	1654	0.364	602	487	0.4	0.6	3.496	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	735	184	497	2785	0.264	735	891	0.4	0.4	1.772	A
2 - Eastern Way (E)	306	76	966	1946	0.157	306	266	0.2	0.2	2.232	A
3 - Harrow Manorway	937	234	337	2355	0.398	937	935	0.7	0.7	2.553	A
4 - Eastern Way (W)	603	151	786	1653	0.364	603	488	0.6	0.6	3.500	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	600	150	406	2841	0.211	601	729	0.4	0.3	1.624	A
2 - Eastern Way (E)	250	62	790	2042	0.122	250	217	0.2	0.1	2.045	A
3 - Harrow Manorway	765	191	275	2389	0.320	766	764	0.7	0.5	2.232	A
4 - Eastern Way (W)	492	123	642	1723	0.286	493	399	0.6	0.4	2.992	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Carlyle Road	503	126	340	2882	0.174	503	610	0.3	0.2	1.529	A
2 - Eastern Way (E)	209	52	661	2111	0.099	209	182	0.1	0.1	1.925	A
3 - Harrow Manorway	641	160	230	2415	0.265	641	640	0.5	0.4	2.041	A
4 - Eastern Way (W)	412	103	538	1774	0.232	412	334	0.4	0.3	2.704	A

Junction 4

Eastern Way / A2016 / Clydesdale Way / Yarnton Way Roundabout

Junctions 10

ARCADY 10 - Roundabout Module

Filename: J4 - Yarnton Wy-Eastern Wy-A2016-Clydesdale Wy 23-08-07.j10
Path: Y:\ARDENT PROJECTS\194180 - Yarnton Way, Belvedere\Transport\ARCADY\J4 - Yarnton Wy-Eastern Wy-A2016-Clydesdale Wy
Report generation date: 07/08/2023 17:39:22

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2022									
1 - Picardy Manorway	1.6	3.58	0.59	A	3.77	0.8	2.50	0.44	A	3.26
2 - Clydesdale Way	0.6	9.89	0.38	A		0.4	6.34	0.30	A	
3 - Yarnton Way	0.4	2.53	0.26	A		0.3	2.10	0.22	A	
4 - Eastern Way	0.7	3.24	0.41	A		1.2	3.95	0.54	A	
	2028 Base									
1 - Picardy Manorway	1.8	3.88	0.62	A	4.08	0.9	2.61	0.46	A	3.48
2 - Clydesdale Way	0.7	11.32	0.42	B		0.5	6.79	0.32	A	
3 - Yarnton Way	0.4	2.66	0.28	A		0.3	2.18	0.24	A	
4 - Eastern Way	0.8	3.41	0.43	A		1.3	4.28	0.57	A	
	2028 with Dev									
1 - Picardy Manorway	1.8	3.92	0.63	A	4.13	0.9	2.66	0.47	A	3.53
2 - Clydesdale Way	0.8	11.51	0.43	B		0.5	6.96	0.33	A	
3 - Yarnton Way	0.5	2.73	0.30	A		0.3	2.19	0.24	A	
4 - Eastern Way	0.8	3.49	0.44	A		1.4	4.36	0.57	A	
	2028 with Dev + Com Dev									
1 - Picardy Manorway	1.8	3.99	0.63	A	4.19	0.9	2.68	0.47	A	3.57
2 - Clydesdale Way	0.8	11.84	0.43	B		0.5	7.07	0.33	A	
3 - Yarnton Way	0.5	2.75	0.31	A		0.3	2.21	0.25	A	
4 - Eastern Way	0.8	3.52	0.44	A		1.4	4.43	0.58	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	J4 Eastern Way/ Picardy Manorway/ Yarnton Way/ Clydesdale Way
Location	
Site number	
Date	21/06/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	194180
Enumerator	ARDENTCE\Transportation
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489
D5	Dev Traffic	AM	ONE HOUR	07:45	09:15	15			
D6	Dev Traffic	PM	ONE HOUR	16:45	18:15	15			
D7	Com Dev	AM	ONE HOUR	07:45	09:15	15			
D8	Com Dev	PM	ONE HOUR	16:45	18:15	15			
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

Analysis Set Details

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

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Picardy Manorway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.77	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Picardy Manorway		
2	Clydesdale Way		
3	Yarnton Way		
4	Eastern Way		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Picardy Manorway	7.11	10.63	32.6	20.0	60.0	43.9		
2 - Clydesdale Way	4.30	5.23	3.7	12.0	60.0	45.1		
3 - Yarnton Way	10.21	10.63	1.4	16.6	60.0	38.4		
4 - Eastern Way	7.15	10.95	9.5	16.3	60.0	54.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Picardy Manorway	0.736	2805
2 - Clydesdale Way	0.472	1335
3 - Yarnton Way	0.778	3035
4 - Eastern Way	0.657	2419

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Picardy Manorway		ONE HOUR	✓	1434	100.000
2 - Clydesdale Way		ONE HOUR	✓	206	100.000
3 - Yarnton Way		ONE HOUR	✓	491	100.000
4 - Eastern Way		ONE HOUR	✓	738	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	86	107	419	822
	2 - Clydesdale Way	101	0	50	54
	3 - Yarnton Way	366	28	6	92
	4 - Eastern Way	594	54	59	32

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	46	1	3	8
	2 - Clydesdale Way	1	0	2	2
	3 - Yarnton Way	8	0	0	21
	4 - Eastern Way	7	0	4	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Picardy Manorway	0.59	3.58	1.6	A	1316	1974
2 - Clydesdale Way	0.38	9.89	0.6	A	189	283
3 - Yarnton Way	0.26	2.53	0.4	A	451	676
4 - Eastern Way	0.41	3.24	0.7	A	678	1016

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1080	270	134	2706	0.399	1077	860	0.0	0.7	2.373	A
2 - Clydesdale Way	155	39	1069	831	0.186	154	142	0.0	0.2	5.390	A
3 - Yarnton Way	370	92	822	2395	0.154	369	401	0.0	0.2	1.945	A
4 - Eastern Way	556	139	440	2130	0.261	554	751	0.0	0.4	2.427	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1289	322	161	2687	0.480	1288	1030	0.7	1.0	2.766	A
2 - Clydesdale Way	185	46	1279	732	0.253	184	170	0.2	0.3	6.666	A
3 - Yarnton Way	441	110	984	2269	0.195	441	479	0.2	0.3	2.157	A
4 - Eastern Way	664	166	527	2073	0.320	663	898	0.4	0.5	2.715	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1579	395	197	2660	0.593	1577	1260	1.0	1.6	3.566	A
2 - Clydesdale Way	226	57	1565	597	0.379	225	208	0.3	0.6	9.804	A
3 - Yarnton Way	541	135	1204	2098	0.258	540	587	0.3	0.4	2.532	A
4 - Eastern Way	813	203	645	1996	0.407	812	1099	0.5	0.7	3.234	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1579	395	197	2660	0.594	1579	1262	1.6	1.6	3.580	A
2 - Clydesdale Way	226	57	1567	596	0.380	226	208	0.6	0.6	9.886	A
3 - Yarnton Way	541	135	1206	2096	0.258	541	588	0.4	0.4	2.535	A
4 - Eastern Way	813	203	646	1995	0.408	813	1101	0.7	0.7	3.238	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1289	322	161	2687	0.480	1291	1032	1.6	1.0	2.779	A
2 - Clydesdale Way	185	46	1282	731	0.253	186	170	0.6	0.3	6.722	A
3 - Yarnton Way	441	110	987	2267	0.195	442	481	0.4	0.3	2.163	A
4 - Eastern Way	664	166	528	2072	0.320	665	901	0.7	0.5	2.723	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1080	270	135	2706	0.399	1081	864	1.0	0.7	2.384	A
2 - Clydesdale Way	155	39	1073	829	0.187	155	143	0.3	0.2	5.427	A
3 - Yarnton Way	370	92	826	2392	0.155	370	402	0.3	0.2	1.952	A
4 - Eastern Way	556	139	442	2129	0.261	556	754	0.5	0.4	2.434	A

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Picardy Manorway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.26	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.26	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Picardy Manorway		ONE HOUR	✓	1055	100.000
2 - Clydesdale Way		ONE HOUR	✓	218	100.000
3 - Yarnton Way		ONE HOUR	✓	462	100.000
4 - Eastern Way		ONE HOUR	✓	981	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	28	119	283	625
	2 - Clydesdale Way	113	0	46	59
	3 - Yarnton Way	378	30	6	48
	4 - Eastern Way	831	75	43	31

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	53	1	3	3
	2 - Clydesdale Way	0	0	0	0
	3 - Yarnton Way	5	0	0	7
	4 - Eastern Way	3	0	5	7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Picardy Manorway	0.44	2.50	0.8	A	968	1452
2 - Clydesdale Way	0.30	6.34	0.4	A	200	300
3 - Yarnton Way	0.22	2.10	0.3	A	423	635
4 - Eastern Way	0.54	3.95	1.2	A	900	1350

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	794	199	139	2703	0.294	793	1014	0.0	0.4	1.952	A
2 - Clydesdale Way	164	41	763	975	0.168	163	169	0.0	0.2	4.429	A
3 - Yarnton Way	347	87	642	2535	0.137	347	284	0.0	0.2	1.723	A
4 - Eastern Way	739	185	417	2146	0.344	736	573	0.0	0.5	2.627	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	949	237	167	2682	0.354	948	1213	0.4	0.6	2.152	A
2 - Clydesdale Way	196	49	913	905	0.217	196	202	0.2	0.3	5.076	A
3 - Yarnton Way	415	104	769	2437	0.170	415	340	0.2	0.2	1.864	A
4 - Eastern Way	882	220	498	2092	0.422	881	685	0.5	0.7	3.060	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1162	290	204	2655	0.438	1161	1484	0.6	0.8	2.496	A
2 - Clydesdale Way	240	60	1118	808	0.297	239	247	0.3	0.4	6.325	A
3 - Yarnton Way	508	127	941	2303	0.221	508	416	0.2	0.3	2.101	A
4 - Eastern Way	1080	270	610	2019	0.535	1078	839	0.7	1.2	3.936	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1162	290	204	2655	0.438	1162	1486	0.8	0.8	2.499	A
2 - Clydesdale Way	240	60	1119	808	0.297	240	247	0.4	0.4	6.343	A
3 - Yarnton Way	508	127	942	2302	0.221	508	417	0.3	0.3	2.102	A
4 - Eastern Way	1080	270	611	2018	0.535	1080	839	1.2	1.2	3.952	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	949	237	167	2682	0.354	949	1216	0.8	0.6	2.154	A
2 - Clydesdale Way	196	49	915	904	0.217	197	202	0.4	0.3	5.095	A
3 - Yarnton Way	415	104	770	2436	0.170	415	341	0.3	0.2	1.866	A
4 - Eastern Way	882	220	499	2091	0.422	884	686	1.2	0.8	3.073	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	794	199	140	2702	0.294	795	1017	0.6	0.4	1.957	A
2 - Clydesdale Way	164	41	766	974	0.168	164	169	0.3	0.2	4.447	A
3 - Yarnton Way	347	87	645	2533	0.137	348	285	0.2	0.2	1.728	A
4 - Eastern Way	739	185	418	2145	0.344	739	574	0.8	0.5	2.641	A

2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Picardy Manorway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.08	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Picardy Manorway		ONE HOUR	✓	1504	100.000
2 - Clydesdale Way		ONE HOUR	✓	216	100.000
3 - Yarnton Way		ONE HOUR	✓	515	100.000
4 - Eastern Way		ONE HOUR	✓	774	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	90	113	439	862
	2 - Clydesdale Way	106	0	53	57
	3 - Yarnton Way	383	29	6	96
	4 - Eastern Way	622	57	61	34

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	46	1	3	8
	2 - Clydesdale Way	1	0	2	2
	3 - Yarnton Way	8	0	0	21
	4 - Eastern Way	7	0	4	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Picardy Manorway	0.62	3.88	1.8	A	1380	2070
2 - Clydesdale Way	0.42	11.32	0.7	B	198	297
3 - Yarnton Way	0.28	2.66	0.4	A	472	709
4 - Eastern Way	0.43	3.41	0.8	A	710	1066

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1132	283	141	2702	0.419	1129	902	0.0	0.8	2.459	A
2 - Clydesdale Way	162	41	1121	807	0.201	161	149	0.0	0.3	5.663	A
3 - Yarnton Way	388	97	862	2364	0.164	387	420	0.0	0.2	1.994	A
4 - Eastern Way	583	146	462	2116	0.275	581	787	0.0	0.4	2.492	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1352	338	169	2681	0.504	1351	1080	0.8	1.1	2.908	A
2 - Clydesdale Way	194	48	1341	703	0.276	193	178	0.3	0.4	7.164	A
3 - Yarnton Way	463	116	1031	2232	0.207	463	503	0.2	0.3	2.229	A
4 - Eastern Way	696	174	553	2056	0.338	696	942	0.4	0.5	2.811	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1656	414	206	2653	0.624	1653	1321	1.1	1.8	3.861	A
2 - Clydesdale Way	237	59	1641	561	0.423	236	218	0.4	0.7	11.188	B
3 - Yarnton Way	567	142	1262	2053	0.276	566	615	0.3	0.4	2.654	A
4 - Eastern Way	853	213	676	1975	0.432	851	1152	0.5	0.8	3.403	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1656	414	207	2653	0.624	1656	1323	1.8	1.8	3.882	A
2 - Clydesdale Way	237	59	1644	560	0.424	237	219	0.7	0.7	11.321	B
3 - Yarnton Way	567	142	1265	2051	0.276	567	616	0.4	0.4	2.658	A
4 - Eastern Way	853	213	677	1974	0.432	852	1154	0.8	0.8	3.411	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1352	338	169	2681	0.504	1354	1083	1.8	1.1	2.927	A
2 - Clydesdale Way	194	48	1345	701	0.277	195	179	0.7	0.4	7.243	A
3 - Yarnton Way	463	116	1035	2229	0.208	463	504	0.4	0.3	2.236	A
4 - Eastern Way	696	174	554	2055	0.339	697	945	0.8	0.5	2.820	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1132	283	141	2701	0.419	1133	906	1.1	0.8	2.473	A
2 - Clydesdale Way	162	41	1125	805	0.202	163	150	0.4	0.3	5.699	A
3 - Yarnton Way	388	97	866	2361	0.164	388	422	0.3	0.2	2.001	A
4 - Eastern Way	583	146	464	2115	0.276	583	790	0.5	0.4	2.502	A

2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Picardy Manorway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.48	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.48	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Picardy Manorway		ONE HOUR	✓	1107	100.000
2 - Clydesdale Way		ONE HOUR	✓	229	100.000
3 - Yarnton Way		ONE HOUR	✓	484	100.000
4 - Eastern Way		ONE HOUR	✓	1029	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	29	125	297	655
	2 - Clydesdale Way	119	0	48	62
	3 - Yarnton Way	396	31	6	50
	4 - Eastern Way	872	79	46	33

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	53	1	3	3
	2 - Clydesdale Way	0	0	0	0
	3 - Yarnton Way	5	0	0	7
	4 - Eastern Way	3	0	5	7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Picardy Manorway	0.46	2.61	0.9	A	1016	1523
2 - Clydesdale Way	0.32	6.79	0.5	A	210	315
3 - Yarnton Way	0.24	2.18	0.3	A	444	666
4 - Eastern Way	0.57	4.28	1.3	A	944	1416

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	833	208	146	2698	0.309	831	1063	0.0	0.5	1.998	A
2 - Clydesdale Way	172	43	801	958	0.180	171	177	0.0	0.2	4.574	A
3 - Yarnton Way	364	91	674	2511	0.145	364	298	0.0	0.2	1.756	A
4 - Eastern Way	775	194	437	2132	0.363	772	601	0.0	0.6	2.721	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	995	249	175	2676	0.372	994	1272	0.5	0.6	2.219	A
2 - Clydesdale Way	206	51	958	884	0.233	205	212	0.2	0.3	5.305	A
3 - Yarnton Way	435	109	806	2408	0.181	435	357	0.2	0.2	1.911	A
4 - Eastern Way	925	231	523	2076	0.446	924	718	0.6	0.8	3.215	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1218	305	214	2648	0.460	1217	1557	0.6	0.9	2.608	A
2 - Clydesdale Way	252	63	1172	782	0.322	251	259	0.3	0.5	6.769	A
3 - Yarnton Way	533	133	987	2267	0.235	533	437	0.2	0.3	2.175	A
4 - Eastern Way	1133	283	640	1999	0.567	1131	880	0.8	1.3	4.260	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1218	305	214	2647	0.460	1218	1559	0.9	0.9	2.611	A
2 - Clydesdale Way	252	63	1174	782	0.322	252	259	0.5	0.5	6.792	A
3 - Yarnton Way	533	133	988	2266	0.235	533	437	0.3	0.3	2.176	A
4 - Eastern Way	1133	283	641	1999	0.567	1133	880	1.3	1.3	4.282	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	995	249	175	2676	0.372	996	1275	0.9	0.6	2.224	A
2 - Clydesdale Way	206	51	959	883	0.233	206	212	0.5	0.3	5.328	A
3 - Yarnton Way	435	109	808	2406	0.181	436	358	0.3	0.2	1.916	A
4 - Eastern Way	925	231	524	2075	0.446	927	720	1.3	0.8	3.233	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	833	208	147	2697	0.309	834	1067	0.6	0.5	2.003	A
2 - Clydesdale Way	172	43	803	956	0.180	172	178	0.3	0.2	4.593	A
3 - Yarnton Way	364	91	676	2509	0.145	365	299	0.2	0.2	1.758	A
4 - Eastern Way	775	194	438	2131	0.364	776	603	0.8	0.6	2.738	A

2028 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Picardy Manorway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.13	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Picardy Manorway		ONE HOUR	✓	1510	100.000
2 - Clydesdale Way		ONE HOUR	✓	216	100.000
3 - Yarnton Way		ONE HOUR	✓	561	100.000
4 - Eastern Way		ONE HOUR	✓	778	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	90	113	445	862
	2 - Clydesdale Way	106	0	53	57
	3 - Yarnton Way	412	29	6	113
	4 - Eastern Way	622	57	65	34

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	46	1	3	8
	2 - Clydesdale Way	1	0	2	2
	3 - Yarnton Way	7	0	0	17
	4 - Eastern Way	7	0	4	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Picardy Manorway	0.63	3.92	1.8	A	1385	2078
2 - Clydesdale Way	0.43	11.51	0.8	B	198	297
3 - Yarnton Way	0.30	2.73	0.5	A	515	772
4 - Eastern Way	0.44	3.49	0.8	A	714	1071

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1137	284	144	2699	0.421	1133	924	0.0	0.8	2.467	A
2 - Clydesdale Way	162	41	1128	803	0.202	161	149	0.0	0.3	5.685	A
3 - Yarnton Way	422	106	862	2364	0.179	421	428	0.0	0.2	2.013	A
4 - Eastern Way	586	146	484	2102	0.279	584	800	0.0	0.4	2.520	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1357	339	172	2679	0.507	1356	1106	0.8	1.1	2.925	A
2 - Clydesdale Way	194	48	1350	699	0.278	193	178	0.3	0.4	7.224	A
3 - Yarnton Way	504	126	1031	2232	0.226	504	512	0.2	0.3	2.264	A
4 - Eastern Way	700	175	579	2039	0.343	699	957	0.4	0.6	2.853	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1662	416	211	2650	0.627	1659	1353	1.1	1.8	3.897	A
2 - Clydesdale Way	237	59	1652	556	0.427	236	218	0.4	0.7	11.364	B
3 - Yarnton Way	618	154	1262	2053	0.301	617	626	0.3	0.5	2.724	A
4 - Eastern Way	857	214	708	1954	0.438	856	1171	0.6	0.8	3.481	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1662	416	211	2650	0.627	1662	1355	1.8	1.8	3.919	A
2 - Clydesdale Way	237	59	1655	555	0.428	237	219	0.7	0.8	11.506	B
3 - Yarnton Way	618	154	1265	2051	0.301	618	627	0.5	0.5	2.730	A
4 - Eastern Way	857	214	709	1953	0.439	857	1173	0.8	0.8	3.489	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1357	339	172	2678	0.507	1360	1109	1.8	1.1	2.942	A
2 - Clydesdale Way	194	48	1354	697	0.278	195	179	0.8	0.4	7.309	A
3 - Yarnton Way	504	126	1036	2229	0.226	505	513	0.5	0.3	2.270	A
4 - Eastern Way	700	175	580	2038	0.343	701	960	0.8	0.6	2.865	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1137	284	144	2699	0.421	1138	928	1.1	0.8	2.482	A
2 - Clydesdale Way	162	41	1133	801	0.203	163	150	0.4	0.3	5.731	A
3 - Yarnton Way	422	106	866	2361	0.179	423	430	0.3	0.2	2.020	A
4 - Eastern Way	586	146	486	2100	0.279	587	803	0.6	0.4	2.530	A

2028 with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Picardy Manorway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.53	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.53	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Picardy Manorway		ONE HOUR	✓	1123	100.000
2 - Clydesdale Way		ONE HOUR	✓	229	100.000
3 - Yarnton Way		ONE HOUR	✓	498	100.000
4 - Eastern Way		ONE HOUR	✓	1038	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	29	125	313	655
	2 - Clydesdale Way	119	0	48	62
	3 - Yarnton Way	405	31	6	55
	4 - Eastern Way	872	79	55	33

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	53	1	3	3
	2 - Clydesdale Way	0	0	0	0
	3 - Yarnton Way	5	0	0	6
	4 - Eastern Way	3	0	4	7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Picardy Manorway	0.47	2.66	0.9	A	1030	1545
2 - Clydesdale Way	0.33	6.96	0.5	A	210	315
3 - Yarnton Way	0.24	2.19	0.3	A	457	686
4 - Eastern Way	0.57	4.36	1.4	A	953	1429

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	845	211	153	2693	0.314	843	1070	0.0	0.5	2.015	A
2 - Clydesdale Way	172	43	819	949	0.181	171	177	0.0	0.2	4.626	A
3 - Yarnton Way	375	94	674	2511	0.149	374	317	0.0	0.2	1.763	A
4 - Eastern Way	782	195	444	2128	0.367	779	604	0.0	0.6	2.743	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1009	252	183	2671	0.378	1009	1280	0.5	0.6	2.245	A
2 - Clydesdale Way	206	51	980	873	0.235	205	212	0.2	0.3	5.389	A
3 - Yarnton Way	448	112	806	2408	0.186	448	379	0.2	0.2	1.922	A
4 - Eastern Way	933	233	531	2071	0.451	932	723	0.6	0.8	3.252	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1236	309	224	2640	0.468	1235	1567	0.6	0.9	2.651	A
2 - Clydesdale Way	252	63	1200	769	0.327	251	259	0.3	0.5	6.939	A
3 - Yarnton Way	548	137	987	2267	0.242	548	464	0.2	0.3	2.191	A
4 - Eastern Way	1143	286	650	1992	0.574	1141	885	0.8	1.4	4.341	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1236	309	224	2640	0.468	1236	1569	0.9	0.9	2.656	A
2 - Clydesdale Way	252	63	1201	769	0.328	252	259	0.5	0.5	6.962	A
3 - Yarnton Way	548	137	988	2266	0.242	548	465	0.3	0.3	2.193	A
4 - Eastern Way	1143	286	651	1992	0.574	1143	886	1.4	1.4	4.364	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1009	252	184	2670	0.378	1010	1284	0.9	0.6	2.248	A
2 - Clydesdale Way	206	51	982	872	0.236	206	212	0.5	0.3	5.413	A
3 - Yarnton Way	448	112	808	2406	0.186	448	380	0.3	0.2	1.924	A
4 - Eastern Way	933	233	532	2070	0.451	935	724	1.4	0.9	3.274	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	845	211	154	2692	0.314	846	1074	0.6	0.5	2.022	A
2 - Clydesdale Way	172	43	822	948	0.182	172	178	0.3	0.2	4.646	A
3 - Yarnton Way	375	94	676	2509	0.149	375	318	0.2	0.2	1.768	A
4 - Eastern Way	782	195	445	2127	0.367	783	606	0.9	0.6	2.760	A

2028 with Dev + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Picardy Manorway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.19	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.19	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Picardy Manorway		ONE HOUR	✓	1521	100.000
2 - Clydesdale Way		ONE HOUR	✓	216	100.000
3 - Yarnton Way		ONE HOUR	✓	572	100.000
4 - Eastern Way		ONE HOUR	✓	784	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	90	113	456	862
	2 - Clydesdale Way	106	0	53	57
	3 - Yarnton Way	419	29	6	117
	4 - Eastern Way	622	57	71	34

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	46	1	3	8
	2 - Clydesdale Way	1	0	2	2
	3 - Yarnton Way	7	0	0	17
	4 - Eastern Way	7	0	3	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Picardy Manorway	0.63	3.99	1.8	A	1395	2093
2 - Clydesdale Way	0.43	11.84	0.8	B	198	297
3 - Yarnton Way	0.31	2.75	0.5	A	525	787
4 - Eastern Way	0.44	3.52	0.8	A	720	1080

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1145	286	148	2696	0.425	1142	929	0.0	0.8	2.484	A
2 - Clydesdale Way	162	41	1141	797	0.204	161	149	0.0	0.3	5.739	A
3 - Yarnton Way	431	108	862	2364	0.182	430	440	0.0	0.2	2.019	A
4 - Eastern Way	590	148	489	2098	0.281	589	803	0.0	0.4	2.532	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1367	342	177	2675	0.511	1366	1112	0.8	1.1	2.954	A
2 - Clydesdale Way	194	48	1365	691	0.280	193	178	0.3	0.4	7.328	A
3 - Yarnton Way	514	129	1031	2232	0.230	514	527	0.2	0.3	2.273	A
4 - Eastern Way	705	176	585	2035	0.346	704	960	0.4	0.6	2.872	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1674	419	217	2645	0.633	1671	1361	1.1	1.8	3.962	A
2 - Clydesdale Way	237	59	1671	547	0.434	236	218	0.4	0.8	11.679	B
3 - Yarnton Way	630	157	1262	2053	0.307	629	645	0.3	0.5	2.742	A
4 - Eastern Way	864	216	716	1949	0.443	862	1175	0.6	0.8	3.516	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1674	419	218	2645	0.633	1674	1363	1.8	1.8	3.986	A
2 - Clydesdale Way	237	59	1673	546	0.435	237	219	0.8	0.8	11.835	B
3 - Yarnton Way	630	157	1265	2051	0.307	630	646	0.5	0.5	2.749	A
4 - Eastern Way	864	216	717	1948	0.443	864	1177	0.8	0.8	3.525	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1367	342	178	2674	0.511	1370	1115	1.8	1.1	2.975	A
2 - Clydesdale Way	194	48	1369	690	0.281	195	179	0.8	0.4	7.415	A
3 - Yarnton Way	514	129	1036	2229	0.231	515	529	0.5	0.3	2.279	A
4 - Eastern Way	705	176	587	2034	0.347	706	964	0.8	0.6	2.885	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1145	286	149	2696	0.425	1146	933	1.1	0.8	2.499	A
2 - Clydesdale Way	162	41	1145	795	0.204	163	150	0.4	0.3	5.786	A
3 - Yarnton Way	431	108	866	2361	0.182	431	442	0.3	0.2	2.024	A
4 - Eastern Way	590	148	491	2097	0.282	591	806	0.6	0.4	2.542	A

2028 with Dev + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Picardy Manorway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.57	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.57	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Picardy Manorway		ONE HOUR	✓	1132	100.000
2 - Clydesdale Way		ONE HOUR	✓	229	100.000
3 - Yarnton Way		ONE HOUR	✓	510	100.000
4 - Eastern Way		ONE HOUR	✓	1044	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	29	125	322	655
	2 - Clydesdale Way	119	0	48	62
	3 - Yarnton Way	413	31	6	59
	4 - Eastern Way	872	79	61	33

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Picardy Manorway	2 - Clydesdale Way	3 - Yarnton Way	4 - Eastern Way
From	1 - Picardy Manorway	53	1	3	3
	2 - Clydesdale Way	0	0	0	0
	3 - Yarnton Way	5	0	0	6
	4 - Eastern Way	3	0	4	7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Picardy Manorway	0.47	2.68	0.9	A	1038	1558
2 - Clydesdale Way	0.33	7.07	0.5	A	210	315
3 - Yarnton Way	0.25	2.21	0.3	A	468	702
4 - Eastern Way	0.58	4.43	1.4	A	958	1437

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	852	213	157	2689	0.317	850	1076	0.0	0.5	2.026	A
2 - Clydesdale Way	172	43	831	943	0.182	171	177	0.0	0.2	4.658	A
3 - Yarnton Way	384	96	674	2511	0.153	383	328	0.0	0.2	1.768	A
4 - Eastern Way	786	197	450	2124	0.370	784	607	0.0	0.6	2.760	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1017	254	188	2667	0.382	1017	1287	0.5	0.6	2.260	A
2 - Clydesdale Way	206	51	994	867	0.237	205	212	0.2	0.3	5.441	A
3 - Yarnton Way	459	115	806	2408	0.190	458	393	0.2	0.2	1.930	A
4 - Eastern Way	939	235	538	2066	0.454	938	726	0.6	0.9	3.280	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1246	312	231	2636	0.473	1245	1575	0.6	0.9	2.679	A
2 - Clydesdale Way	252	63	1216	762	0.331	251	259	0.3	0.5	7.041	A
3 - Yarnton Way	562	140	987	2267	0.248	561	481	0.2	0.3	2.206	A
4 - Eastern Way	1150	287	659	1987	0.579	1147	889	0.9	1.4	4.403	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1246	312	231	2635	0.473	1246	1578	0.9	0.9	2.683	A
2 - Clydesdale Way	252	63	1218	761	0.331	252	259	0.5	0.5	7.069	A
3 - Yarnton Way	562	140	988	2266	0.248	562	481	0.3	0.3	2.207	A
4 - Eastern Way	1150	287	659	1986	0.579	1150	890	1.4	1.4	4.428	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	1017	254	189	2666	0.382	1019	1291	0.9	0.6	2.266	A
2 - Clydesdale Way	206	51	995	866	0.237	206	212	0.5	0.3	5.466	A
3 - Yarnton Way	459	115	808	2406	0.191	459	394	0.3	0.2	1.934	A
4 - Eastern Way	939	235	539	2065	0.454	941	728	1.4	0.9	3.303	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Picardy Manorway	852	213	158	2689	0.317	853	1080	0.6	0.5	2.031	A
2 - Clydesdale Way	172	43	833	942	0.183	173	178	0.3	0.2	4.680	A
3 - Yarnton Way	384	96	676	2509	0.153	384	329	0.2	0.2	1.770	A
4 - Eastern Way	786	197	451	2123	0.370	787	609	0.9	0.6	2.775	A

Junction 5

Anderson Way / A2016 / B253 Roundabout

Junctions 10

ARCADY 10 - Roundabout Module

Filename: J5 - Anderson Wy-A2016 23-08-07.j10
Path: Y:\ARDENT PROJECTS\194180 - Yarnton Way, Belvedere\Transport\ARCADY\J5 - Anderson Wy-A2016-B253
Report generation date: 07/08/2023 17:42:03

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2022									
1 - Anderson Way	0.3	5.05	0.20	A	4.30	0.7	7.19	0.41	A	4.55
2 - Bronze Age Way	1.5	4.17	0.57	A		0.8	3.36	0.44	A	
3 - Picardy Manorway South	0.7	4.42	0.42	A		0.3	2.81	0.22	A	
4 - Picardy Manorway West	1.5	4.18	0.58	A		2.0	4.68	0.66	A	
	2028 Base									
1 - Anderson Way	0.3	5.32	0.22	A	4.68	0.8	8.08	0.45	A	5.02
2 - Bronze Age Way	1.7	4.54	0.60	A		0.9	3.58	0.47	A	
3 - Picardy Manorway South	0.8	4.86	0.45	A		0.3	2.93	0.24	A	
4 - Picardy Manorway West	1.7	4.55	0.61	A		2.3	5.22	0.69	A	
	2028 with Dev									
1 - Anderson Way	0.3	5.43	0.22	A	4.77	0.9	8.22	0.46	A	5.09
2 - Bronze Age Way	1.7	4.59	0.61	A		1.0	3.62	0.47	A	
3 - Picardy Manorway South	0.9	4.89	0.46	A		0.3	2.96	0.24	A	
4 - Picardy Manorway West	1.8	4.72	0.62	A		2.4	5.29	0.70	A	
	2028 with Dev + Com Dev									
1 - Anderson Way	0.3	5.46	0.22	A	4.82	0.9	8.32	0.46	A	5.14
2 - Bronze Age Way	1.8	4.64	0.61	A		1.0	3.65	0.48	A	
3 - Picardy Manorway South	0.9	4.95	0.46	A		0.3	2.98	0.24	A	
4 - Picardy Manorway West	1.8	4.75	0.63	A		2.4	5.36	0.70	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	J5 Horse Roundabout
Location	
Site number	
Date	21/06/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	194180
Enumerator	ARDENTCE\Transportation
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489
D5	Dev Traffic	AM	ONE HOUR	07:45	09:15	15			
D6	Dev Traffic	PM	ONE HOUR	16:45	18:15	15			
D7	Com Dev	AM	ONE HOUR	07:45	09:15	15			
D8	Com Dev	PM	ONE HOUR	16:45	18:15	15			
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

Analysis Set Details

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

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Picardy Manorway South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.30	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.30	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Anderson Way		
2	Bronze Age Way		
3	Picardy Manorway South		
4	Picardy Manorway West		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Anderson Way	3.68	10.68	9.1	19.2	60.0	40.0		
2 - Bronze Age Way	7.35	10.68	7.7	43.4	60.0	42.2		
3 - Picardy Manorway South	3.40	10.26	32.5	49.0	60.0	24.7		
4 - Picardy Manorway West	7.58	10.52	5.0	21.5	60.0	42.1		

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - Anderson Way	✓	100
2 - Bronze Age Way		
3 - Picardy Manorway South		
4 - Picardy Manorway West		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Anderson Way	0.541	1664
2 - Bronze Age Way	0.710	2608
3 - Picardy Manorway South	0.687	2378
4 - Picardy Manorway West	0.686	2505

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Anderson Way		ONE HOUR	✓	316	100.000
2 - Bronze Age Way		ONE HOUR	✓	1175	100.000
3 - Picardy Manorway South		ONE HOUR	✓	544	100.000
4 - Picardy Manorway West		ONE HOUR	✓	1164	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	130	69	117
	2 - Bronze Age Way	188	35	46	906
	3 - Picardy Manorway South	104	48	0	391
	4 - Picardy Manorway West	169	748	240	8

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	49	14	15
	2 - Bronze Age Way	29	63	13	9
	3 - Picardy Manorway South	8	0	0	1
	4 - Picardy Manorway West	10	12	0	40

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Anderson Way	0.20	5.05	0.3	A	290	256
2 - Bronze Age Way	0.57	4.17	1.5	A	1078	1617
3 - Picardy Manorway South	0.42	4.42	0.7	A	499	748
4 - Picardy Manorway West	0.58	4.18	1.5	A	1068	1602

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	238	140	35	97	0	810	1226	0.114	140	346	0.0	0.1	3.795
2 - Bronze Age Way	884	884	221	0	97	326	2377	0.372	882	624	0.0	0.7	2.718
3 - Picardy Manorway South	409	409	102	0	0	941	1732	0.236	408	266	0.0	0.3	2.776
4 - Picardy Manorway West	876	876	219	0	0	282	2312	0.379	874	1067	0.0	0.7	2.728

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	284	167	42	116	0	969	1140	0.147	167	414	0.1	0.2	4.240
2 - Bronze Age Way	1056	1056	264	0	116	390	2331	0.453	1055	746	0.7	0.9	3.186
3 - Picardy Manorway South	489	489	122	0	0	1126	1605	0.305	488	319	0.3	0.4	3.292
4 - Picardy Manorway West	1047	1047	262	0	0	337	2274	0.460	1045	1277	0.7	0.9	3.195

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	348	205	51	143	0	1186	1023	0.200	205	507	0.2	0.3	5.042
2 - Bronze Age Way	1293	1293	323	0	143	477	2269	0.570	1291	913	0.9	1.5	4.153
3 - Picardy Manorway South	599	599	150	0	0	1378	1432	0.418	597	390	0.4	0.7	4.404
4 - Picardy Manorway West	1282	1282	320	0	0	413	2222	0.577	1280	1563	0.9	1.5	4.160

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	348	205	51	143	0	1188	1022	0.201	205	508	0.3	0.3	5.053
2 - Bronze Age Way	1293	1293	323	0	143	478	2269	0.570	1293	915	1.5	1.5	4.173
3 - Picardy Manorway South	599	599	150	0	0	1380	1430	0.419	598	391	0.7	0.7	4.423
4 - Picardy Manorway West	1282	1282	320	0	0	413	2222	0.577	1282	1565	1.5	1.5	4.180

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	284	167	42	116	0	972	1138	0.147	168	415	0.3	0.2	4.254
2 - Bronze Age Way	1056	1056	264	0	116	391	2330	0.453	1058	748	1.5	0.9	3.204
3 - Picardy Manorway South	489	489	122	0	0	1129	1602	0.305	490	320	0.7	0.5	3.308
4 - Picardy Manorway West	1047	1047	262	0	0	338	2273	0.460	1049	1281	1.5	0.9	3.214

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	238	140	35	97	0	813	1224	0.115	140	347	0.2	0.1	3.809
2 - Bronze Age Way	884	884	221	0	97	327	2376	0.372	885	626	0.9	0.7	2.735
3 - Picardy Manorway South	409	409	102	0	0	945	1729	0.237	410	268	0.5	0.3	2.788
4 - Picardy Manorway West	876	876	219	0	0	283	2311	0.379	877	1072	0.9	0.7	2.742

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Picardy Manorway South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.55	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.55	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Anderson Way		ONE HOUR	✓	522	100.000
2 - Bronze Age Way		ONE HOUR	✓	823	100.000
3 - Picardy Manorway South		ONE HOUR	✓	332	100.000
4 - Picardy Manorway West		ONE HOUR	✓	1403	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	197	138	187
	2 - Bronze Age Way	81	45	59	638
	3 - Picardy Manorway South	55	32	2	243
	4 - Picardy Manorway West	149	888	361	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	10	1	3
	2 - Bronze Age Way	36	10	0	6
	3 - Picardy Manorway South	4	0	0	0
	4 - Picardy Manorway West	9	4	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Anderson Way	0.41	7.19	0.7	A	479	448
2 - Bronze Age Way	0.44	3.36	0.8	A	756	1133
3 - Picardy Manorway South	0.22	2.81	0.3	A	305	457
4 - Picardy Manorway West	0.66	4.68	2.0	A	1287	1931

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	393	245	61	148	0	1001	1123	0.218	244	214	0.0	0.3	4.179
2 - Bronze Age Way	620	620	155	0	148	520	2238	0.277	618	724	0.0	0.4	2.400
3 - Picardy Manorway South	250	250	63	0	0	718	1885	0.133	249	421	0.0	0.2	2.215
4 - Picardy Manorway West	1056	1056	264	0	0	162	2394	0.441	1053	806	0.0	0.8	2.776

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	469	293	73	177	0	1197	1016	0.288	292	256	0.3	0.4	5.074
2 - Bronze Age Way	740	740	185	0	177	623	2166	0.342	740	867	0.4	0.6	2.727
3 - Picardy Manorway South	299	299	75	0	0	859	1788	0.167	298	503	0.2	0.2	2.432
4 - Picardy Manorway West	1261	1261	315	0	0	193	2373	0.532	1260	964	0.8	1.2	3.350

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	575	358	90	216	0	1465	871	0.411	357	313	0.4	0.7	7.136
2 - Bronze Age Way	907	907	227	0	216	762	2067	0.439	905	1060	0.6	0.8	3.347
3 - Picardy Manorway South	366	366	91	0	0	1052	1656	0.221	365	616	0.2	0.3	2.807
4 - Picardy Manorway West	1545	1545	386	0	0	237	2343	0.659	1541	1180	1.2	2.0	4.640

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	575	358	90	216	0	1468	870	0.412	358	314	0.7	0.7	7.189
2 - Bronze Age Way	907	907	227	0	216	764	2066	0.439	907	1062	0.8	0.8	3.357
3 - Picardy Manorway South	366	366	91	0	0	1053	1655	0.221	366	617	0.3	0.3	2.810
4 - Picardy Manorway West	1545	1545	386	0	0	237	2343	0.659	1545	1182	2.0	2.0	4.677

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	469	293	73	177	0	1201	1014	0.289	294	257	0.7	0.4	5.113
2 - Bronze Age Way	740	740	185	0	177	626	2164	0.342	741	870	0.8	0.6	2.739
3 - Picardy Manorway South	299	299	75	0	0	862	1786	0.167	299	505	0.3	0.2	2.435
4 - Picardy Manorway West	1261	1261	315	0	0	194	2372	0.532	1264	967	2.0	1.2	3.378

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	393	245	61	148	0	1005	1120	0.219	246	215	0.4	0.3	4.206
2 - Bronze Age Way	620	620	155	0	148	523	2236	0.277	620	727	0.6	0.4	2.410
3 - Picardy Manorway South	250	250	63	0	0	721	1883	0.133	250	423	0.2	0.2	2.219
4 - Picardy Manorway West	1056	1056	264	0	0	162	2394	0.441	1058	809	1.2	0.8	2.798

2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Picardy Manorway South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.68	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.68	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Anderson Way		ONE HOUR	✓	331	100.000
2 - Bronze Age Way		ONE HOUR	✓	1232	100.000
3 - Picardy Manorway South		ONE HOUR	✓	570	100.000
4 - Picardy Manorway West		ONE HOUR	✓	1221	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	136	73	122
	2 - Bronze Age Way	198	36	48	950
	3 - Picardy Manorway South	109	51	0	410
	4 - Picardy Manorway West	177	784	252	8

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	49	14	15
	2 - Bronze Age Way	29	63	13	9
	3 - Picardy Manorway South	8	0	0	1
	4 - Picardy Manorway West	10	12	0	40

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Anderson Way	0.22	5.32	0.3	A	304	269
2 - Bronze Age Way	0.60	4.54	1.7	A	1130	1695
3 - Picardy Manorway South	0.45	4.86	0.8	A	523	785
4 - Picardy Manorway West	0.61	4.55	1.7	A	1120	1680

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	249	147	37	102	0	849	1205	0.122	146	363	0.0	0.2	3.895
2 - Bronze Age Way	927	927	232	0	102	341	2366	0.392	924	654	0.0	0.7	2.818
3 - Picardy Manorway South	429	429	107	0	0	986	1701	0.252	428	279	0.0	0.3	2.887
4 - Picardy Manorway West	919	919	230	0	0	295	2303	0.399	916	1119	0.0	0.7	2.828

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	298	176	44	122	0	1016	1115	0.157	175	434	0.2	0.2	4.392
2 - Bronze Age Way	1107	1107	277	0	122	409	2318	0.478	1106	782	0.7	1.0	3.356
3 - Picardy Manorway South	512	512	128	0	0	1180	1567	0.327	512	334	0.3	0.5	3.483
4 - Picardy Manorway West	1097	1097	274	0	0	354	2263	0.485	1096	1339	0.7	1.0	3.366

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	364	215	54	150	0	1243	992	0.217	215	531	0.2	0.3	5.308
2 - Bronze Age Way	1356	1356	339	0	150	500	2253	0.602	1354	957	1.0	1.7	4.513
3 - Picardy Manorway South	628	628	157	0	0	1444	1386	0.453	626	409	0.5	0.8	4.833
4 - Picardy Manorway West	1344	1344	336	0	0	433	2208	0.609	1341	1638	1.0	1.7	4.519

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	364	215	54	150	0	1245	990	0.217	215	532	0.3	0.3	5.321
2 - Bronze Age Way	1356	1356	339	0	150	501	2252	0.602	1356	959	1.7	1.7	4.543
3 - Picardy Manorway South	628	628	157	0	0	1447	1384	0.453	628	410	0.8	0.8	4.862
4 - Picardy Manorway West	1344	1344	336	0	0	434	2208	0.609	1344	1641	1.7	1.7	4.548

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	298	176	44	122	0	1019	1113	0.158	176	436	0.3	0.2	4.408
2 - Bronze Age Way	1107	1107	277	0	122	410	2317	0.478	1110	785	1.7	1.0	3.382
3 - Picardy Manorway South	512	512	128	0	0	1185	1565	0.328	514	336	0.8	0.5	3.504
4 - Picardy Manorway West	1097	1097	274	0	0	355	2262	0.485	1100	1343	1.7	1.0	3.391

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	249	147	37	102	0	853	1203	0.122	147	364	0.2	0.2	3.911
2 - Bronze Age Way	927	927	232	0	102	343	2364	0.392	929	657	1.0	0.7	2.837
3 - Picardy Manorway South	429	429	107	0	0	991	1697	0.253	430	281	0.5	0.3	2.902
4 - Picardy Manorway West	919	919	230	0	0	297	2302	0.399	920	1124	1.0	0.7	2.848

2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Picardy Manorway South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.02	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.02	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Anderson Way		ONE HOUR	✓	548	100.000
2 - Bronze Age Way		ONE HOUR	✓	864	100.000
3 - Picardy Manorway South		ONE HOUR	✓	348	100.000
4 - Picardy Manorway West		ONE HOUR	✓	1472	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	206	145	196
	2 - Bronze Age Way	85	47	62	669
	3 - Picardy Manorway South	58	34	2	255
	4 - Picardy Manorway West	156	931	379	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	10	1	3
	2 - Bronze Age Way	36	10	0	6
	3 - Picardy Manorway South	4	0	0	0
	4 - Picardy Manorway West	9	4	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Anderson Way	0.45	8.08	0.8	A	503	470
2 - Bronze Age Way	0.47	3.58	0.9	A	793	1189
3 - Picardy Manorway South	0.24	2.93	0.3	A	320	479
4 - Picardy Manorway West	0.69	5.22	2.3	A	1350	2026

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	412	257	64	155	0	1049	1096	0.235	256	224	0.0	0.3	4.369
2 - Bronze Age Way	650	650	163	0	155	546	2220	0.293	648	760	0.0	0.4	2.473
3 - Picardy Manorway South	262	262	66	0	0	753	1861	0.141	262	441	0.0	0.2	2.264
4 - Picardy Manorway West	1108	1108	277	0	0	169	2389	0.464	1104	845	0.0	0.9	2.897

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	492	307	77	185	0	1256	985	0.312	306	268	0.3	0.5	5.416
2 - Bronze Age Way	776	776	194	0	185	653	2144	0.362	776	909	0.4	0.6	2.842
3 - Picardy Manorway South	313	313	78	0	0	901	1759	0.178	313	528	0.2	0.2	2.505
4 - Picardy Manorway West	1323	1323	331	0	0	203	2366	0.559	1321	1011	0.9	1.3	3.566

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	603	376	94	227	0	1536	833	0.451	375	329	0.5	0.8	7.996
2 - Bronze Age Way	951	951	238	0	227	799	2041	0.466	950	1112	0.6	0.9	3.561
3 - Picardy Manorway South	384	384	96	0	0	1103	1621	0.237	383	646	0.2	0.3	2.927
4 - Picardy Manorway West	1620	1620	405	0	0	248	2335	0.694	1616	1238	1.3	2.3	5.165

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	603	376	94	227	0	1540	831	0.452	376	329	0.8	0.8	8.079
2 - Bronze Age Way	951	951	238	0	227	801	2039	0.466	951	1114	0.9	0.9	3.575
3 - Picardy Manorway South	384	384	96	0	0	1105	1619	0.237	384	647	0.3	0.3	2.931
4 - Picardy Manorway West	1620	1620	405	0	0	249	2335	0.694	1620	1240	2.3	2.3	5.222

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	492	307	77	185	0	1261	982	0.313	308	269	0.8	0.5	5.473
2 - Bronze Age Way	776	776	194	0	185	657	2142	0.363	778	913	0.9	0.6	2.857
3 - Picardy Manorway South	313	313	78	0	0	904	1757	0.178	314	530	0.3	0.2	2.509
4 - Picardy Manorway West	1323	1323	331	0	0	203	2366	0.559	1327	1014	2.3	1.3	3.606

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	412	257	64	155	0	1054	1094	0.235	258	225	0.5	0.3	4.401
2 - Bronze Age Way	650	650	163	0	155	549	2218	0.293	651	763	0.6	0.5	2.483
3 - Picardy Manorway South	262	262	66	0	0	756	1859	0.141	262	443	0.2	0.2	2.269
4 - Picardy Manorway West	1108	1108	277	0	0	170	2389	0.464	1110	849	1.3	0.9	2.924

2028 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Picardy Manorway South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.77	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Anderson Way		ONE HOUR	✓	332	100.000
2 - Bronze Age Way		ONE HOUR	✓	1236	100.000
3 - Picardy Manorway South		ONE HOUR	✓	571	100.000
4 - Picardy Manorway West		ONE HOUR	✓	1251	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	136	73	123
	2 - Bronze Age Way	198	36	48	954
	3 - Picardy Manorway South	109	51	0	411
	4 - Picardy Manorway West	182	803	258	8

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	49	14	15
	2 - Bronze Age Way	29	63	13	9
	3 - Picardy Manorway South	8	0	0	1
	4 - Picardy Manorway West	10	12	0	40

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Anderson Way	0.22	5.43	0.3	A	305	270
2 - Bronze Age Way	0.61	4.59	1.7	A	1134	1701
3 - Picardy Manorway South	0.46	4.89	0.9	A	524	786
4 - Picardy Manorway West	0.62	4.72	1.8	A	1148	1721

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	250	148	37	102	0	868	1195	0.124	147	367	0.0	0.2	3.933
2 - Bronze Age Way	930	930	233	0	102	347	2362	0.394	927	668	0.0	0.7	2.830
3 - Picardy Manorway South	430	430	107	0	0	990	1698	0.253	429	284	0.0	0.3	2.895
4 - Picardy Manorway West	942	942	235	0	0	295	2303	0.409	939	1123	0.0	0.7	2.869

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	298	176	44	122	0	1038	1102	0.160	176	439	0.2	0.2	4.450
2 - Bronze Age Way	1111	1111	278	0	122	415	2313	0.480	1110	799	0.7	1.0	3.377
3 - Picardy Manorway South	513	513	128	0	0	1185	1564	0.328	513	340	0.3	0.5	3.496
4 - Picardy Manorway West	1124	1124	281	0	0	354	2263	0.497	1123	1344	0.7	1.1	3.438

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	366	216	54	150	0	1270	977	0.221	216	537	0.2	0.3	5.415
2 - Bronze Age Way	1361	1361	340	0	150	508	2247	0.605	1358	978	1.0	1.7	4.561
3 - Picardy Manorway South	629	629	157	0	0	1450	1382	0.455	627	416	0.5	0.8	4.864
4 - Picardy Manorway West	1377	1377	344	0	0	433	2208	0.624	1374	1645	1.1	1.8	4.684

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	366	216	54	150	0	1273	975	0.222	216	538	0.3	0.3	5.429
2 - Bronze Age Way	1361	1361	340	0	150	509	2247	0.606	1361	980	1.7	1.7	4.591
3 - Picardy Manorway South	629	629	157	0	0	1453	1380	0.456	629	417	0.8	0.9	4.893
4 - Picardy Manorway West	1377	1377	344	0	0	434	2208	0.624	1377	1648	1.8	1.8	4.719

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	298	176	44	122	0	1042	1100	0.160	177	440	0.3	0.2	4.468
2 - Bronze Age Way	1111	1111	278	0	122	416	2312	0.480	1114	802	1.7	1.1	3.404
3 - Picardy Manorway South	513	513	128	0	0	1189	1561	0.329	515	341	0.9	0.5	3.518
4 - Picardy Manorway West	1124	1124	281	0	0	355	2262	0.497	1127	1349	1.8	1.1	3.463

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	250	148	37	102	0	872	1193	0.124	148	368	0.2	0.2	3.947
2 - Bronze Age Way	930	930	233	0	102	348	2361	0.394	932	671	1.1	0.7	2.849
3 - Picardy Manorway South	430	430	107	0	0	995	1695	0.254	431	285	0.5	0.3	2.909
4 - Picardy Manorway West	942	942	235	0	0	297	2302	0.409	943	1128	1.1	0.8	2.890

2028 with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Picardy Manorway South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.09	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.09	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Anderson Way		ONE HOUR	✓	551	100.000
2 - Bronze Age Way		ONE HOUR	✓	874	100.000
3 - Picardy Manorway South		ONE HOUR	✓	351	100.000
4 - Picardy Manorway West		ONE HOUR	✓	1481	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	206	145	199
	2 - Bronze Age Way	85	47	62	679
	3 - Picardy Manorway South	58	34	2	258
	4 - Picardy Manorway West	157	937	381	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	10	1	3
	2 - Bronze Age Way	36	10	0	6
	3 - Picardy Manorway South	4	0	0	0
	4 - Picardy Manorway West	9	4	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Anderson Way	0.46	8.22	0.9	A	505	474
2 - Bronze Age Way	0.47	3.62	1.0	A	802	1203
3 - Picardy Manorway South	0.24	2.96	0.3	A	322	484
4 - Picardy Manorway West	0.70	5.29	2.4	A	1359	2038

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	415	259	65	155	0	1055	1093	0.237	258	225	0.0	0.3	4.397
2 - Bronze Age Way	658	658	164	0	155	549	2218	0.297	656	764	0.0	0.5	2.487
3 - Picardy Manorway South	265	265	66	0	0	763	1854	0.143	264	443	0.0	0.2	2.276
4 - Picardy Manorway West	1115	1115	279	0	0	169	2389	0.467	1111	857	0.0	0.9	2.912

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	495	310	77	185	0	1263	981	0.316	309	269	0.3	0.5	5.468
2 - Bronze Age Way	785	785	196	0	185	658	2141	0.367	785	914	0.5	0.6	2.865
3 - Picardy Manorway South	316	316	79	0	0	913	1751	0.180	316	530	0.2	0.2	2.523
4 - Picardy Manorway West	1331	1331	333	0	0	203	2366	0.563	1329	1026	0.9	1.3	3.593

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	606	379	95	227	0	1545	828	0.458	378	330	0.5	0.8	8.134
2 - Bronze Age Way	962	962	240	0	227	804	2037	0.472	961	1118	0.6	1.0	3.607
3 - Picardy Manorway South	387	387	97	0	0	1117	1611	0.240	386	648	0.2	0.3	2.959
4 - Picardy Manorway West	1630	1630	408	0	0	248	2335	0.698	1626	1255	1.3	2.4	5.235

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	606	379	95	227	0	1548	826	0.459	379	330	0.8	0.9	8.223
2 - Bronze Age Way	962	962	240	0	227	807	2035	0.473	962	1121	1.0	1.0	3.621
3 - Picardy Manorway South	387	387	97	0	0	1119	1609	0.240	387	649	0.3	0.3	2.962
4 - Picardy Manorway West	1630	1630	408	0	0	249	2335	0.698	1630	1257	2.4	2.4	5.294

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	495	310	77	185	0	1268	978	0.317	311	270	0.9	0.5	5.528
2 - Bronze Age Way	785	785	196	0	185	661	2138	0.367	787	918	1.0	0.6	2.878
3 - Picardy Manorway South	316	316	79	0	0	916	1749	0.181	316	532	0.3	0.2	2.530
4 - Picardy Manorway West	1331	1331	333	0	0	203	2366	0.563	1335	1029	2.4	1.3	3.637

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	415	259	65	155	0	1060	1090	0.238	260	226	0.5	0.3	4.430
2 - Bronze Age Way	658	658	164	0	155	553	2215	0.297	658	768	0.6	0.5	2.497
3 - Picardy Manorway South	265	265	66	0	0	766	1852	0.143	265	445	0.2	0.2	2.282
4 - Picardy Manorway West	1115	1115	279	0	0	170	2389	0.467	1116	861	1.3	0.9	2.939

2028 with Dev + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Picardy Manorway South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.82	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.82	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Anderson Way		ONE HOUR	✓	334	100.000
2 - Bronze Age Way		ONE HOUR	✓	1243	100.000
3 - Picardy Manorway South		ONE HOUR	✓	573	100.000
4 - Picardy Manorway West		ONE HOUR	✓	1257	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	136	73	125
	2 - Bronze Age Way	198	36	48	961
	3 - Picardy Manorway South	109	51	0	413
	4 - Picardy Manorway West	183	807	259	8

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	49	14	15
	2 - Bronze Age Way	29	63	13	9
	3 - Picardy Manorway South	8	0	0	1
	4 - Picardy Manorway West	10	12	0	40

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Anderson Way	0.22	5.46	0.3	A	307	273
2 - Bronze Age Way	0.61	4.64	1.8	A	1140	1711
3 - Picardy Manorway South	0.46	4.95	0.9	A	526	789
4 - Picardy Manorway West	0.63	4.75	1.8	A	1153	1730

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	251	149	37	102	0	871	1193	0.125	149	367	0.0	0.2	3.940
2 - Bronze Age Way	936	936	234	0	102	349	2360	0.396	933	671	0.0	0.7	2.842
3 - Picardy Manorway South	431	431	108	0	0	997	1693	0.255	430	285	0.0	0.3	2.909
4 - Picardy Manorway West	946	946	237	0	0	295	2303	0.411	943	1131	0.0	0.8	2.877

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	300	178	45	122	0	1043	1100	0.162	178	439	0.2	0.2	4.464
2 - Bronze Age Way	1117	1117	279	0	122	418	2311	0.483	1116	803	0.7	1.0	3.398
3 - Picardy Manorway South	515	515	129	0	0	1193	1559	0.330	515	341	0.3	0.5	3.520
4 - Picardy Manorway West	1130	1130	282	0	0	354	2263	0.499	1128	1354	0.8	1.1	3.453

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	368	218	55	150	0	1276	974	0.224	218	538	0.2	0.3	5.444
2 - Bronze Age Way	1368	1368	342	0	150	511	2245	0.609	1366	982	1.0	1.7	4.608
3 - Picardy Manorway South	631	631	158	0	0	1460	1375	0.459	629	417	0.5	0.9	4.922
4 - Picardy Manorway West	1384	1384	346	0	0	433	2208	0.627	1381	1657	1.1	1.8	4.719

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	368	218	55	150	0	1278	972	0.224	218	539	0.3	0.3	5.458
2 - Bronze Age Way	1368	1368	342	0	150	512	2244	0.610	1368	984	1.7	1.8	4.641
3 - Picardy Manorway South	631	631	158	0	0	1463	1373	0.459	631	418	0.9	0.9	4.952
4 - Picardy Manorway West	1384	1384	346	0	0	434	2208	0.627	1384	1660	1.8	1.8	4.755

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	300	178	45	122	0	1046	1098	0.162	179	441	0.3	0.2	4.480
2 - Bronze Age Way	1117	1117	279	0	122	419	2310	0.484	1120	806	1.8	1.1	3.425
3 - Picardy Manorway South	515	515	129	0	0	1197	1556	0.331	517	342	0.9	0.5	3.543
4 - Picardy Manorway West	1130	1130	282	0	0	355	2262	0.499	1133	1359	1.8	1.1	3.478

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	251	149	37	102	0	875	1191	0.125	149	369	0.2	0.2	3.955
2 - Bronze Age Way	936	936	234	0	102	351	2359	0.397	937	674	1.1	0.7	2.861
3 - Picardy Manorway South	431	431	108	0	0	1002	1690	0.255	432	286	0.5	0.4	2.926
4 - Picardy Manorway West	946	946	237	0	0	297	2302	0.411	947	1137	1.1	0.8	2.898

2028 with Dev + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Picardy Manorway South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.14	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Anderson Way		ONE HOUR	✓	552	100.000
2 - Bronze Age Way		ONE HOUR	✓	880	100.000
3 - Picardy Manorway South		ONE HOUR	✓	353	100.000
4 - Picardy Manorway West		ONE HOUR	✓	1489	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	206	145	200
	2 - Bronze Age Way	85	47	62	685
	3 - Picardy Manorway South	58	34	2	260
	4 - Picardy Manorway West	158	942	383	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Anderson Way	2 - Bronze Age Way	3 - Picardy Manorway South	4 - Picardy Manorway West
From	1 - Anderson Way	0	10	1	3
	2 - Bronze Age Way	36	10	0	6
	3 - Picardy Manorway South	4	0	0	0
	4 - Picardy Manorway West	9	4	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Anderson Way	0.46	8.32	0.9	A	506	476
2 - Bronze Age Way	0.48	3.65	1.0	A	807	1211
3 - Picardy Manorway South	0.24	2.98	0.3	A	324	486
4 - Picardy Manorway West	0.70	5.36	2.4	A	1366	2049

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	415	260	65	155	0	1061	1090	0.239	259	226	0.0	0.3	4.416
2 - Bronze Age Way	662	662	166	0	155	552	2216	0.299	660	768	0.0	0.5	2.494
3 - Picardy Manorway South	266	266	67	0	0	768	1851	0.144	265	444	0.0	0.2	2.284
4 - Picardy Manorway West	1121	1121	280	0	0	169	2389	0.469	1117	864	0.0	0.9	2.925

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	496	311	78	185	0	1269	977	0.318	310	270	0.3	0.5	5.503
2 - Bronze Age Way	791	791	198	0	185	660	2139	0.370	790	919	0.5	0.6	2.879
3 - Picardy Manorway South	318	318	79	0	0	919	1747	0.182	317	531	0.2	0.2	2.534
4 - Picardy Manorway West	1338	1338	335	0	0	203	2366	0.566	1337	1034	0.9	1.3	3.617

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	607	380	95	227	0	1552	824	0.462	379	331	0.5	0.9	8.227
2 - Bronze Age Way	969	969	242	0	227	807	2035	0.476	967	1124	0.6	1.0	3.635
3 - Picardy Manorway South	389	389	97	0	0	1125	1606	0.242	389	650	0.2	0.3	2.977
4 - Picardy Manorway West	1639	1639	410	0	0	248	2335	0.702	1635	1265	1.3	2.4	5.298

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	607	380	95	227	0	1556	822	0.463	380	331	0.9	0.9	8.321
2 - Bronze Age Way	969	969	242	0	227	810	2033	0.476	969	1126	1.0	1.0	3.650
3 - Picardy Manorway South	389	389	97	0	0	1127	1604	0.243	389	652	0.3	0.3	2.980
4 - Picardy Manorway West	1639	1639	410	0	0	249	2335	0.702	1639	1267	2.4	2.4	5.360

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	496	311	78	185	0	1274	975	0.319	312	271	0.9	0.5	5.562
2 - Bronze Age Way	791	791	198	0	185	664	2136	0.370	792	923	1.0	0.6	2.893
3 - Picardy Manorway South	318	318	79	0	0	922	1745	0.182	318	534	0.3	0.2	2.539
4 - Picardy Manorway West	1338	1338	335	0	0	203	2366	0.566	1342	1037	2.4	1.4	3.663

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Dela (s)
1 - Anderson Way	415	260	65	155	0	1066	1088	0.239	261	227	0.5	0.3	4.449
2 - Bronze Age Way	662	662	166	0	155	555	2214	0.299	663	771	0.6	0.5	2.508
3 - Picardy Manorway South	266	266	67	0	0	772	1848	0.144	266	446	0.2	0.2	2.289
4 - Picardy Manorway West	1121	1121	280	0	0	170	2389	0.469	1122	868	1.4	0.9	2.950

Junction 6

Sainsbury's Access Roundabout with A2041

Junctions 9

ARCADY 9 - Roundabout Module

Filename: J7 - Sainsbury's Access Existing 23-07-17.j9
Path: Y:\ARDENT PROJECTS\194180 - Yarnton Way, Belvedere\Transport\ARCADY\J7 - Sainsbury's Access
Report generation date: 17/07/2023 13:44:26

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2022									
1 - A2041 (N)	1.0	3.70	0.49	A	4.05	0.7	3.20	0.41	A	3.51
2 - Lensbury Way	0.1	6.42	0.08	A		0.0	5.71	0.04	A	
3 - A2041 (S)	1.1	4.32	0.52	A		0.8	3.66	0.43	A	
4 - Sainsbury's Access	0.1	3.81	0.08	A		0.2	3.82	0.18	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	A2041 / Lensbury Way / Sainsburys Access (Existing)
Location	Yarnton Way
Site number	194180
Date	11/10/2022
Version	
Status	(new file)
Identifier	TP
Client	
Jobnumber	194180
Enumerator	ARDENTCE\Transportation
Description	

Units

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

Analysis Options

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

Analysis Set Details

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓

2022, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A2041 (N)	
2	Lensbury Way	
3	A2041 (S)	
4	Sainsbury's Access	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A2041 (N)	6.92	6.92	0.0	15.0	36.0	39.2	
2 - Lensbury Way	3.40	4.76	4.1	6.1	36.0	33.3	
3 - A2041 (S)	3.75	7.61	21.6	10.4	36.0	28.0	
4 - Sainsbury's Access	3.30	7.67	11.0	21.2	36.0	31.8	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A2041 (N)	0.695	1996
2 - Lensbury Way	0.487	1079
3 - A2041 (S)	0.660	1809
4 - Sainsbury's Access	0.624	1577

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

Traffic Demand

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2041 (N)		ONE HOUR	✓	714	100.000
2 - Lensbury Way		ONE HOUR	✓	26	100.000
3 - A2041 (S)		ONE HOUR	✓	683	100.000
4 - Sainsbury's Access		ONE HOUR	✓	187	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A2041 (N)	2 - Lensbury Way	3 - A2041 (S)	4 - Sainsbury's Access
From	1 - A2041 (N)	9	17	637	51
	2 - Lensbury Way	15	0	11	0
	3 - A2041 (S)	594	8	0	81
	4 - Sainsbury's Access	96	4	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2041 (N)	2 - Lensbury Way	3 - A2041 (S)	4 - Sainsbury's Access
From	1 - A2041 (N)	0	0	1	0
	2 - Lensbury Way	0	0	0	0
	3 - A2041 (S)	2	0	0	0
	4 - Sainsbury's Access	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2041 (N)	0.41	3.20	0.7	A	656	983
2 - Lensbury Way	0.04	5.71	0.0	A	24	36
3 - A2041 (S)	0.43	3.66	0.8	A	627	941
4 - Sainsbury's Access	0.18	3.82	0.2	A	172	257

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	538	134	74	1944	0.277	536	536	0.0	0.4	2.578	A
2 - Lensbury Way	20	5	589	792	0.025	19	22	0.0	0.0	4.657	A
3 - A2041 (S)	514	129	56	1771	0.290	513	552	0.0	0.4	2.906	A
4 - Sainsbury's Access	141	35	470	1284	0.110	140	99	0.0	0.1	3.145	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	642	161	89	1934	0.332	642	642	0.4	0.5	2.811	A
2 - Lensbury Way	23	6	704	736	0.032	23	26	0.0	0.0	5.050	A
3 - A2041 (S)	614	154	67	1764	0.348	614	660	0.4	0.5	3.182	A
4 - Sainsbury's Access	168	42	563	1226	0.137	168	119	0.1	0.2	3.401	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	787	197	109	1920	0.410	786	786	0.5	0.7	3.201	A
2 - Lensbury Way	29	7	862	659	0.043	29	32	0.0	0.0	5.708	A
3 - A2041 (S)	752	188	82	1754	0.429	752	808	0.5	0.8	3.649	A
4 - Sainsbury's Access	206	51	689	1147	0.179	206	145	0.2	0.2	3.822	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	787	197	109	1920	0.410	787	787	0.7	0.7	3.204	A
2 - Lensbury Way	29	7	863	659	0.043	29	32	0.0	0.0	5.712	A
3 - A2041 (S)	752	188	83	1754	0.429	752	809	0.8	0.8	3.655	A
4 - Sainsbury's Access	206	51	690	1147	0.180	206	145	0.2	0.2	3.824	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	642	161	89	1934	0.332	643	643	0.7	0.5	2.817	A
2 - Lensbury Way	23	6	706	735	0.032	23	26	0.0	0.0	5.055	A
3 - A2041 (S)	614	154	68	1764	0.348	615	662	0.8	0.5	3.189	A
4 - Sainsbury's Access	168	42	564	1225	0.137	168	119	0.2	0.2	3.408	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	538	134	75	1944	0.277	538	538	0.5	0.4	2.586	A
2 - Lensbury Way	20	5	591	791	0.025	20	22	0.0	0.0	4.664	A
3 - A2041 (S)	514	129	57	1771	0.290	515	554	0.5	0.4	2.916	A
4 - Sainsbury's Access	141	35	472	1283	0.110	141	99	0.2	0.1	3.152	A

Junctions 9

ARCADY 9 - Roundabout Module

Filename: J7 - Sainsbury's Access Proposed 23-07-17.j9
Path: Y:\ARDENT PROJECTS\194180 - Yarnton Way, Belvedere\Transport\ARCADY\J7 - Sainsbury's Access
Report generation date: 17/07/2023 11:58:46

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2028 Base									
1 - A2041 (N)	1.0	3.67	0.49	A	3.98	0.7	3.24	0.42	A	3.52
2 - A2041 (S)	1.1	4.32	0.53	A		0.8	3.73	0.44	A	
3 - Sainsbury's Access	0.1	3.79	0.08	A		0.2	3.87	0.18	A	
	2028 with Dev									
1 - A2041 (N)	1.0	3.74	0.50	A	4.02	0.7	3.26	0.42	A	3.55
2 - A2041 (S)	1.1	4.33	0.53	A		0.8	3.76	0.45	A	
3 - Sainsbury's Access	0.1	3.80	0.08	A		0.2	3.89	0.19	A	
	2028 with Dev + Com Dev									
1 - A2041 (N)	1.1	3.90	0.52	A	4.15	0.7	3.29	0.43	A	3.59
2 - A2041 (S)	1.2	4.45	0.54	A		0.8	3.81	0.45	A	
3 - Sainsbury's Access	0.1	3.88	0.08	A		0.2	3.93	0.19	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	A2041 / Sainsbury's Access (Proposed)
Location	Yarnton Way
Site number	194180
Date	11/10/2022
Version	
Status	(new file)
Identifier	TP
Client	
Jobnumber	194180
Enumerator	ARDENTCE\Transportation
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2022	AM	ONE HOUR	07:45	09:15	15			
D2	2022	PM	ONE HOUR	16:45	18:15	15			
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489
D5	Dev Traffic	AM	ONE HOUR	07:45	09:15	15			
D6	Dev Traffic	PM	ONE HOUR	16:45	18:15	15			
D7	Com Dev	AM	ONE HOUR	07:45	09:15	15			
D8	Com Dev	PM	ONE HOUR	16:45	18:15	15			
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

Analysis Set Details

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

2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A2041 / Sainsbury's Access (Proposed)	Standard Roundabout		1, 2, 3	3.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A2041 (N)	
2	A2041 (S)	
3	Sainsbury's Access	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A2041 (N)	6.92	6.92	0.0	15.0	36.0	39.2	
2 - A2041 (S)	3.75	7.61	21.6	10.4	36.0	28.0	
3 - Sainsbury's Access	3.30	7.67	11.0	21.2	36.0	31.8	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A2041 (N)	0.695	1996
2 - A2041 (S)	0.660	1809
3 - Sainsbury's Access	0.624	1577

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2041 (N)		ONE HOUR	✓	869	100.000
2 - A2041 (S)		ONE HOUR	✓	850	100.000
3 - Sainsbury's Access		ONE HOUR	✓	74	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	1	827	41
	2 - A2041 (S)	773	3	74
	3 - Sainsbury's Access	24	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	0	2	0
	2 - A2041 (S)	1	0	1
	3 - Sainsbury's Access	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2041 (N)	0.49	3.67	1.0	A	797	1196
2 - A2041 (S)	0.53	4.32	1.1	A	780	1170
3 - Sainsbury's Access	0.08	3.79	0.1	A	68	101

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	654	164	40	1968	0.332	652	599	0.0	0.5	2.784	A
2 - A2041 (S)	640	160	31	1788	0.358	638	660	0.0	0.6	3.156	A
3 - Sainsbury's Access	55	14	583	1214	0.046	55	86	0.0	0.0	3.149	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	781	195	47	1963	0.398	780	717	0.5	0.7	3.101	A
2 - A2041 (S)	764	191	38	1784	0.428	763	790	0.6	0.8	3.561	A
3 - Sainsbury's Access	66	17	698	1142	0.058	66	103	0.0	0.1	3.391	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	957	239	58	1955	0.489	955	877	0.7	1.0	3.663	A
2 - A2041 (S)	936	234	46	1778	0.526	934	967	0.8	1.1	4.302	A
3 - Sainsbury's Access	81	20	854	1044	0.078	81	126	0.1	0.1	3.787	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	957	239	58	1955	0.489	957	879	1.0	1.0	3.672	A
2 - A2041 (S)	936	234	46	1778	0.526	936	968	1.1	1.1	4.315	A
3 - Sainsbury's Access	81	20	856	1043	0.078	81	126	0.1	0.1	3.790	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	781	195	47	1963	0.398	782	719	1.0	0.7	3.110	A
2 - A2041 (S)	764	191	38	1784	0.428	765	792	1.1	0.8	3.577	A
3 - Sainsbury's Access	66	17	700	1141	0.058	66	103	0.1	0.1	3.395	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	654	164	40	1968	0.332	655	602	0.7	0.5	2.796	A
2 - A2041 (S)	640	160	32	1788	0.358	641	663	0.8	0.6	3.173	A
3 - Sainsbury's Access	55	14	586	1212	0.046	56	86	0.1	0.0	3.157	A

2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A2041 / Sainsbury's Access (Proposed)	Standard Roundabout		1, 2, 3	3.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2041 (N)		ONE HOUR	✓	731	100.000
2 - A2041 (S)		ONE HOUR	✓	708	100.000
3 - Sainsbury's Access		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	9	668	53
	2 - A2041 (S)	623	0	85
	3 - Sainsbury's Access	101	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	0	1	0
	2 - A2041 (S)	2	0	0
	3 - Sainsbury's Access	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2041 (N)	0.42	3.24	0.7	A	671	1006
2 - A2041 (S)	0.44	3.73	0.8	A	650	975
3 - Sainsbury's Access	0.18	3.87	0.2	A	176	264

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	550	138	68	1948	0.283	549	550	0.0	0.4	2.594	A
2 - A2041 (S)	533	133	47	1777	0.300	532	570	0.0	0.4	2.937	A
3 - Sainsbury's Access	145	36	475	1281	0.113	144	104	0.0	0.1	3.164	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	657	164	82	1939	0.339	657	659	0.4	0.5	2.834	A
2 - A2041 (S)	637	159	57	1771	0.360	636	682	0.4	0.6	3.226	A
3 - Sainsbury's Access	173	43	568	1223	0.141	172	124	0.1	0.2	3.427	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	805	201	100	1926	0.418	804	807	0.5	0.7	3.237	A
2 - A2041 (S)	780	195	69	1763	0.442	779	835	0.6	0.8	3.720	A
3 - Sainsbury's Access	211	53	696	1143	0.185	211	152	0.2	0.2	3.862	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	805	201	100	1926	0.418	805	808	0.7	0.7	3.240	A
2 - A2041 (S)	780	195	69	1763	0.442	780	836	0.8	0.8	3.726	A
3 - Sainsbury's Access	211	53	697	1142	0.185	211	152	0.2	0.2	3.865	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	657	164	82	1939	0.339	658	660	0.7	0.5	2.840	A
2 - A2041 (S)	637	159	57	1771	0.360	638	684	0.8	0.6	3.234	A
3 - Sainsbury's Access	173	43	570	1222	0.141	173	125	0.2	0.2	3.434	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	550	138	69	1948	0.283	551	553	0.5	0.4	2.602	A
2 - A2041 (S)	533	133	47	1777	0.300	534	572	0.6	0.4	2.946	A
3 - Sainsbury's Access	145	36	477	1280	0.113	145	104	0.2	0.1	3.171	A

2028 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A2041 / Sainsbury's Access (Proposed)	Standard Roundabout		1, 2, 3	4.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2041 (N)		ONE HOUR	✓	885	100.000
2 - A2041 (S)		ONE HOUR	✓	853	100.000
3 - Sainsbury's Access		ONE HOUR	✓	74	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	1	843	41
	2 - A2041 (S)	776	3	74
	3 - Sainsbury's Access	24	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	0	2	0
	2 - A2041 (S)	1	0	1
	3 - Sainsbury's Access	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2041 (N)	0.50	3.74	1.0	A	812	1218
2 - A2041 (S)	0.53	4.33	1.1	A	783	1174
3 - Sainsbury's Access	0.08	3.80	0.1	A	68	101

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	666	167	40	1968	0.338	664	601	0.0	0.5	2.807	A
2 - A2041 (S)	642	161	31	1788	0.359	640	672	0.0	0.6	3.162	A
3 - Sainsbury's Access	55	14	585	1212	0.046	55	86	0.0	0.0	3.153	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	795	199	47	1963	0.405	795	719	0.5	0.7	3.138	A
2 - A2041 (S)	767	192	38	1784	0.430	766	804	0.6	0.8	3.571	A
3 - Sainsbury's Access	66	17	701	1140	0.058	66	103	0.0	0.1	3.396	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	974	244	58	1955	0.498	973	881	0.7	1.0	3.727	A
2 - A2041 (S)	939	235	46	1778	0.528	937	985	0.8	1.1	4.318	A
3 - Sainsbury's Access	81	20	858	1042	0.078	81	126	0.1	0.1	3.795	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	974	244	58	1955	0.498	974	882	1.0	1.0	3.736	A
2 - A2041 (S)	939	235	46	1778	0.528	939	986	1.1	1.1	4.332	A
3 - Sainsbury's Access	81	20	859	1041	0.078	81	126	0.1	0.1	3.798	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	795	199	47	1963	0.405	797	721	1.0	0.7	3.150	A
2 - A2041 (S)	767	192	38	1784	0.430	768	806	1.1	0.8	3.584	A
3 - Sainsbury's Access	66	17	703	1139	0.058	66	103	0.1	0.1	3.403	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	666	167	40	1968	0.338	667	604	0.7	0.5	2.821	A
2 - A2041 (S)	642	161	32	1788	0.359	643	675	0.8	0.6	3.179	A
3 - Sainsbury's Access	55	14	588	1210	0.046	56	86	0.1	0.0	3.160	A

2028 with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A2041 / Sainsbury's Access (Proposed)	Standard Roundabout		1, 2, 3	3.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2041 (N)		ONE HOUR	✓	736	100.000
2 - A2041 (S)		ONE HOUR	✓	717	100.000
3 - Sainsbury's Access		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	9	673	53
	2 - A2041 (S)	632	0	85
	3 - Sainsbury's Access	101	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	0	1	0
	2 - A2041 (S)	2	0	0
	3 - Sainsbury's Access	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2041 (N)	0.42	3.26	0.7	A	675	1013
2 - A2041 (S)	0.45	3.76	0.8	A	658	987
3 - Sainsbury's Access	0.19	3.89	0.2	A	176	264

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	554	139	68	1948	0.284	553	557	0.0	0.4	2.601	A
2 - A2041 (S)	540	135	47	1777	0.304	538	574	0.0	0.4	2.952	A
3 - Sainsbury's Access	145	36	482	1277	0.113	144	104	0.0	0.1	3.176	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	662	165	82	1939	0.341	661	667	0.4	0.5	2.844	A
2 - A2041 (S)	645	161	57	1771	0.364	644	687	0.4	0.6	3.248	A
3 - Sainsbury's Access	173	43	577	1218	0.142	172	124	0.1	0.2	3.444	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	810	203	100	1926	0.421	810	817	0.5	0.7	3.253	A
2 - A2041 (S)	790	197	69	1763	0.448	789	841	0.6	0.8	3.757	A
3 - Sainsbury's Access	211	53	706	1137	0.186	211	152	0.2	0.2	3.888	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	810	203	100	1926	0.421	810	818	0.7	0.7	3.256	A
2 - A2041 (S)	790	197	69	1763	0.448	790	842	0.8	0.8	3.763	A
3 - Sainsbury's Access	211	53	707	1136	0.186	211	152	0.2	0.2	3.891	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	662	165	82	1939	0.341	663	669	0.7	0.5	2.848	A
2 - A2041 (S)	645	161	57	1771	0.364	646	688	0.8	0.6	3.256	A
3 - Sainsbury's Access	173	43	578	1217	0.142	173	125	0.2	0.2	3.451	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	554	139	69	1948	0.285	555	560	0.5	0.4	2.607	A
2 - A2041 (S)	540	135	47	1777	0.304	541	576	0.6	0.4	2.962	A
3 - Sainsbury's Access	145	36	484	1275	0.113	145	104	0.2	0.1	3.183	A

2028 with Dev + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A2041 / Sainsbury's Access (Proposed)	Standard Roundabout		1, 2, 3	4.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2041 (N)		ONE HOUR	✓	922	100.000
2 - A2041 (S)		ONE HOUR	✓	854	100.000
3 - Sainsbury's Access		ONE HOUR	✓	74	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	30	851	41
	2 - A2041 (S)	777	3	74
	3 - Sainsbury's Access	24	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	0	2	0
	2 - A2041 (S)	1	0	1
	3 - Sainsbury's Access	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2041 (N)	0.52	3.90	1.1	A	846	1269
2 - A2041 (S)	0.54	4.45	1.2	A	783	1175
3 - Sainsbury's Access	0.08	3.88	0.1	A	68	101

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	694	173	40	1968	0.353	692	623	0.0	0.6	2.866	A
2 - A2041 (S)	643	161	53	1773	0.362	640	678	0.0	0.6	3.202	A
3 - Sainsbury's Access	55	14	608	1198	0.046	55	86	0.0	0.0	3.192	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	829	207	47	1963	0.422	828	746	0.6	0.7	3.227	A
2 - A2041 (S)	768	192	64	1766	0.435	767	812	0.6	0.8	3.633	A
3 - Sainsbury's Access	66	17	728	1123	0.059	66	103	0.0	0.1	3.450	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	1015	254	58	1955	0.519	1013	914	0.7	1.1	3.885	A
2 - A2041 (S)	940	235	78	1757	0.535	939	993	0.8	1.2	4.434	A
3 - Sainsbury's Access	81	20	891	1022	0.079	81	126	0.1	0.1	3.878	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	1015	254	58	1955	0.519	1015	915	1.1	1.1	3.896	A
2 - A2041 (S)	940	235	78	1757	0.535	940	995	1.2	1.2	4.450	A
3 - Sainsbury's Access	81	20	892	1021	0.080	81	126	0.1	0.1	3.882	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	829	207	47	1963	0.422	830	749	1.1	0.7	3.238	A
2 - A2041 (S)	768	192	64	1766	0.435	769	814	1.2	0.8	3.650	A
3 - Sainsbury's Access	66	17	730	1122	0.059	66	103	0.1	0.1	3.458	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	694	173	40	1968	0.353	695	626	0.7	0.6	2.881	A
2 - A2041 (S)	643	161	53	1773	0.362	644	681	0.8	0.6	3.220	A
3 - Sainsbury's Access	55	14	611	1196	0.046	56	86	0.1	0.0	3.200	A

2028 with Dev + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A2041 / Sainsbury's Access (Proposed)	Standard Roundabout		1, 2, 3	3.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2041 (N)		ONE HOUR	✓	746	100.000
2 - A2041 (S)		ONE HOUR	✓	722	100.000
3 - Sainsbury's Access		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	17	675	53
	2 - A2041 (S)	637	0	85
	3 - Sainsbury's Access	101	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A2041 (N)	2 - A2041 (S)	3 - Sainsbury's Access
From	1 - A2041 (N)	0	1	0
	2 - A2041 (S)	2	0	0
	3 - Sainsbury's Access	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2041 (N)	0.43	3.29	0.7	A	685	1027
2 - A2041 (S)	0.45	3.81	0.8	A	663	994
3 - Sainsbury's Access	0.19	3.93	0.2	A	176	264

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	562	140	68	1948	0.288	560	567	0.0	0.4	2.615	A
2 - A2041 (S)	544	136	53	1773	0.307	542	575	0.0	0.4	2.970	A
3 - Sainsbury's Access	145	36	491	1271	0.114	144	104	0.0	0.1	3.193	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	671	168	82	1939	0.346	670	679	0.4	0.5	2.861	A
2 - A2041 (S)	649	162	64	1766	0.368	649	688	0.4	0.6	3.275	A
3 - Sainsbury's Access	173	43	588	1210	0.143	172	124	0.1	0.2	3.468	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	821	205	100	1926	0.427	821	831	0.5	0.7	3.281	A
2 - A2041 (S)	795	199	78	1757	0.453	794	843	0.6	0.8	3.801	A
3 - Sainsbury's Access	211	53	720	1128	0.187	211	152	0.2	0.2	3.925	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	821	205	100	1926	0.427	821	832	0.7	0.7	3.288	A
2 - A2041 (S)	795	199	78	1757	0.453	795	844	0.8	0.8	3.807	A
3 - Sainsbury's Access	211	53	721	1127	0.187	211	152	0.2	0.2	3.929	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	671	168	82	1939	0.346	672	680	0.7	0.5	2.868	A
2 - A2041 (S)	649	162	64	1766	0.368	650	690	0.8	0.6	3.283	A
3 - Sainsbury's Access	173	43	590	1209	0.143	173	125	0.2	0.2	3.472	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2041 (N)	562	140	69	1948	0.288	562	569	0.5	0.4	2.623	A
2 - A2041 (S)	544	136	53	1773	0.307	544	578	0.6	0.5	2.983	A
3 - Sainsbury's Access	145	36	494	1269	0.114	145	104	0.2	0.1	3.200	A

Junction 7

Yarnton Way / Hartslock Drive / Wolvercote Road Double Mini-Roundabout

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: J7 - Yarnton Wy-Wolvercote Rd-Hartslock Dr 23-08-22.j9
Path: Y:\ARDENT PROJECTS\194180 - Yarnton Way, Belvedere\Transport\ARCADY\J7 - Yarnton Wy-Wolvercote Rd-Hartslock Dr
Report generation date: 22/08/2023 16:03:43

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2022									
1 - Yarnton Way / Hartslock Drive - 1 - Hartslock Drive	0.2	5.56	0.16	A	5.73	0.1	4.62	0.06	A	4.71
1 - Yarnton Way / Hartslock Drive - 2 - Yarnton Way Link	0.9	5.74	0.46	A		0.5	4.62	0.35	A	
1 - Yarnton Way / Hartslock Drive - 3 - Yarnton Way (W)	0.8	5.76	0.44	A		0.5	4.83	0.34	A	
2 - Yarnton Way / Wolvercote Road - 1 - Yarnton Way (E)	0.6	3.95	0.36	A	4.11	0.4	3.52	0.29	A	3.59
2 - Yarnton Way / Wolvercote Road - 2 - Wolvercote Road	0.1	4.70	0.09	A		0.1	4.37	0.06	A	
2 - Yarnton Way / Wolvercote Road - 3 - Yarnton Way Link	0.5	4.20	0.34	A		0.3	3.57	0.23	A	
	2028 Base									
1 - Yarnton Way / Hartslock Drive - 1 - Hartslock Drive	0.2	5.69	0.17	A	5.98	0.1	4.68	0.06	A	4.84
1 - Yarnton Way / Hartslock Drive - 2 - Yarnton Way Link	0.9	6.02	0.49	A		0.6	4.75	0.37	A	
1 - Yarnton Way / Hartslock Drive - 3 - Yarnton Way (W)	0.8	6.00	0.46	A		0.5	4.96	0.35	A	
2 - Yarnton Way / Wolvercote Road - 1 - Yarnton Way (E)	0.6	4.07	0.38	A	4.22	0.4	3.59	0.31	A	3.66
2 - Yarnton Way / Wolvercote Road - 2 - Wolvercote Road	0.1	4.81	0.09	A		0.1	4.44	0.06	A	
2 - Yarnton Way / Wolvercote Road - 3 - Yarnton Way Link	0.6	4.31	0.36	A		0.3	3.62	0.24	A	
	2028 with Dev									
1 - Yarnton Way / Hartslock Drive - 1 - Hartslock Drive	0.2	5.73	0.17	A	6.25	0.1	4.75	0.06	A	4.97
1 - Yarnton Way / Hartslock Drive - 2 - Yarnton Way Link	1.1	6.50	0.52	A		0.6	4.84	0.38	A	
1 - Yarnton Way / Hartslock Drive - 3 - Yarnton Way (W)	0.9	6.09	0.46	A		0.6	5.13	0.37	A	
2 - Yarnton Way / Wolvercote Road - 1 - Yarnton Way (E)	0.7	4.28	0.41	A	4.36	0.5	3.65	0.32	A	3.72
2 - Yarnton Way / Wolvercote Road - 2 - Wolvercote Road	0.1	4.96	0.10	A		0.1	4.48	0.06	A	
2 - Yarnton Way / Wolvercote Road - 3 - Yarnton Way Link	0.6	4.36	0.37	A		0.4	3.71	0.26	A	
	2028 with Dev + Com Dev									
1 - Yarnton Way / Hartslock Drive - 1 - Hartslock Drive	0.2	5.78	0.18	A	6.42	0.1	4.79	0.06	A	5.07
1 - Yarnton Way / Hartslock Drive - 2 - Yarnton Way Link	1.2	6.73	0.54	A		0.7	4.95	0.40	A	
1 - Yarnton Way / Hartslock Drive - 3 - Yarnton Way (W)	0.9	6.21	0.48	A		0.6	5.22	0.39	A	
2 - Yarnton Way / Wolvercote Road - 1 - Yarnton Way (E)	0.7	4.37	0.43	A	4.44	0.5	3.71	0.33	A	3.78
2 - Yarnton Way / Wolvercote Road - 2 - Wolvercote Road	0.1	5.03	0.10	A		0.1	4.53	0.06	A	
2 - Yarnton Way / Wolvercote Road - 3 - Yarnton Way Link	0.6	4.42	0.38	A		0.4	3.76	0.27	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	Yarnton Way / Wolvercote Road / Hartslock Drive (double roundabout)
Location	Yarnton Way
Site number	194180
Date	10/10/2022
Version	
Status	(new file)
Identifier	TP
Client	Bellway Homes (London Partnership)
Jobnumber	194180
Enumerator	ARDENTCE\Transportation
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489
D5	Dev Traffic	AM	ONE HOUR	07:45	09:15	15			
D6	Dev Traffic	PM	ONE HOUR	16:45	18:15	15			
D7	Com Dev	AM	ONE HOUR	07:45	09:15	15			
D8	Com Dev	PM	ONE HOUR	16:45	18:15	15			
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

Analysis Set Details

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

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Yarnton Way / Hartslock Drive	Standard Roundabout		1, 2, 3	5.73	A
2	Yarnton Way / Wolvercote Road	Standard Roundabout		1, 2, 3	4.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description
1 - Yarnton Way / Hartslock Drive	1	Hartslock Drive	
	2	Yarnton Way Link	
	3	Yarnton Way (W)	
2 - Yarnton Way / Wolvercote Road	1	Yarnton Way (E)	
	2	Wolvercote Road	
	3	Yarnton Way Link	

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	3.64	3.64	0.0	8.6	24.4	41.8	
	2 - Yarnton Way Link	4.02	4.02	0.0	999.0	24.4	41.8	
	3 - Yarnton Way (W)	3.27	5.26	7.0	7.1	24.4	39.0	
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	4.82	5.48	5.0	10.3	24.6	41.2	
	2 - Wolvercote Road	3.79	4.04	0.3	10.4	24.6	33.9	
	3 - Yarnton Way Link	3.90	5.01	3.4	31.7	24.6	36.8	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	0.482	986
	2 - Yarnton Way Link	0.567	1227
	3 - Yarnton Way (W)	0.511	1150
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	0.587	1465
	2 - Wolvercote Road	0.520	1100
	3 - Yarnton Way Link	0.586	1339

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive		ONE HOUR	✓	117	100.000
	2 - Yarnton Way Link		ONE HOUR	✓	494	100.000
	3 - Yarnton Way (W)		ONE HOUR	✓	443	100.000
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)		ONE HOUR	✓	479	100.000
	2 - Wolvercote Road		ONE HOUR	✓	66	100.000
	3 - Yarnton Way Link		ONE HOUR	✓	412	100.000

Origin-Destination Data

1 - Yarnton Way / Hartslock Drive

Demand (PCU/hr)

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	55	62
	2 - Yarnton Way Link	52	0	442
	3 - Yarnton Way (W)	66	357	19

2 - Yarnton Way / Wolvercote Road

Demand (PCU/hr)

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	9	21	449
	2 - Wolvercote Road	21	0	45
	3 - Yarnton Way Link	384	28	0

Vehicle Mix

1 - Yarnton Way / Hartslock Drive

Heavy Vehicle Percentages

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	0	3
	2 - Yarnton Way Link	0	0	1
	3 - Yarnton Way (W)	2	1	6

2 - Yarnton Way / Wolvercote Road

Heavy Vehicle Percentages

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	0	0	1
	2 - Wolvercote Road	0	0	0
	3 - Yarnton Way Link	1	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	0.16	5.56	0.2	A	107	160
	2 - Yarnton Way Link	0.46	5.74	0.9	A	453	680
	3 - Yarnton Way (W)	0.44	5.76	0.8	A	406	609
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	0.36	3.95	0.6	A	439	659
	2 - Wolvercote Road	0.09	4.70	0.1	A	61	91
	3 - Yarnton Way Link	0.34	4.20	0.5	A	378	567

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	88	22	282	850	0.103	87	89	0.0	0.1	4.789
	2 - Yarnton Way Link	372	93	61	1192	0.312	370	309	0.0	0.5	4.408
	3 - Yarnton Way (W)	333	83	39	1130	0.295	332	392	0.0	0.4	4.563
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	360	90	21	1453	0.248	359	311	0.0	0.3	3.317
	2 - Wolvercote Road	50	12	343	922	0.054	50	37	0.0	0.1	4.127
	3 - Yarnton Way Link	310	78	22	1326	0.234	309	371	0.0	0.3	3.569

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	105	26	338	823	0.127	105	106	0.1	0.1	5.088
	2 - Yarnton Way Link	444	111	73	1185	0.375	444	370	0.5	0.6	4.891
	3 - Yarnton Way (W)	398	100	47	1126	0.354	398	469	0.4	0.5	5.007
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	430	108	25	1450	0.297	430	372	0.3	0.4	3.561
	2 - Wolvercote Road	60	15	411	887	0.067	60	44	0.1	0.1	4.353
	3 - Yarnton Way Link	371	93	27	1323	0.280	370	444	0.3	0.4	3.814

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	128	32	414	787	0.163	128	130	0.1	0.2	5.551
	2 - Yarnton Way Link	544	136	89	1176	0.462	543	453	0.6	0.9	5.726
	3 - Yarnton Way (W)	488	122	57	1120	0.435	487	575	0.5	0.8	5.748
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	527	132	31	1447	0.364	526	455	0.4	0.6	3.944
	2 - Wolvercote Road	73	18	503	839	0.087	73	54	0.1	0.1	4.702
	3 - Yarnton Way Link	454	113	33	1319	0.344	453	543	0.4	0.5	4.192

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	128	32	415	786	0.163	128	130	0.2	0.2	5.556
	2 - Yarnton Way Link	544	136	89	1176	0.462	544	454	0.9	0.9	5.745
	3 - Yarnton Way (W)	488	122	57	1120	0.435	488	576	0.8	0.8	5.765
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	527	132	31	1447	0.364	527	456	0.6	0.6	3.949
	2 - Wolvercote Road	73	18	504	838	0.087	73	54	0.1	0.1	4.704
	3 - Yarnton Way Link	454	113	33	1319	0.344	454	544	0.5	0.5	4.197

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	105	26	339	823	0.127	105	107	0.2	0.1	5.095
	2 - Yarnton Way Link	444	111	73	1185	0.375	445	371	0.9	0.6	4.915
	3 - Yarnton Way (W)	398	100	47	1126	0.354	399	471	0.8	0.6	5.028
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	430	108	25	1450	0.297	431	373	0.6	0.4	3.568
	2 - Wolvercote Road	60	15	412	886	0.067	60	44	0.1	0.1	4.358
	3 - Yarnton Way Link	371	93	27	1323	0.280	371	445	0.5	0.4	3.821

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	88	22	284	849	0.103	88	89	0.1	0.1	4.803
	2 - Yarnton Way Link	372	93	61	1192	0.312	373	311	0.6	0.5	4.435
	3 - Yarnton Way (W)	333	83	39	1130	0.295	334	394	0.6	0.4	4.590
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	360	90	21	1453	0.248	361	312	0.4	0.3	3.327
	2 - Wolvercote Road	50	12	345	921	0.054	50	37	0.1	0.1	4.135
	3 - Yarnton Way Link	310	78	23	1325	0.234	311	372	0.4	0.3	3.580

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Yarnton Way / Hartslock Drive	Standard Roundabout		1, 2, 3	4.71	A
2	Yarnton Way / Wolvercote Road	Standard Roundabout		1, 2, 3	3.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive		ONE HOUR	✓	45	100.000
	2 - Yarnton Way Link		ONE HOUR	✓	387	100.000
	3 - Yarnton Way (W)		ONE HOUR	✓	345	100.000
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)		ONE HOUR	✓	387	100.000
	2 - Wolvercote Road		ONE HOUR	✓	47	100.000
	3 - Yarnton Way Link		ONE HOUR	✓	277	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Yarnton Way / Hartslock Drive

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	20	24
	2 - Yarnton Way Link	32	0	355
	3 - Yarnton Way (W)	78	257	10

2 - Yarnton Way / Wolvercote Road

Demand (PCU/hr)

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	9	23	355
	2 - Wolvercote Road	16	0	31
	3 - Yarnton Way Link	253	24	0

Vehicle Mix

1 - Yarnton Way / Hartslock Drive

Heavy Vehicle Percentages

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	0	4
	2 - Yarnton Way Link	0	0	0
	3 - Yarnton Way (W)	1	1	0

2 - Yarnton Way / Wolvercote Road

Heavy Vehicle Percentages

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	0	0	0
	2 - Wolvercote Road	0	0	3
	3 - Yarnton Way Link	1	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	0.06	4.62	0.1	A	41	62
	2 - Yarnton Way Link	0.35	4.62	0.5	A	355	532
	3 - Yarnton Way (W)	0.34	4.83	0.5	A	316	475
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	0.29	3.52	0.4	A	355	533
	2 - Wolvercote Road	0.06	4.37	0.1	A	43	65
	3 - Yarnton Way Link	0.23	3.57	0.3	A	254	381

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	34	8	200	890	0.038	33	83	0.0	0.0	4.293
	2 - Yarnton Way Link	291	73	26	1212	0.240	290	208	0.0	0.3	3.899
	3 - Yarnton Way (W)	260	65	24	1137	0.228	258	291	0.0	0.3	4.130
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	292	73	18	1455	0.201	291	208	0.0	0.2	3.090
	2 - Wolvercote Road	35	9	273	958	0.037	35	35	0.0	0.0	3.977
	3 - Yarnton Way Link	208	52	19	1328	0.157	208	290	0.0	0.2	3.242

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	40	10	239	871	0.046	40	99	0.0	0.0	4.426
	2 - Yarnton Way Link	347	87	31	1209	0.287	347	249	0.3	0.4	4.174
	3 - Yarnton Way (W)	310	77	29	1135	0.273	310	349	0.3	0.4	4.401
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	348	87	22	1452	0.240	348	250	0.2	0.3	3.259
	2 - Wolvercote Road	42	11	327	930	0.046	42	42	0.0	0.0	4.134
	3 - Yarnton Way Link	249	62	22	1326	0.188	249	347	0.2	0.2	3.373

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	49	12	293	845	0.058	49	121	0.0	0.1	4.620
	2 - Yarnton Way Link	426	106	38	1205	0.353	425	304	0.4	0.5	4.611
	3 - Yarnton Way (W)	380	95	35	1132	0.335	379	428	0.4	0.5	4.827
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	427	107	26	1450	0.294	426	306	0.3	0.4	3.515
	2 - Wolvercote Road	52	13	401	892	0.058	52	52	0.0	0.1	4.369
	3 - Yarnton Way Link	305	76	27	1323	0.231	305	425	0.2	0.3	3.568

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	49	12	293	845	0.058	49	121	0.1	0.1	4.621
	2 - Yarnton Way Link	426	106	38	1205	0.353	426	305	0.5	0.5	4.617
	3 - Yarnton Way (W)	380	95	35	1132	0.335	380	428	0.5	0.5	4.833
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	427	107	26	1450	0.294	427	306	0.4	0.4	3.518
	2 - Wolvercote Road	52	13	401	892	0.058	52	52	0.1	0.1	4.370
	3 - Yarnton Way Link	305	76	28	1323	0.231	305	426	0.3	0.3	3.568

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	40	10	240	871	0.046	40	99	0.1	0.0	4.430
	2 - Yarnton Way Link	347	87	31	1209	0.287	348	249	0.5	0.4	4.185
	3 - Yarnton Way (W)	310	77	29	1135	0.273	310	350	0.5	0.4	4.413
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	348	87	22	1452	0.240	349	250	0.4	0.3	3.264
	2 - Wolvercote Road	42	11	328	930	0.046	42	42	0.1	0.0	4.136
	3 - Yarnton Way Link	249	62	23	1326	0.188	249	348	0.3	0.2	3.375

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	34	8	201	889	0.038	34	83	0.0	0.0	4.298
	2 - Yarnton Way Link	291	73	26	1212	0.240	291	209	0.4	0.3	3.913
	3 - Yarnton Way (W)	260	65	24	1137	0.228	260	293	0.4	0.3	4.145
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	292	73	18	1454	0.201	292	209	0.3	0.3	3.096
	2 - Wolvercote Road	35	9	275	958	0.037	35	35	0.0	0.0	3.980
	3 - Yarnton Way Link	208	52	19	1328	0.157	209	291	0.2	0.2	3.248

2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Yarnton Way / Hartslock Drive	Standard Roundabout		1, 2, 3	5.98	A
2	Yarnton Way / Wolvercote Road	Standard Roundabout		1, 2, 3	4.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D1*1.0486

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive		ONE HOUR	✓	122	100.000
	2 - Yarnton Way Link		ONE HOUR	✓	518	100.000
	3 - Yarnton Way (W)		ONE HOUR	✓	464	100.000
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)		ONE HOUR	✓	502	100.000
	2 - Wolvercote Road		ONE HOUR	✓	70	100.000
	3 - Yarnton Way Link		ONE HOUR	✓	432	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Yarnton Way / Hartslock Drive

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	58	65
	2 - Yarnton Way Link	55	0	463
	3 - Yarnton Way (W)	70	375	20

2 - Yarnton Way / Wolvercote Road

Demand (PCU/hr)

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	9	22	470
	2 - Wolvercote Road	22	0	48
	3 - Yarnton Way Link	403	29	0

Vehicle Mix

1 - Yarnton Way / Hartslock Drive

Heavy Vehicle Percentages

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	0	3
	2 - Yarnton Way Link	0	0	1
	3 - Yarnton Way (W)	2	1	6

2 - Yarnton Way / Wolvercote Road

Heavy Vehicle Percentages

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	0	0	1
	2 - Wolvercote Road	0	0	0
	3 - Yarnton Way Link	1	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	0.17	5.69	0.2	A	112	168
	2 - Yarnton Way Link	0.49	6.02	0.9	A	475	713
	3 - Yarnton Way (W)	0.46	6.00	0.8	A	426	639
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	0.38	4.07	0.6	A	461	691
	2 - Wolvercote Road	0.09	4.81	0.1	A	64	96
	3 - Yarnton Way Link	0.36	4.31	0.6	A	397	595

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	92	23	296	844	0.109	92	93	0.0	0.1	4.858
	2 - Yarnton Way Link	390	97	64	1191	0.328	388	324	0.0	0.5	4.515
	3 - Yarnton Way (W)	350	87	41	1129	0.310	348	411	0.0	0.5	4.662
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	378	94	22	1452	0.260	376	326	0.0	0.4	3.373
	2 - Wolvercote Road	52	13	360	913	0.057	52	39	0.0	0.1	4.180
	3 - Yarnton Way Link	325	81	24	1325	0.246	324	388	0.0	0.3	3.625

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	110	27	354	815	0.135	110	111	0.1	0.2	5.182
	2 - Yarnton Way Link	466	116	76	1183	0.394	465	388	0.5	0.6	5.052
	3 - Yarnton Way (W)	417	104	49	1125	0.371	417	492	0.5	0.6	5.150
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	451	113	26	1450	0.311	451	390	0.4	0.5	3.635
	2 - Wolvercote Road	63	16	431	876	0.071	63	46	0.1	0.1	4.424
	3 - Yarnton Way Link	389	97	28	1322	0.294	388	465	0.3	0.4	3.887

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	135	34	434	777	0.173	134	136	0.2	0.2	5.688
	2 - Yarnton Way Link	570	143	93	1174	0.486	569	475	0.6	0.9	5.995
	3 - Yarnton Way (W)	511	128	60	1119	0.457	510	602	0.6	0.8	5.984
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	553	138	32	1446	0.382	552	478	0.5	0.6	4.061
	2 - Wolvercote Road	77	19	528	826	0.093	77	57	0.1	0.1	4.804
	3 - Yarnton Way Link	476	119	35	1318	0.361	475	570	0.4	0.6	4.307

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	135	34	435	777	0.173	135	137	0.2	0.2	5.694
	2 - Yarnton Way Link	570	143	93	1174	0.486	570	476	0.9	0.9	6.020
	3 - Yarnton Way (W)	511	128	60	1119	0.457	511	604	0.8	0.8	6.003
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	553	138	32	1446	0.382	553	478	0.6	0.6	4.066
	2 - Wolvercote Road	77	19	528	826	0.093	77	57	0.1	0.1	4.806
	3 - Yarnton Way Link	476	119	35	1318	0.361	476	570	0.6	0.6	4.312

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	110	27	356	815	0.135	110	112	0.2	0.2	5.192
	2 - Yarnton Way Link	466	116	76	1183	0.394	467	389	0.9	0.7	5.077
	3 - Yarnton Way (W)	417	104	49	1125	0.371	418	494	0.8	0.6	5.174
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	451	113	26	1450	0.311	452	391	0.6	0.5	3.646
	2 - Wolvercote Road	63	16	432	876	0.071	63	46	0.1	0.1	4.428
	3 - Yarnton Way Link	389	97	28	1322	0.294	389	466	0.6	0.4	3.896

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	92	23	298	843	0.109	92	94	0.2	0.1	4.872
	2 - Yarnton Way Link	390	97	64	1190	0.328	391	326	0.7	0.5	4.547
	3 - Yarnton Way (W)	350	87	41	1129	0.310	350	413	0.6	0.5	4.690
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	378	94	22	1452	0.260	378	327	0.5	0.4	3.386
	2 - Wolvercote Road	52	13	362	912	0.057	52	39	0.1	0.1	4.188
	3 - Yarnton Way Link	325	81	24	1325	0.246	326	390	0.4	0.3	3.640

2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Yarnton Way / Hartslock Drive	Standard Roundabout		1, 2, 3	4.84	A
2	Yarnton Way / Wolvercote Road	Standard Roundabout		1, 2, 3	3.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*1.0489

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive		ONE HOUR	✓	47	100.000
	2 - Yarnton Way Link		ONE HOUR	✓	405	100.000
	3 - Yarnton Way (W)		ONE HOUR	✓	362	100.000
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)		ONE HOUR	✓	406	100.000
	2 - Wolvercote Road		ONE HOUR	✓	49	100.000
	3 - Yarnton Way Link		ONE HOUR	✓	290	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Yarnton Way / Hartslock Drive

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	21	25
	2 - Yarnton Way Link	34	0	372
	3 - Yarnton Way (W)	82	269	10

2 - Yarnton Way / Wolvercote Road

Demand (PCU/hr)

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	9	24	373
	2 - Wolvercote Road	17	0	33
	3 - Yarnton Way Link	265	25	0

Vehicle Mix

1 - Yarnton Way / Hartslock Drive

Heavy Vehicle Percentages

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	0	4
	2 - Yarnton Way Link	0	0	0
	3 - Yarnton Way (W)	1	1	0

2 - Yarnton Way / Wolvercote Road

Heavy Vehicle Percentages

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	0	0	0
	2 - Wolvercote Road	0	0	3
	3 - Yarnton Way Link	1	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	0.06	4.68	0.1	A	43	65
	2 - Yarnton Way Link	0.37	4.75	0.6	A	372	558
	3 - Yarnton Way (W)	0.35	4.96	0.5	A	332	498
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	0.31	3.59	0.4	A	373	559
	2 - Wolvercote Road	0.06	4.44	0.1	A	45	68
	3 - Yarnton Way Link	0.24	3.62	0.3	A	267	400

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	35	9	209	885	0.040	35	87	0.0	0.0	4.323
	2 - Yarnton Way Link	305	76	27	1211	0.252	304	218	0.0	0.3	3.962
	3 - Yarnton Way (W)	272	68	25	1137	0.240	271	306	0.0	0.3	4.192
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	306	76	19	1454	0.210	305	219	0.0	0.3	3.130
	2 - Wolvercote Road	37	9	287	951	0.039	37	37	0.0	0.0	4.015
	3 - Yarnton Way Link	219	55	20	1327	0.165	218	304	0.0	0.2	3.273

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	42	11	251	865	0.049	42	104	0.0	0.1	4.466
	2 - Yarnton Way Link	364	91	32	1208	0.302	364	261	0.3	0.4	4.262
	3 - Yarnton Way (W)	325	81	30	1134	0.287	325	366	0.3	0.4	4.488
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	365	91	23	1452	0.252	365	262	0.3	0.3	3.312
	2 - Wolvercote Road	44	11	343	922	0.048	44	44	0.0	0.1	4.183
	3 - Yarnton Way Link	261	65	24	1325	0.197	261	364	0.2	0.2	3.414

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	52	13	307	838	0.062	52	127	0.1	0.1	4.674
	2 - Yarnton Way Link	446	112	40	1204	0.371	446	319	0.4	0.6	4.742
	3 - Yarnton Way (W)	398	100	37	1131	0.352	398	448	0.4	0.5	4.950
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	447	112	28	1449	0.309	447	321	0.3	0.4	3.591
	2 - Wolvercote Road	54	14	420	882	0.062	54	54	0.1	0.1	4.436
	3 - Yarnton Way Link	320	80	29	1322	0.242	319	446	0.2	0.3	3.624

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	52	13	308	838	0.062	52	127	0.1	0.1	4.676
	2 - Yarnton Way Link	446	112	40	1204	0.371	446	320	0.6	0.6	4.750
	3 - Yarnton Way (W)	398	100	37	1131	0.352	398	449	0.5	0.5	4.961
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	447	112	28	1449	0.309	447	321	0.4	0.4	3.593
	2 - Wolvercote Road	54	14	421	881	0.062	54	54	0.1	0.1	4.437
	3 - Yarnton Way Link	320	80	29	1322	0.242	320	446	0.3	0.3	3.624

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	42	11	252	865	0.049	42	104	0.1	0.1	4.469
	2 - Yarnton Way Link	364	91	32	1208	0.302	365	262	0.6	0.4	4.272
	3 - Yarnton Way (W)	325	81	30	1134	0.287	326	367	0.5	0.4	4.500
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	365	91	23	1452	0.252	366	262	0.4	0.3	3.315
	2 - Wolvercote Road	44	11	344	921	0.048	44	44	0.1	0.1	4.187
	3 - Yarnton Way Link	261	65	24	1325	0.197	261	365	0.3	0.2	3.418

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	35	9	211	885	0.040	35	87	0.1	0.0	4.329
	2 - Yarnton Way Link	305	76	27	1211	0.252	306	219	0.4	0.3	3.978
	3 - Yarnton Way (W)	272	68	25	1137	0.240	273	307	0.4	0.3	4.209
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	306	76	19	1454	0.210	306	220	0.3	0.3	3.139
	2 - Wolvercote Road	37	9	288	951	0.039	37	37	0.1	0.0	4.020
	3 - Yarnton Way Link	219	55	20	1327	0.165	219	305	0.2	0.2	3.280

2028 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Yarnton Way / Hartslock Drive	Standard Roundabout		1, 2, 3	6.25	A
2	Yarnton Way / Wolvercote Road	Standard Roundabout		1, 2, 3	4.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2028 with Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive		ONE HOUR	✓	122	100.000
	2 - Yarnton Way Link		ONE HOUR	✓	559	100.000
	3 - Yarnton Way (W)		ONE HOUR	✓	472	100.000
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)		ONE HOUR	✓	543	100.000
	2 - Wolvercote Road		ONE HOUR	✓	70	100.000
	3 - Yarnton Way Link		ONE HOUR	✓	440	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Yarnton Way / Hartslock Drive

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	58	65
	2 - Yarnton Way Link	55	0	504
	3 - Yarnton Way (W)	70	383	20

2 - Yarnton Way / Wolvercote Road

Demand (PCU/hr)

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	9	22	511
	2 - Wolvercote Road	22	0	48
	3 - Yarnton Way Link	411	29	0

Vehicle Mix

1 - Yarnton Way / Hartslock Drive

Heavy Vehicle Percentages

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	0	3
	2 - Yarnton Way Link	0	0	1
	3 - Yarnton Way (W)	2	1	6

2 - Yarnton Way / Wolvercote Road

Heavy Vehicle Percentages

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	0	0	1
	2 - Wolvercote Road	0	0	0
	3 - Yarnton Way Link	1	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	0.17	5.73	0.2	A	112	168
	2 - Yarnton Way Link	0.52	6.50	1.1	A	513	769
	3 - Yarnton Way (W)	0.46	6.09	0.9	A	433	650
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	0.41	4.28	0.7	A	498	747
	2 - Wolvercote Road	0.10	4.96	0.1	A	64	96
	3 - Yarnton Way Link	0.37	4.36	0.6	A	404	606

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	92	23	302	841	0.109	92	93	0.0	0.1	4.877
	2 - Yarnton Way Link	421	105	64	1191	0.354	419	330	0.0	0.5	4.689
	3 - Yarnton Way (W)	356	89	41	1129	0.315	354	441	0.0	0.5	4.695
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	409	102	22	1452	0.281	407	332	0.0	0.4	3.470
	2 - Wolvercote Road	52	13	391	897	0.058	52	39	0.0	0.1	4.259
	3 - Yarnton Way Link	331	83	24	1325	0.250	330	419	0.0	0.3	3.647

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	110	27	362	812	0.135	110	111	0.1	0.2	5.206
	2 - Yarnton Way Link	503	126	76	1183	0.425	502	395	0.5	0.7	5.320
	3 - Yarnton Way (W)	425	106	49	1125	0.378	424	529	0.5	0.6	5.202
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	488	122	26	1450	0.337	488	397	0.4	0.5	3.772
	2 - Wolvercote Road	63	16	468	857	0.073	63	46	0.1	0.1	4.531
	3 - Yarnton Way Link	396	99	28	1322	0.299	395	502	0.3	0.4	3.918

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	135	34	443	773	0.174	134	136	0.2	0.2	5.726
	2 - Yarnton Way Link	615	154	93	1174	0.524	614	484	0.7	1.1	6.468
	3 - Yarnton Way (W)	520	130	60	1119	0.465	519	647	0.6	0.9	6.070
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	598	149	32	1446	0.413	597	486	0.5	0.7	4.272
	2 - Wolvercote Road	77	19	573	802	0.096	77	56	0.1	0.1	4.959
	3 - Yarnton Way Link	485	121	35	1318	0.368	484	615	0.4	0.6	4.351

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	135	34	443	772	0.174	135	137	0.2	0.2	5.732
	2 - Yarnton Way Link	615	154	93	1174	0.524	615	485	1.1	1.1	6.502
	3 - Yarnton Way (W)	520	130	60	1119	0.465	520	649	0.9	0.9	6.090
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	598	149	32	1446	0.413	598	487	0.7	0.7	4.279
	2 - Wolvercote Road	77	19	573	802	0.096	77	57	0.1	0.1	4.962
	3 - Yarnton Way Link	485	121	35	1318	0.368	485	615	0.6	0.6	4.357

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	110	27	363	811	0.135	110	112	0.2	0.2	5.216
	2 - Yarnton Way Link	503	126	76	1183	0.425	504	397	1.1	0.8	5.354
	3 - Yarnton Way (W)	425	106	49	1125	0.378	426	531	0.9	0.6	5.228
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	488	122	26	1450	0.337	489	398	0.7	0.5	3.781
	2 - Wolvercote Road	63	16	469	856	0.073	63	46	0.1	0.1	4.537
	3 - Yarnton Way Link	396	99	28	1322	0.299	396	503	0.6	0.4	3.928

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	92	23	304	840	0.110	92	94	0.2	0.1	4.893
	2 - Yarnton Way Link	421	105	64	1190	0.354	422	332	0.8	0.6	4.728
	3 - Yarnton Way (W)	356	89	41	1129	0.315	356	444	0.6	0.5	4.726
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	409	102	22	1452	0.281	409	333	0.5	0.4	3.482
	2 - Wolvercote Road	52	13	393	896	0.058	52	39	0.1	0.1	4.267
	3 - Yarnton Way Link	331	83	24	1325	0.250	332	421	0.4	0.3	3.658

2028 with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Yarnton Way / Hartslock Drive	Standard Roundabout		1, 2, 3	4.97	A
2	Yarnton Way / Wolvercote Road	Standard Roundabout		1, 2, 3	3.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2028 with Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive		ONE HOUR	✓	47	100.000
	2 - Yarnton Way Link		ONE HOUR	✓	418	100.000
	3 - Yarnton Way (W)		ONE HOUR	✓	384	100.000
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)		ONE HOUR	✓	419	100.000
	2 - Wolvercote Road		ONE HOUR	✓	49	100.000
	3 - Yarnton Way Link		ONE HOUR	✓	312	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Yarnton Way / Hartslock Drive

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	21	25
	2 - Yarnton Way Link	34	0	385
	3 - Yarnton Way (W)	82	291	10

2 - Yarnton Way / Wolvercote Road

Demand (PCU/hr)

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	9	24	386
	2 - Wolvercote Road	17	0	33
	3 - Yarnton Way Link	287	25	0

Vehicle Mix

1 - Yarnton Way / Hartslock Drive

Heavy Vehicle Percentages

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	0	4
	2 - Yarnton Way Link	0	0	0
	3 - Yarnton Way (W)	1	1	0

2 - Yarnton Way / Wolvercote Road

Heavy Vehicle Percentages

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	0	0	0
	2 - Wolvercote Road	0	0	3
	3 - Yarnton Way Link	1	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	0.06	4.75	0.1	A	43	65
	2 - Yarnton Way Link	0.38	4.84	0.6	A	384	576
	3 - Yarnton Way (W)	0.37	5.13	0.6	A	352	528
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	0.32	3.65	0.5	A	385	577
	2 - Wolvercote Road	0.06	4.48	0.1	A	45	68
	3 - Yarnton Way Link	0.26	3.71	0.4	A	287	430

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	35	9	226	877	0.040	35	87	0.0	0.0	4.364
	2 - Yarnton Way Link	315	79	27	1211	0.260	314	234	0.0	0.3	4.005
	3 - Yarnton Way (W)	289	72	25	1137	0.254	287	315	0.0	0.3	4.270
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	316	79	19	1454	0.217	315	235	0.0	0.3	3.156
	2 - Wolvercote Road	37	9	297	946	0.039	37	37	0.0	0.0	4.037
	3 - Yarnton Way Link	235	59	20	1327	0.177	234	314	0.0	0.2	3.317

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	42	11	271	856	0.049	42	104	0.0	0.1	4.519
	2 - Yarnton Way Link	376	94	32	1208	0.311	376	281	0.3	0.4	4.322
	3 - Yarnton Way (W)	345	86	30	1134	0.304	345	378	0.3	0.4	4.598
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	377	94	23	1452	0.260	377	282	0.3	0.3	3.348
	2 - Wolvercote Road	44	11	355	916	0.049	44	44	0.0	0.1	4.212
	3 - Yarnton Way Link	281	70	24	1325	0.212	281	376	0.2	0.3	3.476

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	52	13	331	826	0.062	52	127	0.1	0.1	4.745
	2 - Yarnton Way Link	461	115	40	1204	0.383	460	343	0.4	0.6	4.834
	3 - Yarnton Way (W)	422	106	37	1131	0.374	422	463	0.4	0.6	5.120
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	462	115	28	1449	0.319	461	345	0.3	0.5	3.643
	2 - Wolvercote Road	54	14	435	874	0.062	54	54	0.1	0.1	4.476
	3 - Yarnton Way Link	344	86	29	1322	0.260	344	460	0.3	0.4	3.711

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	52	13	332	826	0.062	52	127	0.1	0.1	4.746
	2 - Yarnton Way Link	461	115	40	1204	0.383	461	344	0.6	0.6	4.841
	3 - Yarnton Way (W)	422	106	37	1131	0.374	422	463	0.6	0.6	5.128
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	462	115	28	1449	0.319	462	345	0.5	0.5	3.646
	2 - Wolvercote Road	54	14	435	874	0.062	54	54	0.1	0.1	4.478
	3 - Yarnton Way Link	344	86	29	1322	0.260	344	461	0.4	0.4	3.712

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	42	11	272	855	0.049	42	104	0.1	0.1	4.522
	2 - Yarnton Way Link	376	94	32	1208	0.311	377	281	0.6	0.5	4.333
	3 - Yarnton Way (W)	345	86	30	1134	0.304	346	379	0.6	0.4	4.609
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	377	94	23	1452	0.260	377	282	0.5	0.4	3.354
	2 - Wolvercote Road	44	11	356	915	0.049	44	44	0.1	0.1	4.214
	3 - Yarnton Way Link	281	70	24	1325	0.212	281	377	0.4	0.3	3.481

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	35	9	227	877	0.040	35	87	0.1	0.0	4.372
	2 - Yarnton Way Link	315	79	27	1211	0.260	315	236	0.5	0.4	4.020
	3 - Yarnton Way (W)	289	72	25	1137	0.254	289	317	0.4	0.3	4.288
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	316	79	19	1454	0.217	316	236	0.4	0.3	3.166
	2 - Wolvercote Road	37	9	298	945	0.039	37	37	0.1	0.0	4.042
	3 - Yarnton Way Link	235	59	20	1327	0.177	235	315	0.3	0.2	3.325

2028 with Dev + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Yarnton Way / Hartslock Drive	Standard Roundabout		1, 2, 3	6.42	A
2	Yarnton Way / Wolvercote Road	Standard Roundabout		1, 2, 3	4.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2028 with Dev + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D5+D7

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive		ONE HOUR	✓	122	100.000
	2 - Yarnton Way Link		ONE HOUR	✓	576	100.000
	3 - Yarnton Way (W)		ONE HOUR	✓	483	100.000
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)		ONE HOUR	✓	560	100.000
	2 - Wolvercote Road		ONE HOUR	✓	70	100.000
	3 - Yarnton Way Link		ONE HOUR	✓	451	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Yarnton Way / Hartslock Drive

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	58	65
	2 - Yarnton Way Link	55	0	521
	3 - Yarnton Way (W)	70	394	20

2 - Yarnton Way / Wolvercote Road

Demand (PCU/hr)

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	9	22	528
	2 - Wolvercote Road	22	0	48
	3 - Yarnton Way Link	422	29	0

Vehicle Mix

1 - Yarnton Way / Hartslock Drive

Heavy Vehicle Percentages

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	0	3
	2 - Yarnton Way Link	0	0	1
	3 - Yarnton Way (W)	2	1	6

2 - Yarnton Way / Wolvercote Road

Heavy Vehicle Percentages

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	0	0	1
	2 - Wolvercote Road	0	0	0
	3 - Yarnton Way Link	1	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	0.18	5.78	0.2	A	112	168
	2 - Yarnton Way Link	0.54	6.73	1.2	A	529	793
	3 - Yarnton Way (W)	0.48	6.21	0.9	A	444	665
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	0.43	4.37	0.7	A	514	771
	2 - Wolvercote Road	0.10	5.03	0.1	A	64	96
	3 - Yarnton Way Link	0.38	4.42	0.6	A	414	621

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	92	23	310	837	0.110	92	93	0.0	0.1	4.903
	2 - Yarnton Way Link	434	108	64	1191	0.364	431	338	0.0	0.6	4.765
	3 - Yarnton Way (W)	364	91	41	1129	0.322	362	454	0.0	0.5	4.744
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	421	105	22	1452	0.290	420	340	0.0	0.4	3.510
	2 - Wolvercote Road	52	13	403	891	0.059	52	39	0.0	0.1	4.293
	3 - Yarnton Way Link	340	85	24	1325	0.256	338	432	0.0	0.3	3.677

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	110	27	371	807	0.136	110	111	0.1	0.2	5.241
	2 - Yarnton Way Link	518	129	76	1183	0.438	517	405	0.6	0.8	5.439
	3 - Yarnton Way (W)	434	109	49	1125	0.386	434	544	0.5	0.6	5.275
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	503	126	26	1450	0.347	503	407	0.4	0.5	3.832
	2 - Wolvercote Road	63	16	483	849	0.074	63	46	0.1	0.1	4.576
	3 - Yarnton Way Link	406	101	28	1322	0.307	405	517	0.3	0.4	3.959

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	135	34	455	767	0.176	134	136	0.2	0.2	5.778
	2 - Yarnton Way Link	634	159	93	1174	0.540	633	496	0.8	1.2	6.688
	3 - Yarnton Way (W)	532	133	60	1119	0.476	531	666	0.6	0.9	6.191
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	616	154	32	1446	0.426	616	498	0.5	0.7	4.366
	2 - Wolvercote Road	77	19	591	793	0.097	77	56	0.1	0.1	5.027
	3 - Yarnton Way Link	497	124	35	1318	0.377	496	633	0.4	0.6	4.413

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	135	34	456	767	0.176	135	137	0.2	0.2	5.785
	2 - Yarnton Way Link	634	159	93	1174	0.540	634	497	1.2	1.2	6.726
	3 - Yarnton Way (W)	532	133	60	1119	0.476	532	668	0.9	0.9	6.214
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	616	154	32	1446	0.426	616	499	0.7	0.7	4.374
	2 - Wolvercote Road	77	19	592	792	0.097	77	57	0.1	0.1	5.030
	3 - Yarnton Way Link	497	124	35	1318	0.377	497	634	0.6	0.6	4.420

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	110	27	373	806	0.136	110	112	0.2	0.2	5.252
	2 - Yarnton Way Link	518	129	76	1183	0.438	519	407	1.2	0.8	5.478
	3 - Yarnton Way (W)	434	109	49	1125	0.386	436	547	0.9	0.6	5.303
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	503	126	26	1450	0.347	504	408	0.7	0.5	3.844
	2 - Wolvercote Road	63	16	484	848	0.074	63	46	0.1	0.1	4.582
	3 - Yarnton Way Link	406	101	28	1322	0.307	406	519	0.6	0.4	3.968

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	92	23	312	836	0.110	92	94	0.2	0.1	4.917
	2 - Yarnton Way Link	434	108	64	1190	0.364	434	340	0.8	0.6	4.806
	3 - Yarnton Way (W)	364	91	41	1129	0.322	365	457	0.6	0.5	4.776
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	421	105	22	1452	0.290	422	342	0.5	0.4	3.524
	2 - Wolvercote Road	52	13	405	889	0.059	52	39	0.1	0.1	4.301
	3 - Yarnton Way Link	340	85	24	1325	0.256	340	434	0.4	0.3	3.691

2028 with Dev + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2028 with Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Yarnton Way / Hartslock Drive	Standard Roundabout		1, 2, 3	5.07	A
2	Yarnton Way / Wolvercote Road	Standard Roundabout		1, 2, 3	3.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2028 with Dev + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D6+D8

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive		ONE HOUR	✓	47	100.000
	2 - Yarnton Way Link		ONE HOUR	✓	433	100.000
	3 - Yarnton Way (W)		ONE HOUR	✓	396	100.000
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)		ONE HOUR	✓	434	100.000
	2 - Wolvercote Road		ONE HOUR	✓	49	100.000
	3 - Yarnton Way Link		ONE HOUR	✓	324	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Yarnton Way / Hartslock Drive

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	21	25
	2 - Yarnton Way Link	34	0	400
	3 - Yarnton Way (W)	82	303	10

Demand (PCU/hr)

2 - Yarnton Way / Wolvercote Road

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	9	24	401
	2 - Wolvercote Road	17	0	33
	3 - Yarnton Way Link	299	25	0

Vehicle Mix

Heavy Vehicle Percentages

1 - Yarnton Way / Hartslock Drive

		To		
		1 - Hartslock Drive	2 - Yarnton Way Link	3 - Yarnton Way (W)
From	1 - Hartslock Drive	0	0	4
	2 - Yarnton Way Link	0	0	0
	3 - Yarnton Way (W)	1	1	0

Heavy Vehicle Percentages

2 - Yarnton Way / Wolvercote Road

		To		
		1 - Yarnton Way (E)	2 - Wolvercote Road	3 - Yarnton Way Link
From	1 - Yarnton Way (E)	0	0	0
	2 - Wolvercote Road	0	0	3
	3 - Yarnton Way Link	1	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	0.06	4.79	0.1	A	43	65
	2 - Yarnton Way Link	0.40	4.95	0.7	A	398	597
	3 - Yarnton Way (W)	0.39	5.22	0.6	A	363	545
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	0.33	3.71	0.5	A	399	598
	2 - Wolvercote Road	0.06	4.53	0.1	A	45	68
	3 - Yarnton Way Link	0.27	3.76	0.4	A	298	447

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	35	9	235	873	0.040	35	87	0.0	0.0	4.387
	2 - Yarnton Way Link	326	82	27	1211	0.269	325	243	0.0	0.4	4.054
	3 - Yarnton Way (W)	298	74	25	1137	0.262	296	327	0.0	0.4	4.315
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	327	82	19	1454	0.225	326	244	0.0	0.3	3.188
	2 - Wolvercote Road	37	9	308	940	0.040	37	37	0.0	0.0	4.064
	3 - Yarnton Way Link	244	61	20	1327	0.184	243	325	0.0	0.2	3.345

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	42	11	282	850	0.050	42	104	0.0	0.1	4.548
	2 - Yarnton Way Link	390	97	32	1208	0.322	389	291	0.4	0.5	4.393
	3 - Yarnton Way (W)	356	89	30	1134	0.314	355	391	0.4	0.5	4.660
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	390	98	23	1452	0.269	390	292	0.3	0.4	3.391
	2 - Wolvercote Road	44	11	368	909	0.049	44	44	0.0	0.1	4.246
	3 - Yarnton Way Link	292	73	24	1325	0.220	291	389	0.2	0.3	3.511

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	52	13	345	820	0.063	52	127	0.1	0.1	4.784
	2 - Yarnton Way Link	477	119	40	1204	0.396	476	357	0.5	0.7	4.942
	3 - Yarnton Way (W)	436	109	37	1131	0.385	435	479	0.5	0.6	5.213
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	478	120	28	1449	0.330	478	358	0.4	0.5	3.705
	2 - Wolvercote Road	54	14	451	866	0.063	54	54	0.1	0.1	4.524
	3 - Yarnton Way Link	357	89	29	1322	0.270	357	477	0.3	0.4	3.761

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	52	13	345	820	0.063	52	127	0.1	0.1	4.786
	2 - Yarnton Way Link	477	119	40	1204	0.396	477	357	0.7	0.7	4.951
	3 - Yarnton Way (W)	436	109	37	1131	0.385	436	480	0.6	0.6	5.224
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	478	120	28	1449	0.330	478	358	0.5	0.5	3.708
	2 - Wolvercote Road	54	14	452	865	0.063	54	54	0.1	0.1	4.525
	3 - Yarnton Way Link	357	89	29	1322	0.270	357	477	0.4	0.4	3.761

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	42	11	282	850	0.050	42	104	0.1	0.1	4.553
	2 - Yarnton Way Link	390	97	32	1208	0.322	390	292	0.7	0.5	4.405
	3 - Yarnton Way (W)	356	89	30	1134	0.314	356	392	0.6	0.5	4.672
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	390	98	23	1452	0.269	391	293	0.5	0.4	3.396
	2 - Wolvercote Road	44	11	369	908	0.049	44	44	0.1	0.1	4.249
	3 - Yarnton Way Link	292	73	24	1325	0.220	292	390	0.4	0.3	3.516

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Yarnton Way / Hartslock Drive	1 - Hartslock Drive	35	9	236	872	0.040	35	87	0.1	0.0	4.393
	2 - Yarnton Way Link	326	82	27	1211	0.269	327	245	0.5	0.4	4.072
	3 - Yarnton Way (W)	298	74	25	1137	0.262	298	329	0.5	0.4	4.335
2 - Yarnton Way / Wolvercote Road	1 - Yarnton Way (E)	327	82	19	1454	0.225	327	245	0.4	0.3	3.195
	2 - Wolvercote Road	37	9	309	940	0.040	37	37	0.1	0.0	4.069
	3 - Yarnton Way Link	244	61	20	1327	0.184	244	327	0.3	0.2	3.352