APPENDIX N Trip Generation Technical Note

OTTERPOOL PARK

Trip Generation Calculation Method Technical Note

NOVEMBER 2020

Incorporating

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VERSION CONTROL

Version	Date	Author	Changes
1	23/1/17	AL	
2	31/5/17	PL	
3	27/9/18	PL	
4	22/5/20	PL	Updates to reflect comments received on 2019 Application submission
5	27/5/20	PL	Update to Hotel and Retail external staff trip percentages
6	17/12/20	PL	Final update for submission

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1 Introduction

1.1 Background

Arcadis Consulting (UK) Limited was appointed in August 2016 to develop a masterplan and planning submission in respect of the proposed garden town called Otterpool Park.

In April 2017, a meeting was held with Kent County Council and Folkestone & Hythe District Council to discuss our proposed method for trip generation, mode spit and distribution. Draft technical notes[1][2][3] describing the proposed methods for this work were subsequently produced and reviewed by Kent County Council, Folkestone & Hythe District Council and Highways England.

Discussions relating to the trip generation method were held with Kent County Council, Folkestone & Hythe District Council and Highways England between April 2017 and March 2018. Following comments received on the draft trip generation technical note, a final version[4] was submitted with the outline planning application in 2019 and the method described in the note was used to inform the Transport Assessment[5] and other associated documents submitted with the application.

Following submission of the application, further comments relating to the trip generation method were received. On 10th February 2020, a meeting was held with Kent County Council and Folkestone & Hythe District Council to agree how to resolve the comments raised. This note describes the trip generation method, incorporating the comments received, and have been used to inform a revised Transport Assessment.

1.2 Scoping Discussions

Discussions relating to the trip generation method for the 2019 Transport Assessment were held with Kent County Council, Folkestone & Hythe District Council and Highways England between April 2017 and March 2018. Correspondence with Kent County Council and Folkestone & Hythe District Council are documented in Appendix A.1, while correspondence with Highways England is documented in Appendix A.2. The comments received and the action taken to reach a resolution to each comment is summarised in Table 1 and Table 2.

Table 1 Kent County Council / Folkestone & Hythe District Council Comments on Trip Generation Method

Issue Raised	Resolution
The land use quantum is different in this paper compared to the mode splits paper. Can you confirm which one is correct?	Quanta shown in these technical notes are preliminary and are included only to demonstrate the proposed methods.
Residential trip rate tables suggest rates are per 100 square metres – should they be per unit?	Table headings changed to show that trip rates are per unit.
In terms of the trip rates for both the extra care housing, residential and hotel, I do not see it to be appropriate to use sites in Greater London (due to far greater population range and also better accessibility to public transport) and Ireland (likely to be more rural that the development site). I would also suggest that only sites with a population of up to 125,000 within 5 miles should be included as these sites will represent the similar locational characteristics of Otterpool Park given its position within the Folkestone & Hythe District.	Revised trip rates for extra care housing, residential and hotel were extracted from TRICS excluding all sites in Ireland and in the highlands of Scotland and sites with a population of greater than 125,000 within 5 miles.

[1] Otterpool Park Garden Settlement Trip Generation Calculation Method Technical Note (May 2017)
[2] Otterpool Park Garden Settlement Method for deriving Mode Splits (June 2017)
[3] Otterpool Park Garden Settlement Method for the Distribution of External Vehicle Trips (July 2017)
[4] Otterpool Park Trip Generation Calculation Method Technical Note (September 2018)
[5] Otterpool Park Transport Assessment (February 2019)

Issue Raised	Resolution
The primary and secondary schools create enough jobs. Normally we say that a 1 form entry primary school generates 20 jobs and a 2 form entry primary school generates 40 jobs. If we have 7 2FE primary schools then this will generate 280 jobs. Likely the secondary schools should create more jobs. Normally a 5 form entry secondary school generates approximately 70 jobs.	Job creation rates for primary and secondary schools changed to 40 for primary schools and 70 for secondary schools.
I would suggest that for D1 Health, the number of jobs for on-site residents at 50% appears to be quite high. I would suggest a lower figure of 30% given that most of the jobs will be skilled ones such as doctors, nurses, health professionals etc.	Percentage of jobs created by the D1 Heath land use taken by on-site residents reduced to 30%.
The 80% figure for % to on-site Medical land uses for medical seems high as there are no proposals for a hospital or an A&E department at Otterpool Park. I would suggest a figure of 65-70% is more appropriate.	Percentage of demand for medical trips generated by Otterpool Park residents accommodated by on-site medical facilities reduced to 70%.
I'm not sure how the trip rate for the A2/A3/A4 has been calculated. I have worked out 530 trips in the AM Peak and 795 trips in the PM Peak. Please provide the calculations as to how this has been worked out. This will also affect table 21.	Further information provided for resolution as contained in Appendix A.1.
I'm not convinced that applying the average number of pupils per school for Kent is appropriate. I would have thought that once the development has been built out then the schools will be at full capacity as we see on new housing developments in Kent. I would therefore suggest that you use 1050 pupils per school for a 5 FE for secondary school and 420 pupils for a 2 FE for a primary school.	Assumptions changed to assume that each secondary school can accommodate 1,050 pupils and primary schools can accommodate 420 pupils.
I can't work out how you have the derived the total trip rate? You state that 52% of all trips generated by the on-site resident population for education purposes are expected to route to the on-site education land uses and then go on to say these trips equate to 0.45 education trips and 0.33 education escort trips per pupil space in the AM peak. This will also affect table 27.	Further information provided for resolution as contained in Appendix A.1.
Please explain in further detail how you have calculated the internal and external trips. Shouldn't the tables showing the number of internal and external trips added up to the figures in the table showing total trips?	Revised tables now provided in this Note.

Table 2 Highways England Comments on Trip Generation Method

Issue Raised	Resolution
The business B1 trip rates that for cars are lower than expected for external trips. You are using a peak hour trip rate of 0.35 person trips per job for local trips and assuming the same for longer distance external trips. I would have thought that the vast majority of part time jobs involved local commutes so the peak hour trip rates will be lower than for the external trips. I did a quick assessment using TRICS for business parks excluding London and non-England, town centre and edge of town centre and came up with 0.38 vehicle trips per employee.	TRICS trip rates per job for Business Park land uses derived and agreed for use. NB: these rates have been updated for the revised Transport Assessment, as described in section 1.3.
Your NTS PM peak hour trip purposes has been derived from 4-5PM proportions whereas it should come from 5-6PM proportions. 5-6PM shows a much higher percentage of commuting trips than you have quoted.	PM peak trip purposes updated in revised calculations to reflect 5-6PM.

1.3 Comments Received on 2019 Transport Assessment

Table 3 presents the comments received from Kent County Council relating to the trip generation method used to inform the 2019 Transport Assessment and how the issue has been resolved.

Table 3 Kent County Council Comments on 2019 Transport Assessment Trip Generation Method and Agreed Resolution

Issue Raised	Resolution
The Trip Generation by Land Use tables (Tables 28-30) do not include details of multi-modal trip rates for each residential unit, extra care unit or the various other use classes as would normally be expected in any Transport Assessment. It is not currently clear how these trip generation figures have been calculated. A summary table therefore needs to be produced showing the proposed multi-modal trip for each residential unit / extra care unit / hotel bedroom / 100sqm of commercial use and the proposed D1/D2 uses according to the proposed land use class. This will enable KCC to undertake its own TRICS assessment of the proposed land use classes. Only sites with a population range of up to 125,000 within a 5-mile radius should be used, as these will represent the population characteristics of the Otterpool Park site.	This Technical Note describes the method for the generation of person trips for each land use. A summary table of multi-modal trip rates by land use was also provided in a separate Note. This Note has since been updated[6] to reflect the fixed development schedule.
The business park TRICS outputs submitted currently use sites with a far greater population range and therefore needs to be re-run accordingly.	The business park trip rates used in the 2019 Transport Assessment were requested by Highways England. Revised trip rates for the business park were discussed and agreed with Kent County Council in April 2020. The agreed trip rates are set out in Chapter 3 of this Note.

[6] Otterpool Park Trip Rates by Mode by Land Use (June 2020)

Issue Raised	Resolution
The proposed extra care housing (C2) should be assessed against Sheltered Housing in TRICS. This is because there will be an element of care that is provided on-site and is not a general C3 residential use like retirement flats. A new TRICS analysis is therefore required, based on sheltered housing land use class in TRICS. The proposed trip generation cannot be agreed until this analysis is undertaken.	Revised trip rates for the C2 Extra Care facility were discussed and agreed with Kent County Council in April 2020. The agreed trip rates are set out in Chapter 4 of this Note.
The proposed internal and external trips by mode cannot be agreed until the total multi-modal trip rates are agreed. Furthermore, it is not clear how these trips have been calculated in Tables 35-37 based on the trip generation summary in Table 31. It is requested that the applicant provides detailed justification as to how these trip rates have been calculated.	A separate Note[7] was produced combining the results of the trip generation method described in this Note and the results of the method to derive mode splits[8] and will contain trip rates by mode by land use.

1.4 Summary of Changes

The changes to the trip generation method described in this Note compared to the method used for the 2019 Transport Assessment is summarised in Table 4. This includes a change in the method for deriving Commuter mode splits, the detail of which is explained in a separate Note[9], which influenced trip rates.

Table 4 Summary of Changes to Trip Generation Method

Change to Trip Generation Method	Effect on Trip Rates
Change in B-class land use trip rates to reflect Kent County Council preferred method of selection of TRICS site information	Increase in B-class trip rates in both peak periods
Decrease in Commuter Driver mode share to reflect increase in Rail trips requested by Kent County Council	No effect on vehicle trips; increase in trips by all other modes for B-class land uses
Change in TRICS Lane Use category used to derive trip rates for Otterpool Park C2 Extra Care facility land use from C3 Retirement Flats to C2 Care Home (Elderly Residential)	Increase in AM peak trips, decrease in PM peak trips for C2 Extra Care facility land use
Update of C3 Residential land use TRICS assessment using latest version of TRICS	Small decrease in trip rates in both peak periods for C3 Residential land use
Update of C1 Hotel land use TRICS assessment using latest version of TRICS	Increase in trip rates in both peak periods for C1 Hotel land use

[7] Otterpool Park Trip Rates by Mode by Land Use (June 2020)
[8] Otterpool Park Method for Deriving Mode Splits (June 2020)

2 Overview of Method

2.1 Land Uses

The proposals for Otterpool Park include the land uses shown in Table 5.

Table 5 Proposed Land Uses by Class

Land Use	Class
Residential	C3
Extra Care Housing	C2
Hotel	C1
Commercial business in hubs	B1
Commercial business park	B1
Light Industrial business park	B2
Retail	A1
Business	A2
Café / Restaurant	A3
Pub / Takeway	A4
Secondary schools	D1
Primary School	D1
Nursery	D1
Community Centre	D1
Health	D1
Sports pavilion	D2
Indoor sports hall	D2

2.2 Overview of Method for Deriving Trip Rates by Land Use

The Otterpool Park development has been planned such that it will provide a sufficient scale and range of services that will meet the demands of the local population, thus reducing the need for residents and visitors to the site to make trips over long distances that could be more likely to be made by non-sustainable modes of transport. It is also anticipated that the services provided will not be of a type that will attract significant trips from people living external to Otterpool Park.

By this definition, the majority of trips generated by the A- (Retail) and D-class (Community services) land uses in Table 5 are expected to originate from the on-site C-class (Residential) land uses, with some also originating from the B-class (employment) land use in the form of linked trips. The C-class land use is therefore expected to be the main driver for trip generation. Trip rates for the B- and C-class land uses were calculated by deriving trip rates from comparator sites within the TRICS 7.7.1 database.

Since the majority of trips generated by the Retail and Community service land uses are expected to originate from on-site Residential land uses, the number of trips generated by the Retail and Community service land uses were calculated by considering the demand for these land uses that the on-site Residential land uses would generate. To achieve this, the on-site Residential land use trip generation was disaggregated by trip purpose and each purpose was assigned to an associated land use, e.g. shopping trips were assigned to Retail land use, education trips were assigned to education land uses.

This ‘internal’ demand for Retail and Community service land uses was uplifted by a suitable percentage to account for trips made to these land uses from outside Otterpool Park (external trips). This percentage was derived by considering the ratio of internal to external trips the land use would be likely to generate based on the propensity of each land use to attract trips from off-site locations compared to on-site locations, e.g. for the education land uses, the ratio was derived from the proportion of school spaces taken by on-site residents compared to the number taken by off-site residents.

Trip rates for all land uses were derived for the local AM and PM peak hours, which have been found to be 8-9am and 5-6pm based on local traffic count data.

2.3 Trip Purposes

As described above, the method for the calculation of trip generation by non-residential land uses is based on the trip generation of the Residential land uses disaggregated for a range of trip purposes, as defined within the National Travel Survey (NTS) data. Table 6 provides a list of the trip purposes referred to in this Note and the definition of these purposes.

Table 6 Trip Purposes and Definitions

Trip Purpose	Definition
Work Trips	
Commuting	Trips to a usual place of work from home, or from work to home.
Business	Personal trips in course of work, including a trip in course of work back to work. This includes all work trips by people with no usual place of work (e.g. site workers) and those who work at or from home.
Non-Work Trips	
Education	Trips to school or college, etc. by full time students, students on day release and part time students following vocational courses.
Escort education	Trips made by people accompanying students making education trips.
Shopping	All trips to shops or from shops to home, even if there was no intention to buy.
Other escort	Used when the traveller has no purpose of his or her own, other than to escort or accompany another person; for example, taking a child to school. 'Escort commuting' is escorting or accompanying someone from home to work or from work to home. Similarly, other escort purposes are related to the purpose of the person being escorted. Note that the purpose of a trip for a small child accompanying older children to school would be 'escort education'.
Personal business	Visits to services, e.g. hairdressers, launderettes, dry cleaners, betting shops, solicitors, banks, estate agents, libraries, churches; or for medical consultations or treatment; or for eating and drinking, unless the main purpose was entertainment or social.
Visiting friends at private home Visiting friends elsewhere	Visits to meet friends, relatives, or acquaintances, both at someone's home or at a pub, restaurant, etc.
Entertainment / public activity Sport: participate	All types of entertainment or sport, clubs, and voluntary work, nonvocational evening classes, political meetings, etc..
Holiday: base Day trip	Trips to or from any holiday (including stays of 4 or more nights with friends or relatives), or trips for pleasure (not otherwise classified as social or entertainment) within a single day.
Other including just walk	Walking trips for pleasure or exercise along public highways, including taking the dog for a walk and jogging.

3 Trip Generation for B-Class Land Uses

3.1 Introduction

Vehicle trip rates for the B-class land uses used in the 2019 Application were agreed with Highways England using rates derived from TRICS. As shown in Table 3, Kent County Council requested revised trip rates to be derived using an alternative method of selection from the TRICS database.

This section presents the agreed revised vehicle trip rates and describes the method used to derive all-mode trip rates and the assumptions regarding internal and external trips. As noted in Table 4, the result of the change in

3.2 Vehicle Trip Rates

The AM and PM peak and daily vehicle trip rates for B-class land uses agreed with Highways England for the 2019 Transport Assessment are shown in Table 7.

Table 7 B-Class Land Use Vehicle Trip Rates per Job (2019 Transport Assessment)

Land Use	Vehicle Trip Rates per Job					
	AM Peak			PM Peak		
	Arrive	Depart	Total	Arrive	Depart	Total
B1/B2 Commercial & Light Industrial	0.30	0.04	**0.34**	0.03	0.23	**0.25**

The following selection criteria were applied in TRICS 7.5.1 to generate the trip rates in Table 7:

Main Land Use:	02 – Employment
Sub Land Use:	B – Business Park
Regions/Areas:	excluding sites in Greater London, Ireland and the highlands of Scotland
Location Types:	Suburban Area
	Edge of Town
Population:	no filter

Kent County Council requested trip rates to be derived from the TRICS database using the same selection criteria as above with a population filter that excludes sites with population greater than 125,000 within 5 miles. Appendix B contains a Memo[9] issued to Kent County Council and Folkestone & Hythe District Council which presents the trip rates derived using TRICS 7.7.1 and the revised selection criteria and compares the 2019 Business Park trip rates to the revised rates. Table 8 presents the revised vehicle trip rates using the Kent County Council method.

Table 8 B-Class Land Use Vehicle Trip Rates per Job (Revised method)

Land Use	Vehicle Trip Rates per Job					
	AM Peak			PM Peak		
	Arrive	Depart	Total	Arrive	Depart	Total
B1/B2 Commercial & Light Industrial	0.32	0.03	**0.35**	0.02	0.27	**0.29**

[9] Otterpool Park Business Park Trip Rates (21 April 2020)

3.3 All-Mode Trip Rates

All-mode trip rates for the Business Park land uses were derived from the vehicle trip rates in Table 7 by considering the car driver mode share for these land uses for external trips. Appendix C describes how the mode split for external work trips was derived and shows that the car driver mode share is 78.4%. This means that the trip rates shown in Table 8 represent 78.4% of the all-mode trip rates. This knowledge was used to calculate the all-mode trip rates per job as presented in Table 9.

Table 9 B-Class Land Use All-Mode Trip Rates per Job

Land Use	All Mode Trip Rates per Job					
	AM Peak			PM Peak		
	Arrive	Depart	Total	Arrive	Depart	Total
B1/B2 Commercial & Light Industrial	0.41	0.04	**0.45**	0.03	0.34	**0.37**

The number of jobs generated by the B-class land uses was calculated using the HCA employment densities of $12m^2$ NIA per job for B1 land uses and $36m^2$ GIA per job for B2 land uses.

3.4 Internal and External Trips

The number of trips generated by the B-class land uses that would be internal to the site will be determined by the number of B-class jobs that could be expected to be filled by Otterpool Park residents.

Given that the type of job and employer recruitment policy and the phasing of development beyond the first phase is currently unknown, a conservative value of 10% of all B-class jobs are assumed to be filled by Otterpool Park residents. This means that 10% of all trips generated by B-class land uses would be internal to the site, with the remaining 90% routing to/from off-site destinations.

4 Trip Generation for Residential Land Uses

4.1 Overview

Trip rates for the proposed C-class land uses were derived from the TRICS database using the following selection filtering as requested by Kent County Council:

Calculation Options: Multi-modal trip rates

Regions: excluding sites in Great London, Ireland and in the highlands of Scotland

Location Types: Edge of Town

Suburban Area

Population: excluding sites with population greater than 125,000 within 5 miles

The following sections present the trip rates derived for each C-class land use as well as the trip purpose assumptions that affect the trip generation of the A- and D-class land uses.

4.2 C2 Extra Care Housing

4.2.1 All-mode trip rates

For the 2019 Transport Assessment, all-mode trip rates for the C2 Extra Care Housing land use were derived from the TRICS database using the selection filtering described in section 4.1 and the following land use selection:

Main Land Use: 03 – Residential

Sub Land Use: N – Retirement Flats

The AM and PM peak trip rates derived are shown in Table 10.

Table 10 C2 Extra Care Housing Land Use All-Mode Trip Rates (2019 Transport Assessment)

Land Use	All Mode Trip Rates per Unit					
	AM Peak			PM Peak		
	Arrive	Depart	Total	Arrive	Depart	Total
C2 Extra Care Housing	0.09	0.05	**0.13**	0.19	0.21	**0.40**

Following discussions with Kent County Council in April 2020, it was agreed to change Main and Sub Land Use selection criteria to the following:

Main Land Use: 05 – Health

Sub Land Use: F – Care Home (Elderly Residential)

Appendix D contains a Technical Note[10] issued to Kent County Council setting out the rationale behind the change in the selection of the Land Use category and the response from Kent County Council agreeing to the change. The TRICS assessment in the Technical Note was undertaken using TRICS version 7.6.1. Following agreement of the trip rates, the TRICS assessment was re-run using latest version 7.7.1, with the result that trip rates increased in both peak periods. Table 11 presents the revised C2 Extra Care trip rates. The related TRICS output reports are contained in Appendix E.

[10] Otterpool Park Extra Care Facility Trip Rates (April 2020)

Table 11 Revised C2 Extra Care Housing Land Use All-Mode Trip Rates and Trips

Land Use	All Mode Trip Rates per Unit					
	AM Peak			PM Peak		
	Arrive	Depart	Total	Arrive	Depart	Total
C2 Extra Care Housing	0.12	0.13	**0.25**	0.09	0.25	**0.33**

The trips in Table 11 include trips for all purposes listed in Table 6, including staff trips. The following section presents the trip purpose split for residents of the C2 Extra Care Housing.

4.2.2 Trip purposes

4.2.2.1 Work related trips

The split of residential trips by purpose has been derived from the NTS database. The number of internal work-related trips, i.e. trips generated between the on-site C-class Residential and B- and land uses, was calculated as described in section 3.4 based on a trip rate per job derived from TRICS. The percentage of residential work trips will therefore be influenced by the result of that calculation. For this reason, we have assumed that the number of work-related trips generated by the Residential land uses will be calculated by applying the TRICS trip rate per job to the number of residents likely to travel to work each day.

The total number of residents expected to travel to work each day was calculated by considering the following:

a) The total population likely to be in employment based on Census 2011 results for Folkestone & Hythe;

b) Deducting the number of people in employment who do not work from home who would not travel on a given day due to absence through holiday or sickness. For full-time and self-employed workers, this is based on typical worker annual attendance rates. For part-time workers, this is based on the average number of hours worked each week by part-time workers in the UK (16.2 hours[11]) as a percentage of hours worked per week by full-time workers (37.5 hours); and

c) Deducting the number of people in employment who work from home based on Census 2011 results for Shepway

The resulting trips are assumed to include the following trip purposes from Table 6:

a) Commuting;

b) Business; and

c) Commuting and Business escort trips.

4.2.2.2 Non-work related trips

The split of C2 Extra Care land use non-work related trips by purpose was derived by considering trips by non-work related purposes made by people over the age of 65 in the NTS database. Table 12 presents the percentage of trips by purpose for non-work related trips in the AM and PM peak.

[11] Office for National Statistics (2015)

Table 12 NTS Non-work Trips by Purpose for C2 Extra Care land use

Trip Purpose	Proportion	
	AM Peak	PM Peak
Education	0.0%	0.0%
Escort education	1.8%	1.8%
Shopping	35.5%	35.5%
Other escort	6.5%	6.5%
Personal business	15.9%	15.9%
Visiting friends at private home	11.4%	11.4%
Visiting friends elsewhere	7.2%	7.2%
Entertainment / public activity	8.6%	8.6%
Sport: participate	0.0%	0.0%
Holiday: base	6.2%	6.2%
Day trip	0.0%	0.0%
Other including just walk	6.9%	6.9%
All purposes	**100.0%**	**100.0%**

4.3 C3 Residential

4.3.1 All-mode trip rates

All-mode trip rates for the C3 Residential land use was derived from the TRICS database using selection filtering described in section 4.1 and the following land use selection:

Main Land Use: 03 – Residential

Sub Land Use: K – Mixed Private Houses (Flats and Houses)

L – Mixed Affordable Houses (Flats and Houses)

M – Mixed Private/Affordable Housing

The TRICS outputs for the sites included in the calculations are contained in Appendix F. Trip rate data from sites from all three sub land use categories were extracted and combined to produce a weighted average trip rate. The AM and PM peak trip rates derived are shown in Table 13. These trips include trips for all purposes listed in Table 6.

Table 13 C3 Residential Land Use All-Mode Trip Rates

Land Use	All Mode Trip Rates per Unit					
	AM Peak			PM Peak		
	Arrive	Depart	Total	Arrive	Depart	Total
C3 Residential	0.19	0.74	**0.93**	0.59	0.31	**0.90**

4.3.2 Trip purposes

The number of work-related trips generated by the C3 Residential land use was calculated using the same method as described for the C2 Extra Care work-related trips. The resident population of the C3 Residential land use was calculated by assuming the national average home occupancy of 2.36 persons per dwelling from the NTS database.

The split of C3 Residential land use non-work related trips by purpose was also calculated from NTS data as described for the C2 Extra Care Housing. Table 14 presents the percentage of trips by purpose for non-work related trips in the AM and PM peak.

Table 14 NTS Non-work Trips by Purpose for C3 Residential land use

Trip Purpose	Proportion	
	AM Peak	PM Peak
Education	38.7%	4.2%
Escort education	28.7%	2.7%
Shopping	5.3%	19.5%
Other escort	9.1%	15.6%
Personal business	9.8%	16.8%
Visiting friends at private home	2.0%	13.7%
Visiting friends elsewhere	1.1%	7.3%
Entertainment / public activity	1.2%	8.1%
Sport: participate	0.3%	2.0%
Holiday: base	0.6%	1.4%
Day trip	1.3%	3.4%
Other including just walk	2.1%	5.3%
All purposes	**100.0%**	**100.0%**

5 C1 Hotel Land Use Trips

5.1 Overview

Trip rates for the proposed C1 Hotel were derived from the TRICS database using the selection filtering requested by Kent County Council as described in section 4.1.

The following sections present the trip rates derived for the C1 Hotel land use and how the trips were divided into staff trips and visitor trips.

5.2 All-Mode Trip Rate

All-mode trip rates for the C1 Hotel land use were derived from the TRICS database using the following land use selection:

Main Land Use: 06 – Hotel, Food and Drink

Sub Land Use: A – Hotels

Use Class: C1

The AM and PM peak trip rates derived are shown in Table 15. The TRICS outputs included in the calculation are presented in Appendix G.

Table 15 C1 Hotel Land Use All-Mode Trip Rates per 100m^2

Land Use	All Mode Trip Rates per 100sqm					
	AM Peak			PM Peak		
	Arrive	Depart	Total	Arrive	Depart	Total
Hotels	0.41	1.07	**1.48**	0.99	0.50	**1.49**

The trip rates in Table 15 consist of the following trip types:

a) Staff trips;

b) Visitor trips; and

c) Other escort trips.

The calculation of each of these trip types from the trip rates is described in the following sections.

5.3 Staff Trips

5.3.1 Total All-Mode Trips

The number of staff trips generated by the Hotel was calculated by applying the trip rate per job calculated in Table 9 to the number of jobs created by the Hotel.

The number of jobs created by the Hotel was calculated by applying HCA employment density for Hotels of 0.5 jobs per bed.

5.3.2 Internal and External Trips

The number of staff trips that would be internal to the site will be determined by the number of jobs created by the hotel that could be expected to be filled by Otterpool Park residents.

Given that the majority of Hotel jobs could be low-skilled and low-paid, the distance staff are likely to travel to work is expected to be limited. Hotel staff are therefore assumed to live locally. For this reason, 80% of all Hotel staff are assumed to live on Otterpool Park. This means that 80% of all Hotel staff trips would be internal to the site, with the remaining 20% routing to/from off-site destinations.

5.4 Visitor and Escort Trips

Once the number of staff trips are deducted from the total Hotel trip generation, the remaining trips are assumed to be visitor and escort trips.

All Hotel visitor and escort trips are assumed to be external trips.

6 Retail Trips

6.1 Overview

As described in section 2.2, the majority of trips generated by the proposed Retail land uses are expected to originate from the on-site C-class (Residential) land uses. These internal Retail trips are calculated as part of the Residential trips by purpose calculations described in sections 4.2.2 and 4.3.2. The number of external trips attracted to Retail land uses was calculated by considering the likely ratio of internal to external trips the land use would generate based on the propensity of each land use to attract trips from off-site locations compared to on-site locations.

Retail trips are assumed to consist of the following categories of trips:

a) Staff trips;

b) Customer trips; and

c) Other escort trips.

The calculation of each of these trips for the retail land uses is described in the following sections.

6.2 Staff Trips

6.2.1 Total All-Mode Trips

The number of staff trips generated by the Retail land uses was calculated by applying the trip rate per job calculated in Table 9 to the number of jobs created by the land uses.

The number of jobs created was calculated by applying HCA employment density of 18m^2 GIA per jobs for A1 Retail and 17m^2 GIA per job for A2/A3/A4 Retail.

6.2.2 Internal and External Trips

The number of trips generated by the staff trips that would be internal to the site is determined by the number of jobs created by the Retail land uses that could be expected to be filled by Otterpool Park residents.

As with the calculation of the Hotel jobs, the majority of Retail jobs are expected to be low-skilled and low-paid and staff are assumed to live locally. For this reason, 80% of all retail staff are assumed to live on Otterpool Park. Therefore 80% of all Retail staff trips would be internal to the site, with the remaining 20% routing to/from off-site destinations.

6.3 Customer Trips

6.3.1 A1 Retail

6.3.1.1 Internal Trips

The number of internal A1 Retail customer shopping trips was derived from the number of trips generated for Shopping purposes by the residential land uses, the calculation of which is described in sections 4.2.2.2 and 4.3.2.

Trips made for Shopping purposes were disaggregated into three categories according to three principle types of shopping activities:

a) Frequent trips for small items made to shops local to home;

b) Supermarket trips for less frequent ‘stock up’ shopping trips; and

c) Non-food retail trips.

Table 16 shows the proportion of each of these categories that have been assumed to form all Shopping trips based on marketing research[12].

Table 16 Residential Shopping Trips to On-Site A1 Retail Land Uses

Sub-category	% of All Trips
Local shops	62%
Supermarket	24%
Non-food	14%
All Shopping trips	**100%**

The number of Shopping trips generated by the residential land uses was assigned to each shopping activity according to the percentages in Table 16. Of the total shopping trips for each activity, the following percentages are assumed to be attracted to the on-site A1 Retail land uses:

a) 100% of all trips to local shops;

b) 80% of all supermarket trips; and

c) 20% of all non-food shopping trips.

The remaining shopping trips are assumed to be made to destinations external to Otterpool Park.

6.3.1.2 External trips

The number of customer trips incoming to the A1 Retail supermarket and non-food shops from off-site locations was considered as a proportion of the total number of on-site trips made for these shopping activities. It is assumed that the on-site local shops will not attract trips from off-site.

The number of trips made to the supermarket and non-food A1 Retail land uses from off-site destinations is assumed to be equivalent to 10% of the total on-site trips generated for these shopping activities.

6.3.2 A2/A3/A4 Retail

6.3.2.1 Internal Trips

The number of internal A2/A3/A4 Retail trips was derived from the number of trips generated for Personal Business purposes by the residential land uses, the calculation of which is described in sections 4.2.2.2 and 4.3.2.

Residential Personal business trips were disaggregated into three categories according to three principle types of activities associated with this trip purpose:

a) Trips for A2 Retail Services, e.g. hairdressers, launderettes, dry cleaners, betting shops, solicitors, banks, estate agents, libraries, churches;

b) Trips for D1 land use medical purposes; and

c) Trips for A3/A4 Retail eating/drinking purposes.

A total of 45% of all Personal business trips are assumed to be made to A2 Retail services, with a further 45% made for A3/A4 eating/drinking. The remaining 10% of Personal business trips are assumed to be trips made for medical purposes.

[12] *Mission Impossible: Profiling Shopping Occasions for Retail and Channel Partners (Copernicus Marketing Consulting & Research, 2013)*

A total of 90% of all Personal business trips generated by the residential land uses are therefore assumed to be attracted to Retail land uses. The following percentages are assumed to be attracted to/generated by on-site Retail land uses:

a) 80% of all trips made for A2 Retail services; and

b) 70% of all eating/drinking trips.

The remaining Personal business A2/A3/A4 trips are assumed to be made to destinations external to Otterpool Park.

6.4 Other Escort Trips

The trip purposes obtained from the NTS include a category called 'Other escort', which are trips made to accompany people travelling for other trip purposes, with the exception of Education trips which has its own escort trip category. Therefore, when allocating a trip purpose to a land use, we must also include Other escort trips.

In our trip generation, we have assigned the Other escort trips to the other trip purposes proportionally to the percentage of trips made for each trip purpose.

7 Education land Use Trips

7.1 Overview

The majority of trips generated by the education land uses are expected to originate from on-site land uses, with a smaller percentage originating from off-site.

Trips to the Education land uses are assumed to consist of the following categories of trips:

a) Staff trips;

b) Pupil trips; and

c) Escort trips made by people accompanying pupils to school.

In the following sections we describe the method used to calculate each of these trip types for internal and external trips.

7.2 Staff Trips

Table 17 presents the number of staff places that would be provided per school and the proportion of staff that are expected to live at Otterpool Park, as agreed with Kent County Council.

Table 17 Assumed Number of Staff per School and Percentage Assumed to Live at Otterpool Park

Land Use	Staff per School	% Living On-Site
D1 Secondary schools	70	20%
D1 Primary School	40	50%
D1 Nursery	20	80%

The number of staff trips generated by the Retail land uses was calculated by applying the trip rate per job calculated in Table 9 to the number of jobs created by the land uses. The percentages living on-site in Table 17 were applied to the total trips generated to determine the number of internal and external staff trips.

7.3 Pupil Trips

7.3.1 Internal pupil trips

The number of Education trips generated by Otterpool Park residents is calculated from the C3 Residential trip generation as described in section 4.3. The number of these trips that would be attracted to on-site schools is calculated by considering the demand for school trips against the supply of pupil places.

7.3.1.1 Demand for pupil places

The demand was calculated by considering the number of pupils per house, as informed by Kent County Council and a draft Education Strategy[13] study undertaken for Otterpool Park. The number of Higher education trips was calculated by considering the percentage of the total population that are likely to be in higher education, as provided by the NTS. Table 18 presents these assumptions.

[13] *Otterpool Park Infrastructure and Phasing (Education) Note for Transport Assessment (Quod, 2018)*

Table 18 On-Site Pupil Space Demand for Nursery, Primary and Secondary Schools

Land Use	Age Group	Pupil Demand	
D1 Higher Education	18+	3.5%	of total population
D1 Sixth form	16 to 18	0.07	per home
D1 Secondary schools	11.5 to 16	0.20	per home
D1 Primary School	5 to 11.5	0.28	per home
D1 Nursery	3 to 4	0.08	per home

Using the results of the demand calculations, we calculated the demand for each education category generated as a proportion of total demand, as shown in Table 19.

Table 19 On-Site Pupil Space Demand for Nursery, Primary and Secondary Schools

Land Use	% of Total Demand
D1 Higher Education	12%
D1 Sixth form	10%
D1 Secondary schools	28%
D1 Primary School	39%
D1 Nursery	11%
All Education	**100%**

The proportions in Table 19 were applied to the total number of C3 Residential Education trips to calculate the total number of trips generated for each school category. All C2 Extra Care Education trips are assumed to be Higher education trips.

7.3.1.2 Supply of pupil places

Table 20 presents the number of pupil places that would be provided per school and the proportion of these pupils that are expected to live on Otterpool Park.

Table 20 Assumed Number of Pupils per School and Percentage Assumed to Live on Otterpool Park

Land Use	Pupils per School	% living On-Site	Assumption
D1 Higher Education	N/A	N/A	No Higher Education facilities are proposed on Otterpool Park
D1 Sixth form	250	70%	Some residents may have a preference for an off-site school at this level
D1 Secondary schools	800	70%	
D1 Primary School	420	90%	The school catchment area is unlikely to extend far outside the site
D1 Nursery	54	100%	The school catchment area is unlikely to extend far outside the site

This enables us to calculate the supply of pupil places for Otterpool Park residents for each school type.

7.4 Calculation of Internal and External Pupil Trips

7.4.1 Internal pupil trips

The on-site demand and supply of school places, as calculated above, was compared to calculate the percentage of total demand generated by Otterpool Park residents that would be met by the on-site provision of pupil places.

These percentages were applied to the total demand for each category of school generated by Otterpool Park residents to calculate the number of internal trips by school category.

7.4.2 External pupil trips

The number of trips generated by the on-site education land uses from off-site locations was calculated by applying a trip rate per pupil space to the number of on-site pupil spaces that would be filled by off-site pupils. The trip rate per pupil space was derived by considering the number of trips generated by pupil spaces filled by on-site residents, as calculated above.

The trip rate per pupil place for each school category was calculated by considering the number of pupil trips per place resulting from the internal pupil trip calculations.

7.5 Education Escort Trips

The number of internal Education escort trips was calculated by considering the ratio between Education trips and Education escort trips calculated in the C3 Residential trip generation, as shown in Table 14.

Education escort trips total 74% (28.7% ÷ 38.7%) of Education trips in the AM peak and 64% (2.7% ÷ 4.2%) in the PM peak. These percentages were applied to the total AM and PM peak internal and external pupil trips to calculate the corresponding number of Education escort trips.

8 Other D-Class Land Uses

8.1 Overview

The other D-class land uses considered in this Chapter cover the Community Centre, Health facilities, Sports pavilion and Indoor sports hall.

For the purposes of these calculations, trips to these land uses were assumed to consist of the following categories of trips:

a) Staff trips;

b) Visitor trips; and

c) Other escort trips, made by people accompanying staff and visitors to the land uses.

The method of calculation of these trips generated by the other D-class land uses is described in the following sections.

8.2 Staff Trips

8.2.1 Total All-Mode Trips

The number of staff trips generated by the Retail land uses was calculated by applying the trip rate per job calculated in Table 9 to the number of jobs created by the land uses.

The assumptions relating to employment densities are shown in Table 21.

Table 21 Employment Densities for Non-Education D-Class Land Uses

Land Use	Employment Density (sqm GIA per job)
D1 Community Centre	100
D1 Health	30
D2 Sports pavilion	100
D2 Indoor sports hall	100

8.2.2 Internal and External Trips

The number of staff trips that would be internal to the site will be determined by the jobs created these land uses that could be expected to be filled by Otterpool Park residents. Table 22 presents our assumptions for the percentage of the total jobs created by each D1 land use that can be expected to be filled by residents of Otterpool Park'

Table 22 Percentage of Non-Education D-Class Land Use Jobs Filled by Otterpool Park Residents

Land Use	% of Jobs Filled by Otterpool Park Residents	Assumption
D1 Community Centre	90%	Likely to be run by local residents
D1 Health	30%	Assumption provided by Kent County Council
D2 Sports pavilion	90%	Mostly low-skilled/paid jobs: Staff unlikely to travel far so will live locally
D2 Indoor sports hall	90%	Mostly low-skilled/paid jobs: Staff unlikely to travel far so will live locally

The percentages in Table 22 were applied to the total number of staff trips generated by each land use to calculate the number of internal staff trips. The number of external staff trips was derived by calculating a trip rate per job from the internal staff trip calculations and applying it to the number of jobs available for staff living off-site.

8.3 Visitor Trips

8.3.1 Health facilities

8.3.1.1 Internal trips

As described in section 6.3.2.1, a total of 10% of Personal business trips generated by the C2 and C3 residential land uses are assumed to be trips made for medical purposes. Kent County Council advise that 70% of medical trips generated by Otterpool Park residents can be assumed to be accommodated on-site. Therefore, the D1 Health land uses would attract 7% (70% of 10%) of all Personal business trips generated by Otterpool Park residents.

8.3.1.2 External trips

The D1 Health facilities are expected to cater mainly for Otterpool Park residents. However, a small number of trips may be attracted to the land use from off-site locations. This this reason, the number of external trips has been assumed to be equal to 10% of the total number of internal trips generated.

8.3.2 Community centre / Public activities

Trips made by the Residential land uses for Entertainment / public activity purposes (including all types of entertainment, clubs, voluntary work, non-vocational evening classes and political meetings), as described in sections 4.2.2.2 and 4.3.2, are assumed to include the following categories of trips:

a) Trips made to the on-site Community centre; and

b) Trips made for other Entertainment / public activity purposes.

Trips made to the on-site Community centre is assumed to comprise up to 5% of all Entertainment / public activity trips, with the remaining 95% made for other leisure purposes. As the Community centre is expected to only be used by Otterpool Park residents, the Community centre is expected to generate a number of visitor trips equal to 5% of all Entertainment / public activity trips generated by the on-site Residential land uses.

Of the 95% of Entertainment / public activity trips made for other purposes, up to half are assumed to be made to destinations within Otterpool Park (internal trips) with the other half destined for off-site locations (external trips).

8.3.3 Sports pavilion and Indoor sports hall

8.3.3.1 Internal trips

Trips made by Otterpool Park residents in the trip purpose category Sport: participate are assumed to include the following trip categories:

a) Trips made to the on-site indoor sports hall or pavilion; and

b) Trips made for other sporting participation purposes.

Up to 20% of all Sport: participate trips generated by the on-site Residential land uses are assumed to be attracted to the on-site indoor sports hall or pavilion. The number of internal trips attracted to the Sports hall and pavilion would therefore be equal to 20% of all Sports: participate trips generated by the Residential land uses.

The remaining 80% of all Sport: participate trips generated by the on-site Residential land uses would be made for other sporting participation purposes, and 20% of these trips are expected to be made to on-site destinations such as the areas of public green space.

8.3.3.2 External trips

A small number of trips may be attracted to the indoor sports hall and pavilion from off-site locations. The number of external trips attracted to them has been assumed to equal up to 10% of the total number of internal trips generated to these land uses.

8.4 Other escort trips

A proportion of the Other escort trips generated by the residential land uses would be attracted to the D-class land uses described in this section.

Residential Other escort trips include trips escorting people who are making trips for the following purposes:

a) Commuting and Business;

b) Shopping;

c) Personal business;

d) Visiting friends;

e) Entertainment / public activity;

f) Sport: participate; and

g) ‘Other’, including just walk.

As we have described in this Chapter, D1 Health land uses would attract 7% of all Personal business trips, the Community centre attracts 5% of all Entertainment / public activity trips and the Sports hall / pavilion attract 20% of all Sports: participate trips. To calculate the number of Other escort trips generated by these land uses, the total Other escort trips generated by the residential land uses was disaggregated into the categories a) to g) above by proportion to the number of trips generated by the Residential land uses for these trip purposes. The number of Other escort trips generated by the D1 Health land uses was then assumed to be equal to 7% of all Personal business Other escort trips. The same assumption was used to calculate the number of Other escort trips for the Community centre and the Sports hall / pavilion.

The external trips generated by the Heath facilities and Sports hall / pavilion were assumed to also generate accompanying Other escort trips. The total of these Other escort trips was determined by calculating the number of internal Other escort trips generated by these land uses in comparison to the Visitor trips generated by these land uses and applying the same factor to the external visitor trips.

9 All-Mode Trip Generation Summary

9.1 Total Trip Rates by Land Use

Chapters 3 to 8 of this note describe the methods used to derive the number of all-mode trips generated by the different land uses proposed for the site. Table 23 presents the AM and PM peak trip rates that result from these trip generation methods based on the current proposed land use quantum as of 13th May 2020. Trip rates are trips per 100m^2 gross internal floor area except for C2 Extra Care and C3 Residential, which are trip rates per unit. It is important to note that the A- and D-class trip rates are calculated based on demand and are independent of floor area.

Table 23 All-Mode Trip Rates by Land Use

Land Use	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
C3 Residential	0.19	0.74	**0.93**	0.59	0.31	**0.90**
C2 Extra Care Housing	0.12	0.13	**0.25**	0.09	0.25	**0.33**
C1 Hotel	0.41	1.07	**1.48**	0.99	0.50	**1.49**
B1 Commercial business in hubs	2.40	0.21	**2.61**	0.17	1.99	**2.17**
B1 Commercial business park	2.75	0.24	**2.98**	0.20	2.28	**2.47**
B2 Light Industrial business park	1.14	0.10	**1.24**	0.08	0.95	**1.03**
A1 Retail	4.00	0.89	**4.89**	3.87	6.21	**10.08**
A2 Business A3 Café / Restaurant A4 Pub / Takeway	3.58	0.75	**4.32**	3.08	5.20	**8.27**
D1 Secondary schools	4.02	1.31	**5.33**	0.16	0.51	**0.70**
D1 Primary School	6.94	2.25	**9.19**	0.31	0.92	**1.27**
D1 Nursery	9.60	2.69	**12.29**	0.55	2.52	**3.08**
D1 Community Centre	0.34	0.04	**0.38**	0.22	0.45	**0.67**
D1 Health	1.61	0.30	**1.91**	0.64	1.63	**2.28**
D2 Sports pavilion D2 Indoor sports hall	1.63	0.18	**1.81**	0.72	2.04	**2.76**

As described in section 2.2, the on-site facilities and services (A- and D-class land uses) would be provided at a scale that is sufficient to meet many of the demand requirements of the Otterpool Park residents and will not be designed to attract significant trips from off-site locations. This policy is intended to minimise the number of off-site external trips required to be made by Otterpool Park residents for shopping and services and minimise the number of trips attracted to the site by people living outside Otterpool Park. This is in-keeping with the aspirational to make Otterpool Park a self-sufficient, sustainable settlement that minimises impact on local transport networks.

The precise level of provision of A- and D-class land uses required to meet the demand of Otterpool Park residents will be defined by further retail and community service studies. The precise floor area requirements of these land uses are therefore to be confirmed, which means that the trip rates for these land uses are likely to increase or decrease depending on the floor area that is deemed to be required. However, since the demand for the A- and D-class land uses is influenced by the number of Otterpool Park residents and not by the floor area of these land uses, the number of trips these land uses would attract would not change.

10 External Trip Reductions

10.1 Introduction

In the previous Chapters, we calculated the number of trips each proposed land use is expected to generate/attract. Some of the trips assigned to different land uses will be made by a single person in a single journey as part of a chain of linked trips. For example, a person may leave home and make a trip to the health centre before going to work and then make a trip to the shops after leaving work before arriving home. Using the method described above, each visit to the four land uses – home (C3), the health centre (D1), work (B1/B2) and retail (A1) – would generate 1 arrival and 1 departure trip for each land use, thus registering a total of 8 one-way trips. However, as each visit is made as part of a chain of linked trips, the actual number of one-way trips made would be 4. When considering the number of trips made by people living externally to the site, this would have the effect of overestimating the number of external trips as some trips would be made internally as linked trips.

In addition, some of the trips originating from external locations are likely to already be present on the transport networks and will in future be transferred to the Otterpool Park site. These trips are therefore already present on the transport networks and would also have the effect of overestimating the number of external trips if they were counted as new trips on the networks.

These trips must therefore be discounted from the trip generation before an impact assessment is undertaken. This Chapter considers the trip reductions that should be made to incoming external trips for this purpose.

10.2 Linked Trip Reductions

Table 24 presents linked trip information from NTS data. The data considers what is the next trip purpose for a traveller having completed their main trip purpose. If the next trip purpose is to travel home, then the trip is not considered to be linked to other trips. Where the next trip purpose is not to travel home, a linked trip has been made.

Table 24 Next Trip Purpose following Main Trip

Next trip purpose		Main Trip Purpose				
		Commuting / Business	Escort Education	Shopping	Other	All purposes
Commuting	Trip linked to main trip purpose	9%	9%	2%	12%	11%
Education		0%	2%	0%	5%	4%
Escort education		2%	3%	0%	4%	4%
Shopping		5%	4%	6%	13%	11%
Other escort		3%	5%	1%	7%	6%
Personal business		2%	2%	1%	6%	5%
Visit friends (leisure)		3%	3%	5%	10%	9%
Other leisure		2%	2%	2%	11%	9%
Home	Not linked	75%	71%	81%	31%	43%
Total		**100%**	**100%**	**100%**	**100%**	**100%**
% Linked Trips		**25%**	**29%**	**19%**	**69%**	**57%**

Table 24 shows that, when considering all purposes together, 57% of trips are linked to other trips.

To calculate the trip reductions that this data suggests is applicable, we have considered what trip reduction is applicable to other trip purposes for each main trip purpose. For example, the data suggests that 5% of all trips where the main trip purpose is Commuting / Business includes a linked Shopping trip. The number of Shopping trips linked to Commuting trips is therefore equal to 5% of the total number of Commuting trips. A reduction in Shopping trips to the value of 5% of the total number of Commuting trips is therefore applicable.

This calculation was applied to all trip purposes to derive the applicable trip reduction numbers for each trip purpose. Table 25 presents the resulting percentage trip reduction applied to incoming external trips for these trip purposes.

Table 25 Linked Trip Reductions applied to Incoming External Trips by Purpose

Trip Purpose	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Commuting	16%	36%	**18%**	22%	11%	**12%**
Education	8%	7%	**8%**	100%	49%	**56%**
Education escort	22%	14%	**20%**	100%	100%	**100%**
Shopping	100%	100%	**100%**	100%	100%	**100%**
Leisure	100%	55%	**100%**	52%	100%	**100%**
Personal Business	100%	100%	**100%**	29%	100%	**79%**
Other escort	100%	100%	**100%**	0%	100%	**100%**
Total	**14%**	**25%**	**17%**	**35%**	**15%**	**20%**

The high percentage reductions for Shopping, Leisure and Personal business trips reflect the fact that these land uses are not expected to attract trips from off-site locations for the sole purpose of visiting those land uses, as described in Chapters 2 and 9. Instead, people using these land uses are likely to be ~~made by~~ incoming commuters or parents taking their children to/from the on-site schools and would therefore be linked trips.

Table 25 shows that this method of the calculation of linked trips results in an overall AM peak trip reduction of 17% and a PM peak trip reduction of 20%.

APPENDIX A

Appendix A.1 Scoping Discussions with Kent County Council and Folkestone & Hythe District Council

Longman, Phillip

From:	Matt.Hogben@kent.gov.uk
Sent:	13 June 2017 08:35
To:	Phillip Longman; James.Hammond@shepway.gov.uk
Cc:	Kearney, Rebecca; Anthony James; Myers, Emily; Janice Hughes
Subject:	RE: Otterpool Park: Trip Generation Method Note
Follow Up Flag:	Follow up
Flag Status:	Completed

Hi Phil

Thank you for this. I can confirm that this is satisfactory. I would be grateful if you could send through an amended method note in due course.

Regards

Matthew Hogben | Principal Transport and Development Planner | Ashford and Shepway | Highways and Transportation | Kent County Council | Ashford Highway Depot, 4 Javelin Way, Henwood Industrial Estate, Ashford, Kent, TN24 8AD | 03000 41 81 81 | www.kent.gov.uk

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From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 09 June 2017 20:04
To: Hogben, Matt - GT KH; James Hammond (James.Hammond@shepway.gov.uk)
Cc: Kearney, Rebecca; Anthony James; Myers, Emily; Janice Hughes
Subject: RE: Otterpool Park: Trip Generation Method Note

Matt, James

I provide my responses to your comments. Thank you very much again for these comments as they were a great help.

- **The land use quantum is different in this paper compared to the mode splits paper. Can you confirm which one is correct?**

The quantum in the Mode Splits paper was the most up-to-date at the time of issue. However, as we mention in both papers, the quantum is evolving as the masterplan develops and will not be fixed just yet. The purpose of these papers is to agree the method and not the trip numbers.

- **Page 4, tables 3 and 4. Should be trip rate not be per unit rather than per 100 square metres?**

You are correct – our residential trip rates are based on unit numbers not floor areas. The hotel trip rate is based on floor area.

- **In terms of the trip rates for both the extra care housing, residential and hotel, I do not see it to be appropriate to use sites in Greater London (due to far greater population range and also better accessibility to public transport) and Ireland (likely to be more rural that the development site). I would also suggest that only sites with a population of up to 125,000 within 5 miles should be included as these sites will represent the similar locational characteristics of Otterpool Park given its position within the Shepway District.**

I have amended the TRICS data extraction to discount all sites in Ireland and in the highlands of Scotland and sites with a population of greater than 125,000 within 5 miles. The attached document presents the results. The result is an increase of around 1,000 trips in the AM peak and 1,500 trips in the PM peak.

- **Table 7 - I don't think that the primary and secondary schools create enough jobs. Normally we say that a 1 form entry primary school generates 20 jobs and a 2 form entry primary school generates 40 jobs. If we have 7 2FE primary schools then this will generate 280 jobs. Likely the secondary schools should create more jobs. Normally a 5 form entry secondary school generates approximately 70 jobs.**

We are happy to take your advice on these assumptions. We have therefore adjusted our trip model to assuming the following:

1. 70 jobs per secondary school
2. 40 jobs per primary school

We have also adjusted the number of nursery school jobs to 20 per school.

- **Table 8 – I would suggest that for D1 Health, the number of jobs for on-site residents at 50% appears to be quite high. I would suggest a lower figure of 30% given that most of the jobs will be skilled ones such as doctors, nurses, health professionals etc.**

We have amended the percentage of jobs created by the D1 Health land use that will be filled by on-site residents from 50% to 30%.

- **Table 10 – Please check the calculations as they do not appear to tally with the % amount.**

There was a line missing from the table that should provide the answer to this. The table below shows the total on-site residential population in the first line. The percentages in normal style (not italics) are percentages of this total. Please note, the value for the total population is expected to change as more detail regarding the type of housing proposed emerges.

Employment Type	Population			
	C3 Residential		C2 Extra Care Housing	
	%	Persons	%	Persons
Total Population	100%	26,431		960
In employment	43.1%	11392	10%	92
Employee: Full-time	25.4%	6704	2.4%	23
Do not Work from home	*88%*	*5900*	*88%*	*20*
Daily attendance	*85%*	*5015*	*85%*	*17*
Self-employed	7.4%	1958	3.3%	32
Do not Work from home	*88%*	*1723*	*88%*	*28*
Daily attendance	*85%*	*1464*	*85%*	*24*
Employee: Part-time	10.3%	2730	3.9%	37
Do not Work from home	*88%*	*2402*	*88%*	*33*
Daily attendance	*43%*	*1038*	*43%*	*14*
Total Daily Attendance		**7,517**		**55**
TOTAL	7,572			

- **Table 16 – Medical. The 80% figure for % to on-site land uses for medical seems high as there are no proposals for a hospital or an A&E department at Otterpool Park. I would suggest a figure of 65-70% is more appropriate.**

We have reduced the percentage of the total number of health trips generated by on-site residents that will be internal trips from 80% to 70%.

- **Table 19 – I'm not sure how the trip rate for the A2/A3/A4 has been calculated. I have worked out 530 trips in the AM Peak and 795 trips in the PM Peak. Please provide the calculations as to how this has been worked out. This will also affect table 21.**

I attach an extract from the trip model (Otterpool Park Retail Trip Generation v1.1). The first sheet recreates Table 19 with updated trip numbers that reflect the changes outlined above. The remainder of the spreadsheet provides the inputs (development quantum and trip rates), trip generation (for C3 Residential and C2 Extra Care housing) and the retail trip generation calculations from which Table 19 is created.

- **Table 22 – I'm not convinced that applying the average number of pupils per school for Kent is appropriate. I would have thought that once the development has been built out then the schools will be at full capacity as we see on new housing developments in Kent. I would therefore suggest that you use 1050 pupils per school for a 5 FE for secondary school and 420 pupils for a 2 FE for a primary school.**

We are happy to adopt these assumptions. We have changed our trip model to assume that each secondary school can accommodate 1,050 pupils and primary schools can accommodate 420 pupils.

- **Table 26 – I can't work out how you have the derived the total trip rate? You state that 52% of all trips generated by the on-site resident population for education purposes are expected to route to the on-site education land uses and then go on to say these trips equate to 0.45 education trips and 0.33 education escort trips per pupil space in the AM peak..... This will also affect table 27.**

I attach another extract from the trip model related to education trip generation (Otterpool Park Education Trip Generation v1.1). This provides the same development quantum, trip rate and residential trip generation information as we included in the attached Retail Trip Generation extract, and also provides the Education trip generation calculations. The first sheet recreates Table 26 with updated trip generation to reflect the changes to the input assumptions described above.

- **Tables 30 and 31 – Please explain in further detail how you have calculated the internal and external trips. Shouldn't tables 30 and 31 added up equal table 28?**

You are quite correct, Table 30 and 31 should add up to equal Table 28. There were a number of inaccuracies in the three tables, mainly centred around the way Other escort trips were added. I attach another trip model extract (Otterpool Park Internal-External Trips v1.1) in which these tables are recreated in the first sheet. All subsequent sheets provide the calculations to the table. The first sheet includes a check to show how tables 30 and 31 now add up to table 28 (with the exception of a net of 3 residential trips in the AM peak and 2 in the PM peak)

From: Matt.Hogben@kent.gov.uk [mailto:Matt.Hogben@kent.gov.uk]
Sent: 09 June 2017 08:50
To: Phillip Longman <Phillip.Longman@arcadis.com>; james.hammond@shepway.gov.uk
Cc: Kearney, Rebecca <rebecca.kearney@arcadis.com>; Anthony James <Anthony.James@arcadis.com>; Myers, Emily <emily.myers@arcadis.com>
Subject: RE: Otterpool Park: Trip Generation Method Note

Dear Phil,

I met with James yesterday to go through the two papers yesterday. Please see my initial comments on the first paper below, it would be good to meet up to discuss these in more detail if this helps?

- The land use quantum is different in this paper compared to the mode splits paper. Can you confirm which one is correct?
- Page 4, tables 3 and 4. Should be trip rate not be per unit rather than per 100 square metres?
- In terms of the trip rates for both the extra care housing, residential and hotel, I do not see it to be appropriate to use sites in Greater London (due to far greater population range and also better accessibility to public

transport) and Ireland (likely to be more rural that the development site). I would also suggest that only sites with a population of up to 125,000 within 5 miles should be included as these sites will represent the similar locational characteristics of Otterpool Park given its position within the Shepway District.

- Table 7 - I don't think that the primary and secondary schools create enough jobs. Normally we say that a 1 form entry primary school generates 20 jobs and a 2 form entry primary school generates 40 jobs. If we have 7 2FE primary schools then this will generate 280 jobs. Likely the secondary schools should create more jobs. Normally a 5 form entry secondary school generates approximately 70 jobs.
- Table 8 – I would suggest that for D1 Health, the number of jobs for on-site residents at 50% appears to be quite high. I would suggest a lower figure of 30% given that most of the jobs will be skilled ones such as doctors, nurses, health professionals etc.
- Table 10 – Please check the calculations as they do not appear to tally with the % amount.
- Table 16 – Medical. The 80% figure for % to on-site land uses for medical seems high as there are no proposals for a hospital or an A&E department at Otterpool Park. I would suggest a figure of 65-70% is more appropriate.
- Table 19 – I'm not sure how the trip rate for the A2/A3/A4 has been calculated. I have worked out 530 trips in the AM Peak and 795 trips in the PM Peak. Please provide the calculations as to how this has been worked out. This will also affect table 21.
- Table 22 – I'm not convinced that applying the average number of pupils per school for Kent is appropriate. I would have thought that once the development has been built out then the schools will be at full capacity as we see on new housing developments in Kent. I would therefore suggest that you use 1050 pupils per school for a 5 FE for secondary school and 420 pupils for a 2 FE for a primary school.
- Table 26 – I can't work out how you have the derived the total trip rate? You state that 52% of all trips generated by the on-site resident population for education purposes are expected to route to the on-site education land uses and then go on to say these trips equate to 0.45 education trips and 0.33 education escort trips per pupil space in the AM peak..... This will also affect table 27.
- Tables 30 and 31 – Please explain in further detail how you have calculated the internal and external trips. Shouldn't tables 30 and 31 added up equal table 28?

I will send through my comments on the second paper, method for deriving mode splits this afternoon.

Regards

Matthew Hogben | Principal Transport and Development Planner | Ashford and Shepway | Highways and Transportation | Kent County Council | Ashford Highway Depot, 4 Javelin Way, Henwood Industrial Estate, Ashford, Kent, TN24 8AD | 03000 41 81 81 | www.kent.gov.uk

---

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 31 May 2017 16:22
To: Hogben, Matt - GT KH; james.hammond@shepway.gov.uk
Cc: Kearney, Rebecca; Anthony James; Myers, Emily
Subject: Otterpool Park: Trip Generation Method Note

Dear Matt and James,

Many thanks for your time so far on the Otterpool Park project. I attach a note describing our proposed method for the calculation of trips generated by the proposed development. The note includes:

1. Current masterplan proposals in terms of development quantum by land use
2. Proposed method for deriving the number of trips generated by each land use
3. Proposed method for considering trip reductions related to linked trips

I will follow this note with two further notes relating to our proposed method for deriving mode splits and for the distribution of trips.

I would be very grateful if you could review this note and let me know your thoughts on the proposed method. I would be very happy to answer any questions you may have and discuss how we can agree a method that will enable us to begin testing the development proposals.

Kind regards,

Phil

Phillip Longman
Associate Technical Director
Transport Planning & Urban Design

Phillip.Longman@arcadis.com
Arcadis Consulting (UK Limited)
Bernard Weatherill House, 8 Mint Walk, Croydon CR0 1EA

T: 020 3014 9100
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Appendix A.2 Scoping Discussions with Highways England

Longman, Phillip

From:	WALKDEN, NIGEL <Nigel.Walkden@highwaysengland.co.uk>
Sent:	06 March 2018 14:33
To:	Phillip Longman
Subject:	RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report
Follow Up Flag:	Follow up
Flag Status:	Completed

Hi Phil,

Thank you for sending the details through.

We're generally content with all of the points in the email below. In terms of the documentation sent the approach using the gravity model approach for external vehicle trips looks acceptable. The TRICS outputs look acceptable on this occasion - we wouldn't necessarily agree on exclusion of the neighbourhood centre sites but the percentage reductions in doing so are not excessive.

Section 2.5 of your traffic survey note mentions forecasting using SETRM. Can you explain what this is – do you mean SERTM?

We would question any forecasting based upon SERTM. This model is effectively a base from which more detailed models can be produced as it has limited disaggregation of matrices and limited network coverage. Any forecasts even those produced recently are likely to be out of date as Local Authority OANs locally (Ashford, Shepway and Dover for example) are evolving all the time.

I hope this is useful. Please let me know if you have any queries.

Kind Regards

Nigel Walkden

Nigel Walkden BA MSc MBA CMILT
Managing Consultant, Transportation

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Epsom Gateway, 2 Ashley Avenue, Epsom, Surrey KT18 5AL

Sent on behalf of Highways England

Also contactable at Highways England, Guildford

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Web: http://www.highways.gov.uk

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 15 February 2018 17:23
To: WALKDEN, NIGEL
Cc: Nicolas Contentin; Bown, Kevin; Maria Rosa Gallego; Kearney, Rebecca
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Apologies – gravity model spreadsheet now attached.

From: Phillip Longman
Sent: 15 February 2018 17:09
To: 'WALKDEN, NIGEL' <Nigel.Walkden@highwaysengland.co.uk>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>; Maria Rosa Gallego <MariaRosa.Gallego@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Dear Kevin and Nigel

Further to our telephone call towards the end of last year, I provide responses to your comments on our proposed scope and method of assessment.

(1) Section 1.1 refers to KCC and SDC – *it should also include Highways England (noted this is to be included in the next draft).*

As noted in our response to KCC, this will be updated in the final draft.

---

(2)* The baseline is proposed to be 2017 - *this should be reflective of the year of submission e.g. 2018 (noted this has been acknowledged and will be amended).

Noted. Our baseline year will be 2018. We will use the NTM AF15 dataset and TEMPro v7.2 to growth the 2016 and 2017 traffic surveys to 2018.

---

(3) Future forecast year is proposed to be 2037 to reflect end of local plan period. The 2037 forecast will include the full development scheme. *We will required information on what phases / proportion of the development will be built by 2037 and what will be after that. If a significant proportion of the development will be post-2037 we may require a further future year forecast.*

Our scoping report proposed to assess future year scenarios for 2027 and 2037. Following our discussions, we propose to assess the following:

1. End of Local Plan year – 2037
2. Year of full occupation after total build-out – year to be confirmed

The Transport Assessment scoping note will be updated to reflect this.

---

(4)* Peak hours are to be assessed (0800-0900 and 1700-1800) *– agreed this is sensible however will need to be confirmed on review of traffic survey data.

As explained in the Traffic Survey Data Analysis report issued on Monday (and attached again here for your reference), we have analysed the traffic survey data and can confirm that the AM and PM peak hours are 0800-0900 and 1700-1800.

---

(5)* Committed development (TBC) is to be taken into account. *This should include consideration of the overnight parking element of the Lorry Holding Area (500 spaces) and all sites allocated within relevant Local Plan(s). We would also wish to receive your thoughts on how Otterpool will incorporate resilience such that it continues to be able to operate when the likes of Operation Stack (or it's successors) are implemented.

As explained in the Traffic Survey Data Analysis report, we intend to utilise a combination of the SETRM and TEMPro to forecast flows. It is assumed that committed developments will be included in this data.

As per our discussion regarding Operation Stack; the Transport Assessment will provide a narrative describing the likely affect of Operation Stack on the accessibility of Otterpool Park. The narrative will include an outline of measures to reduce any impact that may arise. It is our intention to produce a draft narrative for discussion and agreement with you prior to submitting the Transport Assessment with the application.

---

(6) Trip generation, mode share and distribution have been discussed separately so not included in this note. *We have no record of being consulted on this element of the assessment so are unable to comment.*

Technical notes covering trip generation, mode split and distribution methods have now been provided and have formed the basis of subsequent correspondence with Nigel. The technical notes will be updated once scoping discussions have concluded.

The most recent correspondence from Nigel (email directly below in this chain) provided a TRICS analysis of trips per job for the business park as it was noted that the TRICS trip rates were greater than the rates derived by our method. As we previously noted, we were trying to move away from using TRICS to derive trip rates as it is difficult to find sites within the database that we think would accurately reflect the very site-specific characteristics and conditions that Otterpool Park will offer. However, we understand your concerns and have considered the use of TRICS for the employment land uses proposed for the business park. We have run our own TRICS analysis, which I believe differs from yours in just two ways, as follows:

1. We have used the latest version 7.4.4 of TRICS. This has provided two additional Business Park sites; and
2. We have excluded sites located in neighbourhood centres. This approach is consistent with the method we used to derive the residential trip rates.

I attach the resulting TRICS output file and welcome your comment.

---

(7) The extent of assessment was discussed with HE on the 24th May. It includes (for the SRN):

- **M20 J9 (referred to as # 27)**
- **M20 J10 (# 1)**
- **M20 J11 (# 2)**
- **M20 J11a (# 21)**
- **M20 J12 (# 22) – *note this is a roundabout not junction as quoted***
- **M20 J13 (# 23) – *note this is a roundabout not junction as quoted***
- **A260 Spitfire Way / White Horse Hill / A20 Slip Roads**

All of the above will be assessed using appropriate LinSig, Arcady or Picady software, as well as a VISSIM model being produced to assess the local junctions most likely to be impacted, expect for M20 J9 and A260/A20 which will be considered in terms of percentage increases in flows.

Dependant on traffic flow volumes, there may be a requirement for merge / diverge assessments as per DMRB TD22/06 at relevant junctions.

The assessment of M20 J9 in terms of percentage increases in flows is not agreed – in terms of the percentage impact approach, a small percentage increase in a large volume of traffic could be a large number of additional vehicles. Equally in some places a single additional vehicle could cause safety and/ or operational issues at a junction. Therefore percentage increases in flows are not considered appropriate when assessing impacts/mitigation. While increase in traffic volume is an element which needs to be considered a key concern will be the impact of the development on safety and operation, which relates to changes in queues and delays. We will therefore require evidence that the proposed development will not increase queues and delays to a point where they impact the safety and operation of the SRN.

M20 J9 and the A260/A20 junction will be assessed in LinSig and Arcady respectively. Mitigation will be proposed, if required, to ensure the junction operates without significant detrimental impact on safety and queuing.

Consideration of the impact of the development on M20 J10a should also be included.

The M20 J10a will be included in our assessment. We anticipate that the forecast flows for this junction would be provided from the SERTM.

---

(8) The distribution of development vehicle flows between the site and a number of off-site origins/destinations has been calculated using a gravity model method. This distribution will be input a VISUM model to distribute the development flows on the network and allow us to identify the likely routing. A volume to capacity ratio analysis will then be carried out to identify sections across the network which perform above an 85% ratio and these junctions will then be assessed in a VISSIM model. The development flow distribution will be extracted from the VISUM model and input the VISSIM model statically. The model will be validated against the observed turning counts and journey time captured on site. *This appears to be a sensible approach in principle - we would need to see the gravity model to comment further.*

The gravity model spreadsheet is attached to this email. The model utilises route distances and travel times between the site and off-site destinations as explained in the Trip Distribution Method Note. It is important to note that the gravity models were used to provide an initial indication of the likely split of vehicle trips between the M20 and off-motorway locations. For modelling purposes, this split will be determined by VISUM. The results of the Residential gravity model provides us with the distribution of non-work trips to/from 82 off-site locations (Column N in the Residential gravity model sheet in the attached spreadsheet) and is based on the size of the population at the of-site location and the distance to the location from Otterpool Park. The values for sigma and mu were derived through calibration with NTS trip distance information, as described on page 19 of the Trip Distribution Method Note. In the case of the commuting trips, the gravity model is not used for assessment purposes as the distribution (Column O in the Commuting gravity models) is taken directly from Census.

Please let me know if you have any further queries. I would like to catch up with you soon regarding the attached TRICS analysis before we update and finalise the Transport Assessment scoping note and accompanying technical notes.

Kind regards,

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 06 November 2017 15:53
To: Phillip Longman <Phillip.Longman@arcadis.com>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Phil,

Attached the TRICS output. I'll give you a call tomorrow about the modelling.

Thanks,
Nigel

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 02 November 2017 18:20
To: WALKDEN, NIGEL
Cc: Nicolas Contentin; Bown, Kevin
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel

Thanks for your response. I will change the PM peak trip purpose percentages to match the 5-6pm values in the NTS table as you suggest. This was an oversight on our part.

Could you please send me the TRICS information from which you derived the vehicle trip rates?

We will continue to work through these trip generation issues, but would it be possible to have a discussion relating to the scope of the highway modelling with reference to the initial responses provided by Kevin further down this email chain?

Many thanks

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 02 November 2017 17:45
To: Phillip Longman <Phillip.Longman@arcadis.com>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Phil,

I've looked through everything again now. In terms of the distribution and mode share reports I am generally content with the derivations.

For the external B1 trips you discuss below you say that the vehicle trip rates are 0.07 and 0.06 vehicle trips lower than the rates that I derived from TRICS. While this does not sound like a large number of journeys, when you calculate the actual number of external vehicle trips it presumably adds up to a large number. Admittedly your B1 has a large proportion of external trips but if you look at employment as a whole the containment of 42% is similar as a percentage to that for Shepway commutes of up to 5km as a whole from the 2011 Census, so the proportion of external commuting trips overall looks reasonable, not high.

Therefore I think this needs some more thought. Travel planning measures for example for longer commutes are less effective than for short commutes due to fewer options, so managing down the longer vehicle trips (particularly such a high proportion) would be very challenging.

The only other issue is your use of data from the NTS0502 table on peak hour trip purposes. Your PM peak hour has been derived from 4-5PM proportions whereas it should come from 5-6PM proportions. 5-6PM shows a much higher percentage of commuting trips than you have quoted.

I thought it better to put this on paper before taking further as the numbers and complexity of your calculations makes it difficult to process over the phone. I can however discuss when I'm back in the office next week.

Have a good weekend,

Nigel

Nigel Walkden BA MSc MBA CMILT
Managing Consultant, Transportation

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From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 25 October 2017 11:29
To: WALKDEN, NIGEL
Cc: Nicolas Contentin
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel

Many thanks for your comments.

I attach a spreadsheet which hopefully explains how we derived the AM and PM peak trip purposes from NTS data. In summary; The AM and PM peak NTS trip purpose data included 8 trip purposes, while the daily NTS trip purpose data provided the more comprehensive list of 14 trip purposes that were relevant to Otterpool Park. We therefore used the daily NTS trip purpose data to sub-divide the peak hour data.

We regard to B1 vehicle trip rates; Our latest trip generation calculations (updated slightly from the version described in the technical note), assumes all-person trip rates of 0.39 per job in the AM peak and 0.40 in the PM peak. In the mode share technical note we show that the car driver mode share for external work trips is derived to be 80%. This generates an AM peak vehicle trip rate of 0.31 trips per job and a PM peak trip rate of 0.32 trips per job.

These trip rates are 0.07 and 0.06 trips per job lower than the rate you have derived from TRICS. Due to the nature of the site, we were trying to move away from using TRICS to derive trip rates as it is difficult to find sites within the database that we think would accurately reflect the very site-specific characteristics and conditions that Otterpool Park will offer. The mode share technical note explains how the 80% car driver mode share was derived from Census 2011 data adjusted for distance travelled. The Otterpool Park business park will be directly adjacent to Westenhanger Station and, with effective travel planning, I would anticipate that a lower car driver mode share than the 80% suggested by current travel behaviour could be achieved at Otterpool Park.

In addition, the total number of B1 jobs assumed in the calculations to be filled by on-site residents is just 10%. We consider that work trip containment of just 10% is conservative and that our calculations therefore represent a robust assessment of external trips.

Hopefully this information goes some way to answering your questions.

Please let me know when would be a suitable time to arrange a call.

Kind regards,

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 17 October 2017 14:15
To: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Phillip Longman <Phillip.Longman@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nicolas,

It is taking time to sense check everything that has been done. I have been through everything now but will need to go over it all again to make sure I haven't missed anything.

To date the issues that stand out are the business B1 trip rates that for cars are lower than expected for external trips. In your trip generation note para 4.3.2 you are using a peak hour trip rate of 0.35 person trips per job for local trips and assuming the same for longer distance external trips. I would have thought that the vast majority of part time jobs involved local commutes so the peak hour trip rates will be lower than for the external trips. I did a quick assessment using TRICS for business parks excluding London and non-England, town centre and edge of town centre and came up with 0.38 vehicle trips per employee.

Table 5 of the trip generation note gives NTS trip purposes for the AM and PM peaks. Can you show how these have been derived? I got very close re-creating the employment proportions but not some of the other purposes.

Feel free to give me a call to discuss if you need to. In the meantime I'll go through everything again.

Thanks

Nigel

Nigel Walkden BA MSc MBA CMILT
Managing Consultant, Transportation

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From: Nicolas Contentin [mailto:Nicolas.Contentin@arcadis.com]
Sent: 17 October 2017 10:31
To: Phillip Longman; WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel,

What time should I call you?
I have a meeting between 11:00 and 12:00. I also need to leave at 15:30 today.

Let me know when it is suitable to call you.

Regards,

Nicolas Contentin
Principal Transport Planner

Arcadis consulting UK Ltd,
34 York Way,
Kings Cross
London N1 9AB

☎ Direct : +44 (0) 2030 149 167
✉ Email: Nicolas.Contentin@Arcadis.com
Web: www.arcadis.com

From: Phillip Longman
Sent: 16 October 2017 11:05
To: WALKDEN, NIGEL <Nigel.Walkden@highwaysengland.co.uk>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel

That's no problem. I am not available tomorrow, but my colleague Nico will be.

Kind regards,

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 16 October 2017 10:44
To: Phillip Longman <Phillip.Longman@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Phil,

I'm still going through your reports at the moment, there is a lot to digest. I suggest talking through these tomorrow if you are available.

Nigel

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 13 October 2017 11:08
To: WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Good morning Nigel

That is perfectly understandable. I attach what I believe is the last correspondence we had on this matter.

Would you be available to chat late morning on Monday instead?

Kind regards,

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 13 October 2017 11:03
To: Phillip Longman <Phillip.Longman@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Good Morning Phil,

I will need to go through our last response with regards to the modelling before we talk. Late afternoon would be preferable if you wish to discuss today.

Thanks

Nigel

Nigel Walkden BA MSc MBA CMILT
Managing Consultant, Transportation

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From: WALKDEN, NIGEL
Sent: 10 October 2017 15:57
To: 'Phillip Longman'
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Phil,

Yes I am, after 10.30. If you want to call me the number i [redacted]

Nigel

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 10 October 2017 15:25
To: WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel

Would you be available on Friday?

Regards

Phil

-----Original Message-----
From: WALKDEN, NIGEL [Nigel.Walkden@highwaysengland.co.uk]
Received: Tuesday, 10 Oct 2017, 15:10
To: Phillip Longman [Phillip.Longman@arcadis.com]
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hello Phil,

Are you around later in the week?

Thanks,

Nigel

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 09 October 2017 13:21
To: Bown, Kevin; WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Dear Kevin, Nigel

I was hoping to give Nigel a call to go through these points you raise, but I do not seem to have Nigel's telephone number. Would you be able to send it to me?

Nigel – I was going to give you a call this afternoon, but if this is not convenient for you, please let me know when you would be available.

Kind regards,

Phil

From: Bown, Kevin [mailto:Kevin.Bown@highwaysengland.co.uk]
Sent: 25 August 2017 12:05
To: Phillip Longman <Phillip.Longman@arcadis.com>; 'Matt.hogben@kent.gov.uk' <Matt.hogben@kent.gov.uk>; 'James Hammond (James.Hammond@shepway.gov.uk)' <James.Hammond@shepway.gov.uk>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Planning SE <planningse@highwaysengland.co.uk>; Fisher, Rachael <Rachael.Fisher@highwaysengland.co.uk>; WALKDEN, NIGEL <Nigel.Walkden@highwaysengland.co.uk>
Subject: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Dear Phil

Our comments on your scoping report are as follows:

(1) Section 1.1 refers to KCC and SDC – *it should also include Highways England (noted this is to be included in the next draft).*

(2) The baseline is proposed to be 2017 - *this should be reflective of the year of submission e.g. 2018 (noted this has been acknowledged and will be amended).*

(3) Future forecast year is proposed to be 2037 to reflect end of local plan period. The 2037 forecast will include the full development scheme. *We will required information on what phases / proportion of the development will be built by 2037 and what will be after that. If a significant proportion of the development will be post-2037 we may require a further future year forecast.*

(4) Peak hours are to be assessed (0800-0900 and 1700-1800) – *agreed this is sensible however will need to be confirmed on review of traffic survey data.*

(5) Committed development (TBC) is to be taken into account. *This should include consideration of the overnight parking element of the Lorry Holding Area (500 spaces) and all sites allocated within relevant Local Plan(s). We would also wish to receive your thoughts on how Otterpool will incorporate resilience such that it continues to be able to operate when the likes of Operation Stack (or it's successors) are implemented.*

(6) Trip generation, mode share and distribution have been discussed separately so not included in this note. *We have no record of being consulted on this element of the assessment so are unable to comment.*

(7) The extent of assessment was discussed with HE on the 24th May. It includes (for the SRN):
- M20 J9 (referred to as # 27)

- M20 J10 (# 1)
- M20 J11 (# 2)
- M20 J11a (# 21)
- M20 J12 (# 22) – *note this is a roundabout not junction as quoted*
- M20 J13 (# 23) – *note this is a roundabout not junction as quoted*
- A260 Spitfire Way / White Horse Hill / A20 Slip Roads

All of the above will be assessed using appropriate LinSig, Arcady or Picady software, as well as a VISSIM model being produced to assess the local junctions most likely to be impacted, expect for M20 J9 and A260/A20 which will be considered in terms of percentage increases in flows.

Dependant on traffic flow volumes, there may be a requirement for merge / diverge assessments as per DMRB TD22/06 at relevant junctions.

The assessment of M20 J9 in terms of percentage increases in flows is not agreed – in terms of the percentage impact approach, a small percentage increase in a large volume of traffic could be a large number of additional vehicles. Equally in some places a single additional vehicle could cause safety and/ or operational issues at a junction. Therefore percentage increases in flows are not considered appropriate when assessing impacts/mitigation. While increase in traffic volume is an element which needs to be considered a key concern will be the impact of the development on safety and operation, which relates to changes in queues and delays. We will therefore require evidence that the proposed development will not increase queues and delays to a point where they impact the safety and operation of the SRN.

Consideration of the impact of the development on M20 J10a should also be included.

(8) The distribution of development vehicle flows between the site and a number of off-site origins/destinations has been calculated using a gravity model method. This distribution will be input a VISUM model to distribute the development flows on the network and allow us to identify the likely routing. A volume to capacity ratio analysis will then be carried out to identify sections across the network which perform above an 85% ratio and these junctions will then be assessed in a VISSIM model. The development flow distribution will be extracted from the VISUM model and input the VISSIM model statically. The model will be validated against the observed turning counts and journey time captured on site. *This appears to be a sensible approach in principle - we would need to see the gravity model to comment further.*

I hope our comments assist, but if you have any queries, please contact us. Rachael and I are both on leave for different periods over the next 2 weeks, so if you have any immediate queries, please contact Nigel.

Regards

Kevin Bown, Spatial (Town) Planning Manager BSc(Hons) MPhil CMS MRTPI

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From: Bown, Kevin
Sent: 08 August 2017 15:04
To: 'Phillip Longman'; Matt.hogben@kent.gov.uk; James Hammond (James.Hammond@shepway.gov.uk)
Cc: Nicolas Contentin; Planning SE; Fisher, Rachael; WALKDEN, NIGEL
Subject: RE: Otterpool Park development Transport scoping report

Dear Phil

Thanks for the TA Scoping. You should receive our response no later than 29 August, but hopefully sooner.

Team – please register as a pre-app under Otterpool folder and allocate to me.

Rachael/Nigel – I look forward to receiving your comments.

Regards

Kevin Bown, Spatial (Town) Planning Manager BSc(Hons) MPhil CMS MRTPI

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From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 08 August 2017 13:31
To: Matt.hogben@kent.gov.uk; James Hammond (James.Hammond@shepway.gov.uk); Bown, Kevin

Cc: Nicolas Contentin
Subject: Otterpool Park development Transport scoping report

Dear Matt, James and Kevin

I attach our proposed scope for the transport assessment for the Otterpool Park development. This report includes our proposed scope and method for the highway capacity modelling based on our discussion in May. It refers to, but does not include, the technical notes previously issued relating to the methods for trip generation, mode split and distribution. These notes will be updated and re-issued to reflect an agreed position at the appropriate time.

I would greatly appreciate your views on the proposed scope and would be happy to arrange any further meetings necessary to progress this.

Hopefully catch up with you all soon. If you wish to discuss anything in the meantime, please feel welcome to contact me.

Kind regards,

Phil

Phillip Longman
Associate Technical Director
Transport Planning & Urban Design

Phillip.Longman@arcadis.com
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APPENDIX B

Business Park Trip Rates: Revised method and Kent County Council agreement

MEMO

ARCADIS Design & Consultancy for natural and built assets

SUBJECT
Otterpool Park Business Park Trip Rates

DATE
21 April 2020

DEPARTMENT
Transportation

COPIES TO
James Farrar, James Hammond (Folkestone & Hythe District Council)

TO
Matt Hogben (Kent County Council)

OUR REF
KCC letter to James Farrar (FHDC) 11 July 2019

PROJECT NUMBER
10029956

FROM
Phillip Longman
T 020 3014 9100 E phillip.longman@arcadis.com

Otterpool Park

Kent County Council Comments on 2019 Application Transport Assessment

1.1 Introduction

In 2019, an outline planning application was submitted for the development of a new garden settlement accommodating up to 8,500 homes (use class C2 and C3) and use class D1, D2, A1, A2, A3, A4, B1a, B1b, B2, C1 development with related highways, green and blue infrastructure (access, appearance, landscaping, layout and scale matters to be reserved).

A Transport Assessment was produced to accompany the application, the scope of which was agreed with Highways England, Folkstone & Hythe District Council and Kent County Council. The agreed method of calculation of trip rates was set out in a Trip Generation Calculation Method Technical Note submitted as Appendix L to the Transport Assessment that accompanied the application.

In a letter dated 11 July 2019 sent to James Farrar (Folkestone & Hythe District Council), Kent County Council provided comments on the Transport Assessment submitted with the application. This package of information relates to the following comment (page 12 of the letter):

> *"The business park TRICS outputs submitted currently use sites with a far greater population range and therefore needs to be re-run accordingly."*

In a meeting held on 10th February 2020 with Kent County Council (Matt Hogben) and Folkestone & Hythe District Council (James Farrar and James Hammond), Arcadis explained that the trip rates used in the Transport Assessment for the business park were requested by Highways England. Arcadis agreed to provide further information to clarify the business park trip rates used.

This Memo provides the following information:

1.2 Highways England Business Park Trip Rate

This sheet sets out the selection criteria used to generate the trip rates requested by Highways England and the resulting number of trips by mode that were calculated to be generated by the whole development using the Highways England Business Park trip rates and the trip rates and method described in the Trip Generation Calculation Method Technical Note for all other land uses.

1.3 Kent County Council Business Park Trip Rates

This sets out the trip rates that would have been generated using the Kent County Council selection criteria and the resulting number of trips by mode that would have been generated by the whole development using the Kent County Council Business Park trip rates and the trip rates and method described in the Trip Generation Calculation Method Technical Note for all other land uses.

1.4 Trip Rate Comparison

Provides a comparison of the trip rates and total trips by mode generated by the Otterpool Park development using the two different methods for generating Business Park trip rates.

1.2 Highways England Business Park Trip Rates

Vehicle trip rates for the B-class land uses were agreed with Highways England in February 2018 following a period of discussion and refinement of the selection of sites within TRICS to derive the trip rates. The agreed trip rates are presented in Table 1.

Table 1 B-Class Land Use Vehicle Trip Rates per Job (Highways England method)

Land Use	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Business Park	0.30	0.04	**0.34**	0.03	0.23	**0.25**

The TRICS selection criteria used to generate the trip rates in Table 1 was as follows:

Regions/Areas: excluding sites in Greater London, Ireland and the highlands of Scotland

Location Types: Edge of Town

Suburban Area

Population: no filter

The development sites selected in TRICS 7.5.1 using these criteria are shown in Table 2.

Table 2 B-Class Land Use TRICS Sites Used to Derive Vehicle Trip Rates per Job (Highways England method)

Reference	Description	Town/City	Area	Location	No. of employees
CA-02-B-02	BUSINESS PARK	PETERBOROUGH	CAMBRIDGESHIRE	Edge of Town	510
CH-02-B-01	BUSINESS PARK	MACCLESFIELD	CHESHIRE	Edge of Town	44
DV-02-B-01	BUSINESS PARK	EXETER	DEVON	Edge of Town	51
GM-02-B-03	BUSINESS PARK	SALE	GREATER MANCHESTER	Edge of Town	300
GM-02-B-04	BUSINESS PARK	OLDHAM	GREATER MANCHESTER	Suburban Area	166
HC-02-B-02	BUSINESS PARK	PORTSMOUTH	HAMPSHIRE	Suburban Area	2800
LC-02-B-03	BUSINESS PARK	PRESTON	LANCASHIRE	Edge of Town	101
LN-02-B-02	BUSINESS PARK	LINCOLN	LINCOLNSHIRE	Edge of Town	105
SH-02-B-03	BUSINESS CENTRE	TELFORD	SHROPSHIRE	Suburban Area	60
TW-02-B-05	BUSINESS PARK	NEWCASTLE	TYNE & WEAR	Suburban Area	400
WG-02-B-02	BUSINESS PARK	READING	WOKINGHAM	Edge of Town	210
WM-02-B-02	BUSINESS PARK	COVENTRY	WEST MIDLANDS	Edge of Town	1300
WY-02-B-01	BUSINESS PARK	LEEDS	WEST YORKSHIRE	Suburban Area	120
WY-02-B-02	BUSINESS PARK	HUDDERSFIELD	WEST YORKSHIRE	Edge of Town	116

All-mode trip rates for the Business Park land use were derived from the vehicle trip rates in Table 1 by considering the car driver mode share for these land uses for external trips. Appendix C of the Trip Generation Calculation Method Technical Note[1] describes how the mode split for external work trips was derived and shows that the car driver mode share is 80%. This means that the trip rates shown in Table 1 represent 80% of the all-mode trip rates. This knowledge was used to calculate the all-mode trip rates per job as presented in Table 3.

[1] Otterpool Park Trip Generation Calculation Method Technical Note (September 2018)

Table 3 B-Class Land Use All-Mode Trip Rates per Job (Highways England method)

Land Use	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Business Park	0.37	0.04	**0.42**	0.03	0.28	**0.31**

Using these trip rates for the business park, and the trip rates and method described in the Trip Generation Calculation Method Technical Note for all other land uses, the total number of trips by mode generated by the Otterpool Park Development is presented in Table 4.

Table 4 Total Otterpool Park Trips by Mode for All Land Uses (using Highways England selection criteria for Business Park trips)

Mode	AM Peak			PM Peak		
	Arrive	Depart	A + D	Arrive	Depart	A + D
Driver	1,980	1,868	**3,847**	1,679	1,905	**3,584**
Passenger	318	370	**687**	501	493	**994**
Taxi	9	9	**18**	7	8	**15**
Motorcycle	40	36	**76**	28	34	**61**
Train	50	46	**96**	34	40	**74**
Bus / Minibus / Coach	209	189	**398**	135	162	**298**
Light Rail	1	1	**2**	1	1	**2**
Bicycle	159	81	**240**	64	115	**179**
On foot	2,112	923	**3,034**	840	1,136	**1,975**
Total	**4,879**	**3,521**	**8,400**	**3,288**	**3,895**	**7,183**

Reductions were applied to external trips to account for trips assigned to different land uses made by a single person in a single journey as part of a chain of linked trips using NTS data, as described in the Trip Generation Calculation Method Technical Note.

1.3 Kent County Council Business Park Trip Rates

The TRICS selection criteria requested by Kent County Council to generate the Residential trip rates was as follows:

Regions/Areas: excluding sites in Greater London, Ireland and the highlands of Scotland

Location Types: Edge of Town

Suburban Area

Population: excluding sites with population greater than 125,000 within 5 miles

TRICS v7.7.1 was used to generate vehicle trip rates using these criteria. The sites selected are shown in Table 5. The TRICS output reports are contained in Appendix A to this Memo.

Table 5 B-Class Land Use TRICS Sites Used to Derive Vehicle Trip Rates per Job (Kent County Council method)

Reference	Description	Town/City	Area	Location	No. of employees
CH-02-B-01	BUSINESS PARK	MACCLESFIELD	CHESHIRE	Edge of Town	44
FA-02-B-02	BUSINESS PARK	FALKIRK	FALKIRK	Edge of Town	500*
FI-02-B-01	BUSINESS PARK	DUNFERMLINE	FIFE	Edge of Town	364
ST-02-B-04	BUSINESS PARK	STAFFORD	STAFFORDSHIRE	Edge of Town	1082
WY-02-B-02	BUSINESS PARK	HUDDERSFIELD	WEST YORKSHIRE	Edge of Town	116

* *number of employees for the Falkirk site was estimated*

The details of each site were reviewed to establish their relevancy to establishing trip rates for the Otterpool Park development. The site record information for the Falkirk site stated that the number of employees recorded in the site information was estimated. Since the Otterpool Park development utilises trip rates per job, it is important that the number of employees recorded is accurate. For this reason, the Falkirk site was excluded from our TRICS assessment. This site was not included in the derivation of trip rates in the Highways England method (Table 2). The resulting trip rates per job for the remaining sites are shown in Table 6.

Table 6 B-Class Land Use Vehicle Trip Rates per Job (Kent County Council method)

Land Use	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Business Park	0.32	0.03	**0.35**	0.02	0.27	**0.29**

Using the same method to convert to all-mode trip rates as described above, the all-mode trip rates are shown in Table 7.

Table 7 B-Class Land Use All-Mode Trip Rates per Job (Kent County Council method)

Land Use	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Business Park	0.40	0.03	**0.44**	0.03	0.33	**0.36**

Using these trip rates for the business park, and the trip rates and method described in the Trip Generation Calculation Method Technical Note for all other land uses, the total number of trips by mode that would be generated by the Otterpool Park Development is presented in Table 8.

Table 8 Total Otterpool Park Trips by Mode for All Land Uses (using Kent County Council selection criteria for Business Park trips)

Mode	AM Peak			PM Peak		
	Arrive	Depart	A + D	Arrive	Depart	A + D
Driver	2,057	1,890	**3,947**	1,747	2,097	**3,844**
Passenger	322	364	**685**	481	503	**983**
Taxi	10	9	**19**	7	9	**16**
Motorcycle	41	36	**78**	29	37	**67**
Train	52	47	**99**	38	46	**84**
Bus / Minibus / Coach	213	189	**402**	138	175	**313**
Light Rail	1	1	**2**	1	1	**2**
Bicycle	165	82	**246**	66	129	**194**
On foot	2,079	939	**3,017**	842	1,124	**1,966**
Total	**4,940**	**3,556**	**8,496**	**3,348**	**4,120**	**7,469**

1.4 Trip Rates Comparison

Table 9 presents a comparison of the Business Park trip rates generated by the Highways England and Kent County Council methods.

Table 9 B-Class Land Use All-Mode Trip Rates per Job

Land Use	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Highways England	0.37	0.04	**0.42**	0.03	0.28	**0.31**
Kent County Council	0.40	0.03	**0.44**	0.03	0.33	**0.36**
Difference (KCC - HE)	0.03	-0.01	**0.02**	0.00	0.05	**0.05**

Table 9 shows that the combined arrival and departure trip rates generated by the Kent County Council method is higher than the Highways England trip rates used in the assessment in the AM peak by 0.02, and greater in the PM peak by 0.05.

Table 10 presents the difference in the total number trips by mode generated by Otterpool Park by deducting the number of trips generated by the Highways England method from the number of trips generated by the Kent County Council method.

Table 10 Difference in Total Otterpool Park Trips by Mode for All Land Uses (Kent County Council Business Park trip rates minus Highways England Business Park trip rates)

Mode	AM Peak			PM Peak		
	Arrive	Depart	A + D	Arrive	Depart	A + D
Driver	77	22	**99**	68	191	**259**
Passenger	4	-6	**-2**	-20	10	**-10**
Taxi	0	0	**0**	0	1	**1**
Motorcycle	1	0	**2**	1	4	**5**
Train	2	1	**4**	4	6	**10**
Bus / Minibus / Coach	4	0	**4**	3	12	**15**
Light Rail	0	0	**0**	0	0	**0**
Bicycle	5	1	**6**	2	13	**15**
On foot	-33	16	**-17**	3	-12	**-9**
Total	**61**	**35**	**96**	**61**	**226**	**286**

A comparison of the trip generation by mode shows that the Kent County Council trip generation method for Business Park land use would generate 83 more car driver trips in the AM peak and 259 more in the PM peak compared to the Highways England method. The slight reduction in the number of passenger and trips on foot can be explained by a slight shift in the ratio of the number of internal (trips made within Otterpool Park) and external (trips made to/from locations outside of the site) trips, as the mode splits for internal and external trips are different.

1.5 Summary and Next Steps

This Memo provides a comparison of the Business Park trip rates agreed with Highways England for the 2019 Otterpool Park Transport Assessment and trip rates generated using the method suggested by Kent County Council. The result is that the total number of trips generated (all other things being equal) would be greater using the Kent County Council method and the majority of the increase would be related to vehicle trips.

Please note that the calculations in this Memo are based on the Otterpool Park schedule of development quantum submitted with the 2019 Transport Assessment. This schedule is expected to be updated for the revised application and thus the total number of trips by mode would also change.

We request a response from Kent County Council on the information provided in this note and a further discussion to confirm the Business Park trip rates to be used in the revised Otterpool Park Transport Assessment.

APPENDIX A
TRICS outputs for Kent County Council selection criteria

Calculation Reference: AUDIT-111301-200421-0408

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : B - BUSINESS PARK
VEHICLES

Selected regions and areas:

06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
11	SCOTLAND		
	FI	FIFE	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 Employees
Actual Range: 44 to 1082 (units:)
Range Selected by User: 0 to 6069 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 14/10/19

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

Selected survey days:
Monday 2 days
Wednesday 2 days

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

Selected survey types:
Manual count 4 days
Directional ATC Count 0 days

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

Selected Locations:
Edge of Town 4

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

Selected Location Sub Categories:
Industrial Zone 1
Commercial Zone 1
Development Zone 1
No Sub Category 1

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

Secondary Filtering selection:

Use Class:
B1 4 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	3 days
15,001 to 20,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	2 days
100,001 to 125,000	1 days

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

Car ownership within 5 miles:

1.1 to 1.5	4 days

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

Travel Plan:

Yes	1 days
No	3 days

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

PTAL Rating:

No PTAL Present	4 days

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

LIST OF SITES relevant to selection parameters

1 CH-02-B-01 BUSINESS PARK CHESHIRE
WINTERTON WAY
MACCLESFIELD

Edge of Town
Development Zone
Total No of Employees: 44
Survey date: MONDAY 19/09/16 Survey Type: MANUAL

2 FI-02-B-01 BUSINESS PARK FIFE
ENTERPRISE WAY
DUNFERMLINE
PITREAVIE
Edge of Town
Commercial Zone
Total No of Employees: 364
Survey date: MONDAY 21/03/16 Survey Type: MANUAL

3 ST-02-B-04 BUSINESS PARK STAFFORDSHIRE
STONE ROAD
STAFFORD

Edge of Town
Industrial Zone
Total No of Employees: 1082
Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL

4 WY-02-B-02 BUSINESS PARK WEST YORKSHIRE
ARMITAGE BRIDGE
HUDDERSFIELD

Edge of Town
No Sub Category
Total No of Employees: 116
Survey date: WEDNESDAY 23/04/14 Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
FA-02-B-02	No. of employees is estimated

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
VEHICLES
Calculation factor: 1 EMPLOY
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	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	4	402	0.240	4	402	0.015	4	402	0.255
08:00 - 09:00	4	**402**	**0.323**	4	402	0.028	4	**402**	**0.351**
09:00 - 10:00	4	402	0.184	4	402	0.044	4	402	0.228
10:00 - 11:00	4	402	0.047	4	402	0.042	4	402	0.089
11:00 - 12:00	4	402	0.035	4	402	0.046	4	402	0.081
12:00 - 13:00	4	402	0.073	4	402	0.095	4	402	0.168
13:00 - 14:00	4	402	0.069	4	402	0.041	4	402	0.110
14:00 - 15:00	4	402	0.037	4	402	0.039	4	402	0.076
15:00 - 16:00	4	402	0.040	4	402	0.110	4	402	0.150
16:00 - 17:00	4	402	0.032	4	402	0.250	4	402	0.282
17:00 - 18:00	4	402	0.023	4	**402**	**0.268**	4	402	0.291
18:00 - 19:00	3	497	0.013	3	497	0.154	3	497	0.167
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.116			1.132			2.248

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:	44 - 1082 (units:)
Survey date date range:	01/01/12 - 14/10/19
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	1

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.

Longman, Phillip

From:	Matt.Hogben@kent.gov.uk
Sent:	22 April 2020 08:27
To:	Longman, Phillip
Cc:	James.Farrar@folkestone-hythe.gov.uk; James.Hammond@folkestone-hythe.gov.uk; De Bhulbh, Fiachra; Maria Rosa Gallego
Subject:	RE: Otterpool Park Business Park Trip Rates
Follow Up Flag:	Follow up
Flag Status:	Completed

Hi Phil,

Many thanks for the Business Park Trip Rates technical note. I am happy with the technical note submitted and the amended trip rates as set out in Tables 6-8.

Happy to have a call this week but please note I will be finishing early on Friday at about 1pm as I have leave to use.

Regards

Matthew Hogben | Principal Transport and Development Planner | Ashford / Folkestone and Hythe | Highways and Transportation | Kent County Council | Ashford Highway Depot, 4 Javelin Way, Henwood Industrial Estate, Ashford, Kent, TN24 8AD | 03000 41 81 81 | www.kent.gov.uk

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From: Longman, Phillip <Phillip.Longman@arcadis.com>
Sent: 21 April 2020 17:01
To: Hogben, Matt - GT HTW <Matt.Hogben@kent.gov.uk>
Cc: James Farrar (James.Farrar@folkestone-hythe.gov.uk) <James.Farrar@folkestone-hythe.gov.uk>; James.Hammond@folkestone-hythe.gov.uk; De Bhulbh, Fiachra <Fiachra.deBhulbh@arcadis.com>; Maria Rosa Gallego <MariaRosa.Gallego@arcadis.com>
Subject: Otterpool Park Business Park Trip Rates

Good afternoon Matt

I attach a memo in response to your comment relating to the TRICS criteria we used to generate the Business Park trip rates for Otterpool Park. This memo provides a comparison of the method suggested by Highways England as used in the 2019 application and the method suggested by KCC.

I will call you either later this week or next week to discuss this and the other information we are currently issuing.

Kind regards,

Phil

Phillip Longman
Associate Technical Director
Highways & Transport

Phillip.Longman@arcadis.com
Arcadis Consulting (UK Limited)
Bernard Weatherill House, 8 Mint Walk, Croydon CR0 1EA

T: 020 3014 9100
www.arcadis.com

Be green, leave it on the screen.

APPENDIX C

Mode Split for External Commuting and Business Trip Purposes

Census Mode Splits

Mode splits for external work-related trips (Commuting and Business trip purposes) were derived from Census 2011 travel to work data for the Folkestone & Hythe district (labelled within Census 2011 under the previous district name of Shepway) for trips made over distances greater than 2km.

Census 2011 travel to work data was utilised to derive the mode split for external trips made for Commuting and Business trip purposes. This includes Commuter and Business trips generated by the on-site Residential land uses and incoming Commuting trips to on-site land uses from off-site locations.

Figure C.1 shows the location of the proposed site (red outline) within the Census mid layer super output areas (SOAs) for Folkestone & Hythe (black dashed lines and numbered 1 to 15). The figure shows how the site is primarily located within mid-layer SOA number 9 and partially in number 8.

Figure C.1 Site Location and Census Mid-Layer SOAs for Folkestone & Hythe

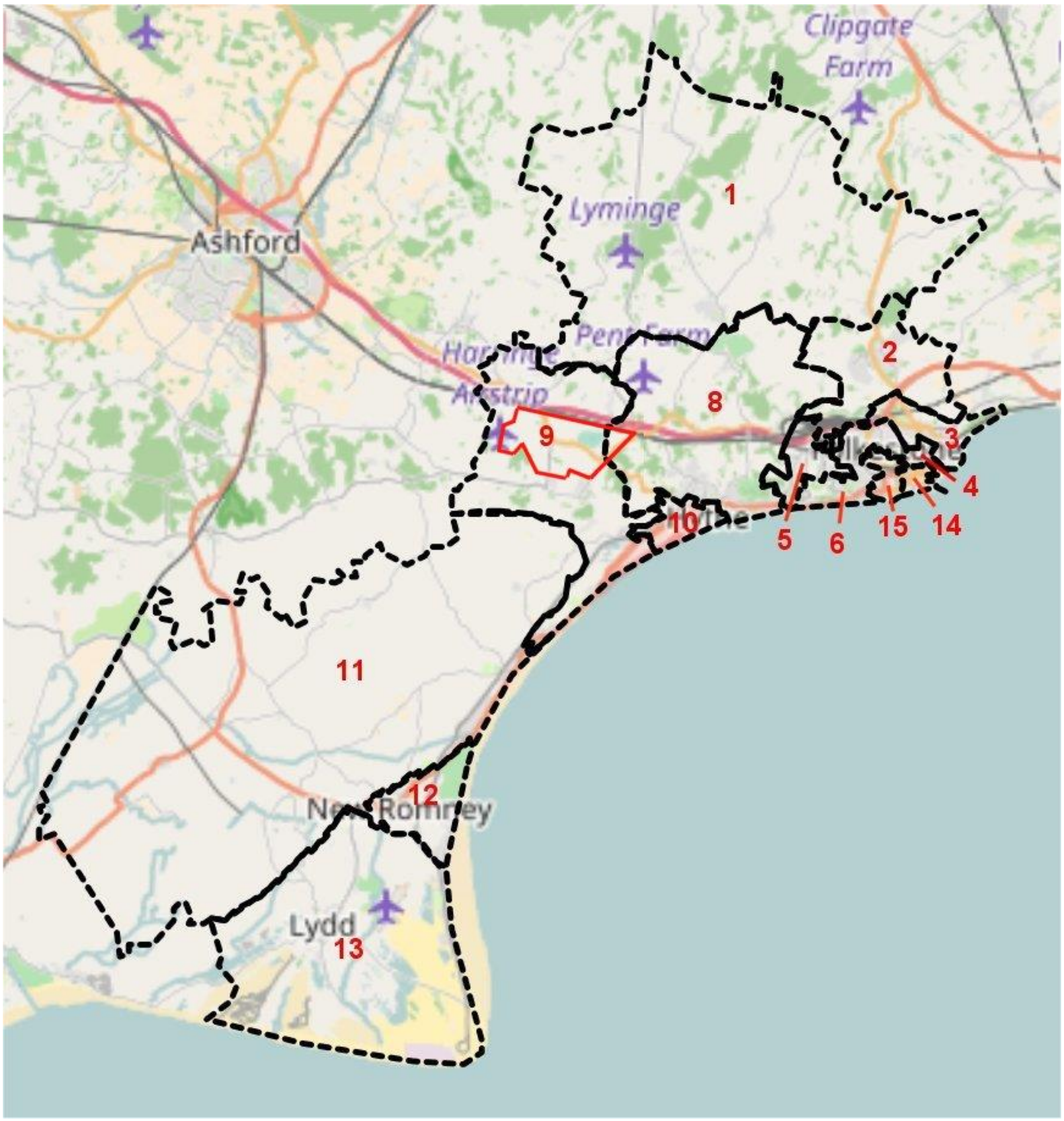


Table C.1 presents the Census mode splits for trips made over distances greater than 2km for SOAs 8 and 9. Trips made over a distance greater than 2km are assumed to be external to the site. When considering trips by distance, Census combines Passenger/Taxi/Motorcycle into one mode share and does the same for all public transport mode shares.

Table C.1 Census Mode Splits for Shepway SOAs 8 and 9 for trips >2km

Mode	Mode Share Over 2km	
	SOA 8	SOA 9
Driver	81.3%	84.5%
Passenger Taxi Motorcycle	8.0%	7.0%
Train Bus / Minibus / Coach Light Rail	5.9%	5.2%
Bicycle	2.1%	1.5%
Walk	2.7%	1.8%
Total	**100%**	**100%**

Table C.1 shows that the Driver mode share for people living in these SOAs is high while the public transport mode share is low.

SOA 9 includes Lympne, Newingreen, Sellindge and Stanford which are close to the site, but also includes areas along the coast such as Burmarsh and Dymchurch which have a similar level of bus service provision to the Otterpool Park location bus significantly further from the rail network. SOA 8 includes Postling, Beachborough and Etchinghil which are all some distance from the rail network and have a lower level of bus service provision. The mode splits for these SOAs, which are an average for all locations within the SOA, are therefore considered likely to have a lower public transport mode share than would be expected for people living on the Otterpool Park site.

Figure C.1 showed that SOA 10 covers an area within Hythe, which has a superior level of public transport provision. Table C.2 presents the mode split of this SOA for trips over 2km.

Table C.2 Census Mode Split for Shepway SOA 10 for trips >2km

Mode	Mode Share Over 2km
	SOA 10
Driver	74.1%
Passenger Taxi Motorcycle	8.2%
Train Bus / Minibus / Coach Light Rail	11.6%
Bicycle	2.1%
Walk	4.0%
Total	**100%**

As expected, the public transport mode share for this SOA is greater than SOAs 8 and 9 while the Driver mode share is lower. Other mode shares are comparable across all three SOAs.

Since SOAs 8 and 9 include sites located further away from public transport nodes than the Otterpool Park site, mode splits from these SOAs would have a lower public transport and higher Driver mode shares than would be expected at Otterpool Park. SOA 10 provides a better comparator to Otterpool Park in terms of proximity to public transport, but is likely to have a better level of service provision. We therefore consider that the Otterpool Park mode split would be somewhere in between SOAs 8, 9 and 10. Table C.3 shows a mode split that represents the weighted average for SOAs 8, 9 and 10.

Table C.3 Average Census Mode Split for Shepway SOAs 8, 9 and 10 for trips >2km

Mode	Mode Share Over 2km SOA 008, 009, 010
Driver	80.1%
Passenger	7.8%
Taxi	
Motorcycle	
Train	7.3%
Bus / Minibus / Coach	
Light Rail	
Bicycle	1.9%
Walk	2.8%
Total	**100%**

Disaggregation of Combined Modes

As mentioned previously, Census combines Passenger/Taxi/Motorcycle into one mode share and does the same for all public transport modes. The assessment requires that these shares are disaggregated into their component modes.

This has been achieved by considering the combined Census mode split for SOAs 8 and 9 for trips of all distances, which provides a full mode split. The mode shares for Passenger/Taxi/Motorcycle and public transport in Table C.3 have been adjusted based on the proportion of these mode shares in the full mode split for all distances. The result in shown in Table C.4.

Table C.4 Adjusted Mode Split for External Commuter and Business Trips

Mode	Mode Share		
	All distances	>2km	Adjusted
Driver	-	80.1%	80.1%
Passenger	5.4%	7.8%	6.0%
Taxi	0.3%		0.4%
Motorcycle	1.3%		1.4%
Train	2.1%	7.3%	2.7%
Bus / Minibus / Coach	3.6%		4.6%
Light Rail	0.1%		0.1%
Bicycle	-	1.9%	1.9%
Walk	-	2.8%	2.8%
Total	**-**	**100%**	**100%**

2020 Update for Rail Trips

The adjusted mode split in B.4 was adopted as the external Commuter and Business trip mode split for the 2019 Transport Assessment. Following submission of the 2019 planning application, comments were received from Kent County Council regarding the number of rail trips being too low. Discussions were held with Kent County Council in May 2020 to agree a revised Train mode share for external trips.

The Folkestone & Hythe Census SOA 15 corresponds to the area which contains Folkestone Central station. Since the journey time by rail to London Kings Cross from Westenhanger station and Folkestone Central station are comparable, it was agreed to use the SOA 15 Train mode share for the Otterpool Park development. The mode splits by distance for SOA 15 are shown in Table C.5.

Table C.5 Census Mode Splits by Distance for Folkestone & Hythe SOA 15

Mode	Mode Splits		
	All distances		>2km
Driver	63.4%	63.4%	73.7%
Passenger	7.0%	8.5%	8.5%
Taxi	0.6%		
Motorcycle	0.9%		
Train	3.6%	10.9%	13.2%
Bus / Minibus / Coach	7.1%		
Light Rail	0.1%		
Bicycle	1.5%	1.5%	0.8%
Walk	15.8%	15.8%	3.8%
Total	**100.0%**	**100.0%**	**100.0%**

Since Census only provides individual mode shares for public transport modes for journeys made for all distances, it was necessary to sub-divide the public transport mode shares for the 2km to 10km and the 2km+ mode splits. This was achieved by dividing the public transport mode shares into Train, Bus and Light Rail by proportion of these the use of these modes according to the All distances mode split. This calculation is shown in Table C.6.

Table C.6 Subdivision of Public Transport Mode Shares by Distance for SOA 15

Mode	Mode Splits		
	All distances		>2km
Train	3.6%	33.2%	4.4%
Bus / Minibus / Coach	7.1%	65.7%	8.7%
Light Rail	0.1%	1.1%	0.2%
	10.9%	**100.0%**	**13.2%**

The Train mode share for the 2km+ distance was used to replace the Train mode share in Table C.4. This increased Train mode share by 1.7 percentage points (4.4% – 2.7%). It was agreed with Kent County Council that the Driver mode share would be reduced by the same amount. The revised Commuter and Business trip mode share is shown in Table C.7.

Table C.7 Mode Split for External Commuter and Business Trips Adjusted for Rail Trips

Mode	Mode Split >2km
Driver	78.4%
Passenger	6.0%
Taxi	0.4%
Motorcycle	1.4%
Train	4.4%
Bus / Minibus / Coach	4.6%
Light Rail	0.1%
Bicycle	1.9%
Walk	2.8%
Total	**100%**

APPENDIX D

Extra Care Facility Technical Note & Response from Kent County Council

OTTERPOOL PARK

Extra Care Facility Trip Rates

APRIL 2020

Otterpool Park

Extra Care Facility Trip Rates

Author	MRG
Checker	PL
Approver	PL
Report No	02
Date	APRIL 2020

VERSION CONTROL

Version	Date	Author	Checker	Approver	Changes
01	30/03/2020	MRG	PL	PL	Draft for review
02	07/04/2020	MRG	PL	PL	Draft with comments

CONTENTS

IMAGES

TABLES

APPENDICES

1 Introduction

On July 2019 Kent County Council (KCC) provided a list of comments to the planning application of Otterpool Park Development (Ref: Y19/0257/ FH). One of the comments related to the Development trip generation (page 12) stated:

> *"The proposed extra care housing (C2) should be assessed against Sheltered Housing in TRICS. This is because there will be an element of care that is provided on-site and is not a general C3 residential use like retirement flats. A new TRICS analysis is therefore required, based on sheltered housing land use class in TRICS".*

The use of Retirement Flats in TRICS to generate the C2 Extra Care Housing trip rates was previously set out in the scoping notes[1] prior to undertaking the assessment. Discussions relating to the trip generation method were held with Kent County Council, Folkestone & Hythe District Council and Highways England between April 2017 and March 2018. The comments received and the action taken to reach a resolution to each comment are summarised in the mentioned technical note[2].

As requested by Kent County Council, Arcadis has undertaken a comparison of Sheltered Housing trip rates to Retirement Flats for the 2044 scenario (the main assessment of the application) with 8,500 homes. In addition, we have provided a comparison with C2 Care Home (05/F - Care Home (Elderly Residential) (use class C2) in the Health main category from TRICS and described as a care home in a residential setting where a number of older people live, usually in single rooms, with access to on-site care services. These sites are not registered to meet a specific care need.

[1] Otterpool Park Trip Generation Calculation Method Technical Note (September 2018)
[2] Otterpool Park Trip Generation Calculation Method Technical Note (September 2018), tables 1 & 2.

2 Trip Rate Comparison

2.1 Land Use Classes

The trip generation of the C2 Extra Care Homes for Otterpool Park considered the trip rates from the Retirement Flats land use (use class C3). This land use is described as housing developments built specifically for the retired and where there should be no care home present. KCC has requested a comparison with Sheltered Accommodation (use class C3), that is usually defined as a type of housing with support but allowing to still live more independently.

The third land use considered here, is the C2 Care Home, where a number of older people live, usually in single rooms, with access to on-site care services. Extra Care usually offers more support than the sheltered accommodation with staff usually available up to 24 hours per day to provide personal care and support services. As established in the Masterplan Framework, there will be a range of extra care residential dwellings use class C2 and therefore, we consider this land use C2 Care Home most appropriately represents the C2 Extra Care facilities considered in the planning application.

2.2 Trip Rates

The trip rates for 03/F - Sheltered Accommodation for elderly people (use class C3) and for the 05/F - Care Home (Elderly Residential, use class C2) for the AM and PM peak derived are shown in Table 1. The trip rates were derived from the TRICS database using the following selection criteria as requested by Kent County Council[3]:

Regions/Areas:	excluding Ireland, Northern Ireland, Greater London and the Highlands of Scotland.
Location type:	Suburban area and Edge of town.
Population:	excluding sites with population greater than 125,000 within 5 miles

The TRICS output reports are contained in Appendix A.

Table 1. All-Mode Trip Rates per Unit comparison: Retirement Flats, Sheltered Housing and Care Homes

TRICS Land Use	AM Peak			PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
C3 Retirement Flats	0.09	0.05	0.13	0.19	0.21	0.40
C3 Sheltered Housing	0.13	0.13	0.26	0.36	0.21	0.57
C2 Care Home	0.09	0.15	0.23	0.10	0.17	0.28

2.3 Trip generation

Table 2 presents a comparison of trips by mode between the C3 Retirement Flats trip rates used in the 2019 Transport Assessment and the two alternative trip rate options. Please note that the trip generation in the table is based on the Otterpool Park schedule of development quantum submitted with the 2019 Transport Assessment. This schedule is expected to be updated for the revised application and thus the total number of trips by mode would also change. The table presents the change in trips by mode that would result in using the alternative trip rates compared to the C3 Retirement Flats trip rates. The Table shows that both of the alternative trip rates would generate a greater number of trips in the AM peak. The Sheltered Accommodation would generate more trips than Retirement Flats in the PM peak, while the Extra Care Housing would generate fewer.

[3] Email from KCC on 9th June 2017.

Table 2. External Trips by Mode (2044). Difference C2 Extra Care Housing and C3 Sheltered Housing scenarios

Mode	C3 Sheltered Accommodation – C3 Retirement Flats						C2 Care Home – C3 Retirement Flats					
	AM Peak			PM Peak			AM Peak			PM Peak		
	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
Driver	+9	+20	**+29**	+29	+6	**+34**	+3	+13	**+16**	-14	-7	**-21**
Passenger	+6	+8	**+13**	+12	+5	**+17**	+2	+6	**+9**	-7	-4	**-11**
Taxi	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**
Motorcycle	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**
Train	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**
Bus / Minibus / Coach	+1	+2	**+3**	+2	+1	**+4**	+1	+1	**+2**	-1	-1	**-2**
Light Rail	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**
Bicycle	0	+1	**+1**	+1	+1	**+1**	+1	0	**+1**	-1	-1	**-1**
On foot	+14	+14	**+29**	+5	+30	**+36**	+18	+2	**+20**	-8	-18	**-25**
Total	**+30**	**+45**	**+75**	**+50**	**+42**	**+92**	**+25**	**+23**	**+48**	**-30**	**-31**	**-61**

2.4 Traffic Flows

Figure 1 and Figure 2 present the difference in traffic flows between the C3 Retirement Flats and C3 Sheltered Housing trip rates for the AM and PM peak hours respectively (number of Sheltered Housing trips minus Retirement Flats trips). The method of trip distribution is the gravity model approach described in the Method for the Distribution of External Vehicle Trips[4] technical note submitted as Appendix N of the 2019 Otterpool Park Transport Assessment. The vehicle routing between origins and destinations presented in this note are fixed routing based on shortest journey times. Actual routing of vehicle trips for local and VISSIM modelling assessments were generated by VISUM, as described in the technical note, and thus may differ.

In the AM peak, there is an increase of 11 (8 + 3) two-way vehicle trips on the A20 Ashford Road to the east of the site. There is an increase of around 4 trips through the Newingreen junction, 6 vehicles along the A20 through the middle of the site and 5 vehicles through Barrow Hill. In the PM peak, there are an extra 12 vehicles on the A20 Ashford Road to the east of the site, 5 vehicles through the Newingreen junction, 8 through the centre of the site on the A20 and 5 through Barrow Hill.

This level of increase in vehicular traffic is not expected to make a material different to the conclusions of the Transport Assessment.

Figure 3 and Figure 4 present the difference in traffic flows between the C3 Retirement Flats and C2 Extra Care trip rates for the AM and PM peak hours respectively (number of Extra Care trips minus Retirement Flats trips). The number of vehicles arriving to Otterpool Park in the AM peak are the same for both trip rates, while there are 11 more vehicles departing from the site in the AM peak. There would be an increase of 5 vehicles on the A20 to the east of the site, 4 extra vehicles routing along the A20 through the centre of the site, 2 extra vehicles routing through the Newingreen junction and 3 extra vehicles at Barrow Hill.

In the PM peak, there are 11 vehicles less arriving to site and 4 vehicles less departing from Otterpool Park. This would translate to 7 fewer vehicles on the A20 to the east of the site, 3 fewer vehicles through Newingreen junction, 5 fewer vehicles through the centre of the site on the A20 and 4 fewer vehicles at Barrow Hill.

This level of change in vehicular traffic is not expected to make a material different to the conclusions of the Transport Assessment.

[4] Otterpool Park Method for the Distribution of External Vehicle Trips (October 2018)

Figure 1. Difference between C3 Retirement Flats and C3 Sheltered Housing scenarios (vehicles/hour). AM 2044

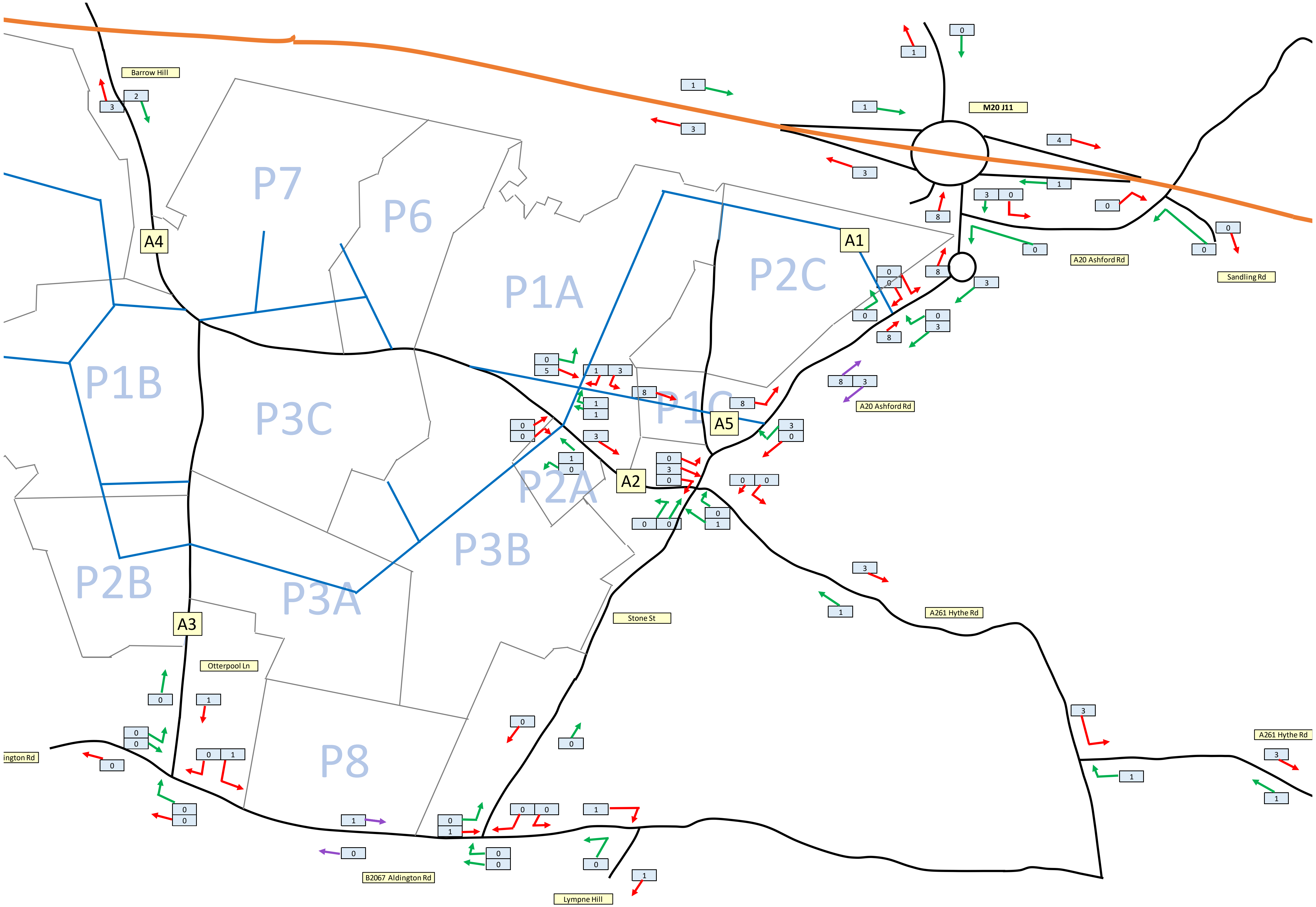


Figure 2. Difference between C3 Retirement Flats and C3 Sheltered Housing scenarios (vehicles/hour). PM 2044

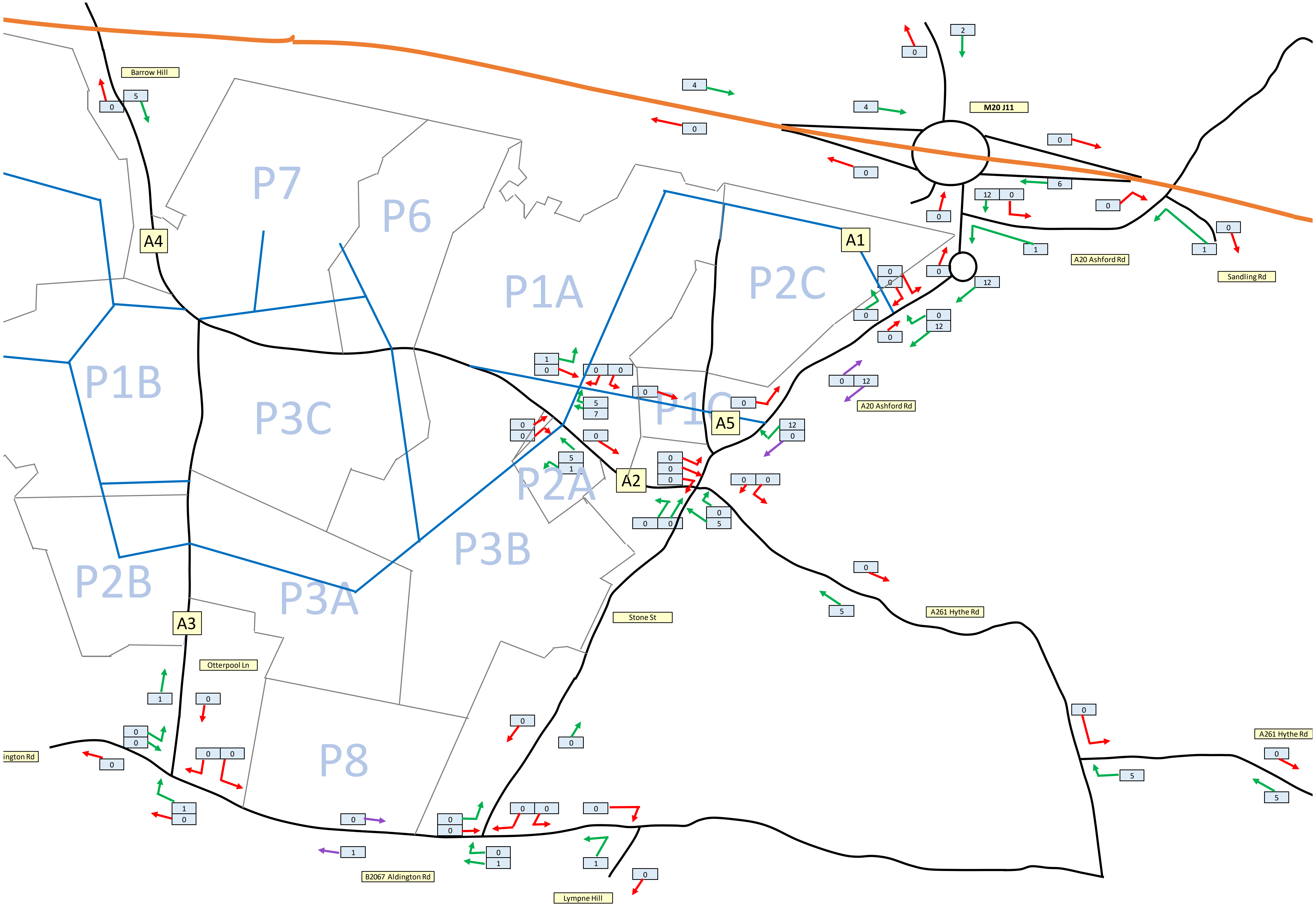
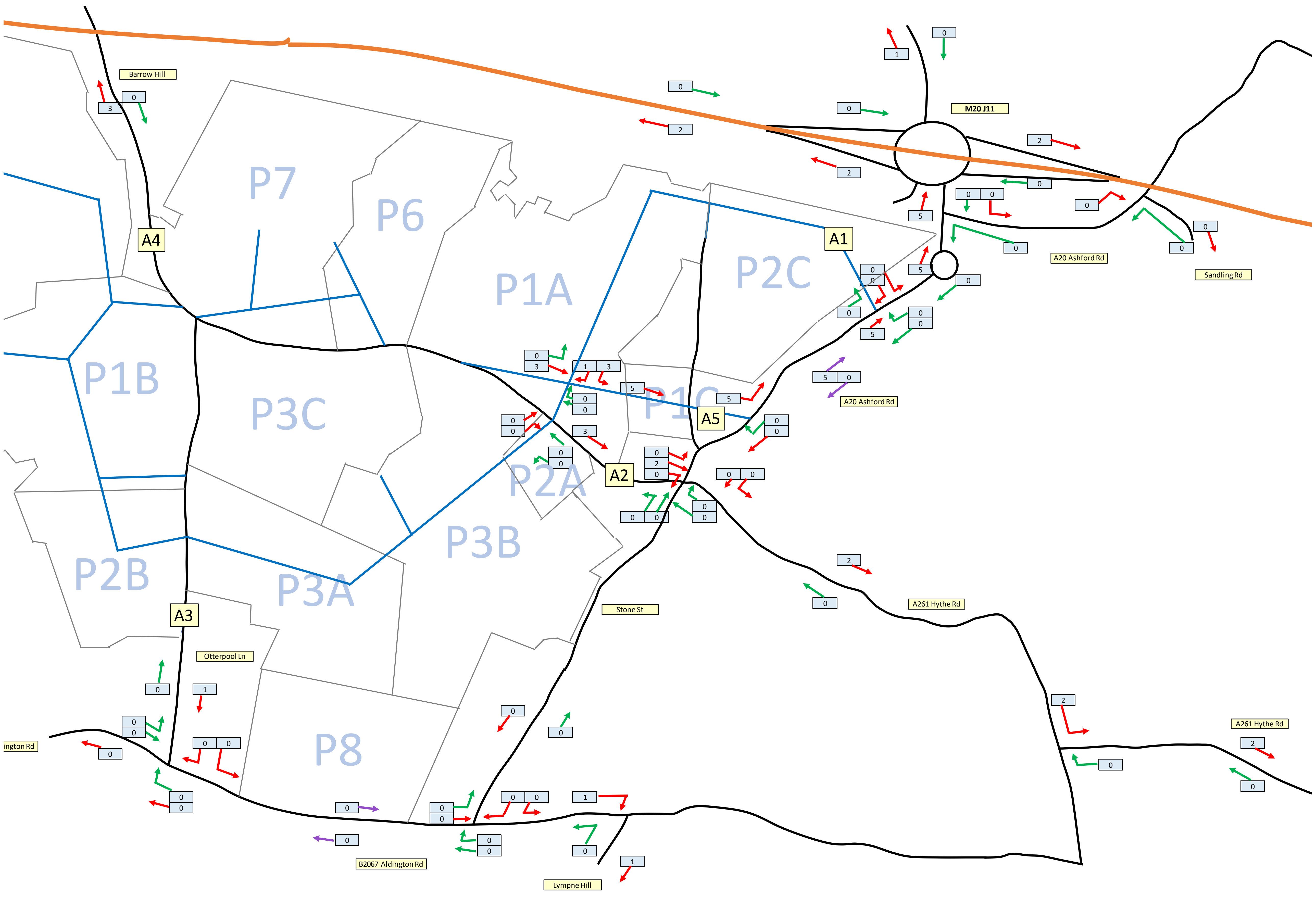
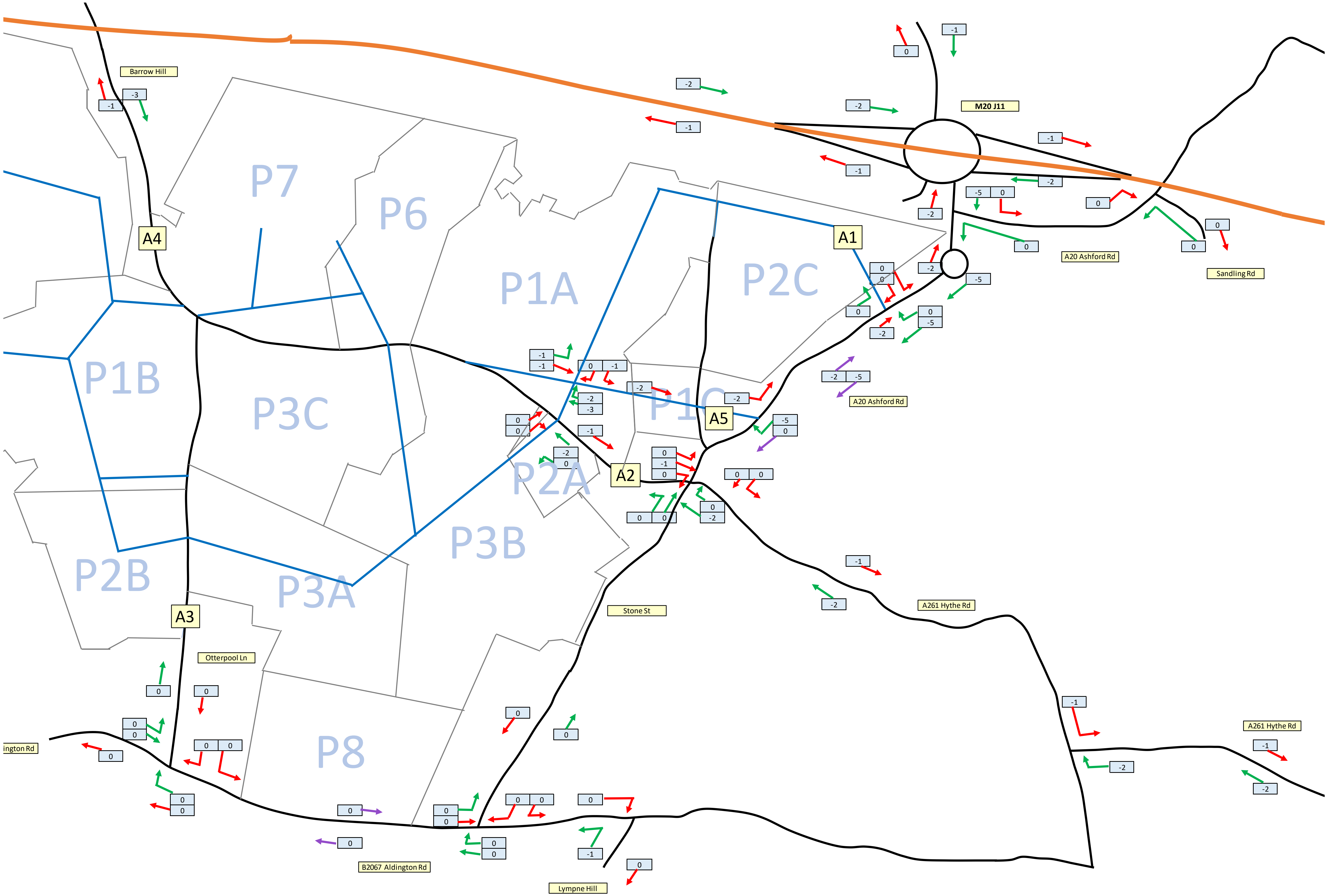


Figure 3. Difference between C3 Retirement Flats and C2 Health Care Homes (elderly residential) scenarios (vehicles/hour). AM 2044



Otterpool Park
Extra Care Facility Trip Rates

Figure 4. Difference between C3 Retirement Flats and C2 Health Care Homes (elderly residential) scenarios (vehicles/hour). PM 2044



3 Next Steps

In May 2020, the Transport Assessment for Otterpool Park will begin to be updated. We therefore wish to agree the trip rates to be used for the C2 Extra Care facility land use of the development proposals.

It is our belief that the C2 Care Home land use in TRICS most closely represents the proposed C2 Extra Care facility rather than either of the C3 land use types.

We request a response from Kent County Council on the information provided in this note and a further discussion to confirm the trip rates to be used in the revised Otterpool Park Transport Assessment.

APPENDIX A

TRICS Output Reports

Filtering Summary

Land Use	03/F	RESIDENTIAL/SHELTERED ACCOMMODATION
Selected Trip Rate Calculation Parameter Range	14-114 DWELLS	
Actual Trip Rate Calculation Parameter Range	14-39 DWELLS	
Date Range	Minimum: 01/01/11	Maximum: 22/10/18
Parking Spaces Range	All Surveys Included	
Bedrooms Per Dwelling Range:	All Surveys Included	
Percentage of dwellings privately owned:	All Surveys Included	
Days of the week selected	Thursday	1
	Friday	1
Main Location Types selected	Edge of Town	2
Population <1 Mile ranges selected	10,001 to 15,000	1
	15,001 to 20,000	1
Population <5 Mile ranges selected	25,001 to 50,000	1
	50,001 to 75,000	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	2
PTAL Rating	No PTAL Present	2

Calculation Reference: AUDIT-111301-200326-0345

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : F - SHELTERED ACCOMMODATION
MULTI-MODAL VEHICLES

Selected regions and areas:

06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
11	SCOTLAND		
	AG	ANGUS	1 days

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

Secondary 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: Number of dwellings
Actual Range: 14 to 39 (units:)
Range Selected by User: 14 to 114 (units:)

Parking Spaces 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: 01/01/11 to 22/10/18

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

Selected survey days:
Thursday 1 days
Friday 1 days

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

Selected survey types:
Manual count 2 days
Directional ATC Count 0 days

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

Selected Locations:
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:
Residential Zone 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, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:
C3 2 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

10,001 to 15,000	1 days
15,001 to 20,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	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:

No	2 days

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

PTAL Rating:

No PTAL Present	2 days

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

LIST OF SITES relevant to selection parameters

1 AG-03-F-01 SHELTERED HOUSING ANGUS
CLIFFBURN ROAD EAST
ARBROATH
HAYSHEAD
Edge of Town
Residential Zone
Total Number of dwellings: 39
Survey date: FRIDAY 28/04/17 Survey Type: MANUAL

2 WK-03-F-01 SHELTERED HOUSING WARWICKSHIRE
NORTHUMBERLAND ROAD
LEAMINGTON SPA
MILVERTON
Edge of Town
Residential Zone
Total Number of dwellings: 14
Survey date: THURSDAY 25/10/12 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/F - SHELTERED ACCOMMODATION
MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	2	27	0.094	2	27	0.094	2	27	0.188
08:00 - 09:00	2	27	0.094	2	27	0.113	2	27	0.207
09:00 - 10:00	2	27	0.264	2	27	0.208	2	27	0.472
10:00 - 11:00	2	27	0.245	2	27	0.226	2	27	0.471
11:00 - 12:00	2	27	0.358	2	27	0.358	2	27	0.716
12:00 - 13:00	2	27	0.264	2	27	0.189	2	27	0.453
13:00 - 14:00	2	27	0.245	2	27	0.358	2	27	0.603
14:00 - 15:00	2	27	0.264	2	27	0.189	2	27	0.453
15:00 - 16:00	2	27	0.226	2	27	0.226	2	27	0.452
16:00 - 17:00	2	27	0.321	2	27	0.264	2	27	0.585
17:00 - 18:00	2	27	0.208	2	27	0.208	2	27	0.416
18:00 - 19:00	2	27	0.189	2	27	0.208	2	27	0.397
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.772			2.641			5.413

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:	14 - 39 (units:)
Survey date date range:	01/01/11 - 22/10/18
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/F - SHELTERED ACCOMMODATION
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	2	27	0.132	2	27	0.132	2	27	0.264
08:00 - 09:00	2	27	0.170	2	27	0.189	2	27	0.359
09:00 - 10:00	2	27	0.226	2	27	0.283	2	27	0.509
10:00 - 11:00	2	27	0.321	2	27	0.358	2	27	0.679
11:00 - 12:00	2	27	0.472	2	**27**	**0.434**	2	**27**	**0.906**
12:00 - 13:00	2	27	0.358	2	27	0.170	2	27	0.528
13:00 - 14:00	2	27	0.321	2	27	0.434	2	27	0.755
14:00 - 15:00	2	27	0.415	2	27	0.302	2	27	0.717
15:00 - 16:00	2	27	0.245	2	27	0.358	2	27	0.603
16:00 - 17:00	2	**27**	**0.491**	2	27	0.302	2	27	0.793
17:00 - 18:00	2	27	0.358	2	27	0.208	2	27	0.566
18:00 - 19:00	2	27	0.264	2	27	0.302	2	27	0.566
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.773			3.472			7.245

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.*

Calculation Reference: AUDIT-111301-200402-0419

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : F - CARE HOME (ELDERLY RESIDENTIAL)
MULTI-MODAL VEHICLES

Selected regions and areas:

06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	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: Number of residents
Actual Range: 32 to 37 (units:)
Range Selected by User: 17 to 180 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 02/05/19

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
Thursday 1 days

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

Selected survey types:
Manual count 2 days
Directional ATC Count 0 days

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

Selected Locations:
Suburban Area (PPS6 Out of Centre) 1
Edge of Town 1

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

Selected Location Sub Categories:
Residential Zone 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, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:
C2 2 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	2 days

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

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	1 days

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

Travel Plan:

No	2 days

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

PTAL Rating:

No PTAL Present	2 days

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

LIST OF SITES relevant to selection parameters

1	NY-05-F-05 SEAGRIM CRESCENT RICHMOND Edge of Town Residential Zone Total Number of residents: *Survey date: MONDAY*	NURSING HOME	 37 *04/03/19*	NORTH YORKSHIRE *Survey Type: MANUAL*
2	WK-05-F-01 CLARENDON SQUARE LEAMINGTON SPA Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of residents: *Survey date: THURSDAY*	NURSING HOME	 32 *25/10/12*	WARWICKSHIRE *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 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)
MULTI-MODAL VEHICLES
Calculation factor: 1 RESIDE
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	2	35	0.029	2	35	0.087	2	35	0.116
08:00 - 09:00	2	35	0.087	2	35	0.130	2	35	0.217
09:00 - 10:00	2	35	0.159	2	35	0.043	2	35	0.202
10:00 - 11:00	2	35	0.072	2	35	0.159	2	35	0.231
11:00 - 12:00	2	35	0.116	2	35	0.174	2	35	0.290
12:00 - 13:00	2	35	0.087	2	35	0.101	2	35	0.188
13:00 - 14:00	2	35	0.246	2	35	0.058	2	35	0.304
14:00 - 15:00	2	35	0.130	2	35	0.246	2	35	0.376
15:00 - 16:00	2	35	0.116	2	35	0.145	2	35	0.261
16:00 - 17:00	2	35	0.101	2	35	0.116	2	35	0.217
17:00 - 18:00	2	35	0.101	2	35	0.130	2	35	0.231
18:00 - 19:00	2	35	0.116	2	35	0.101	2	35	0.217
19:00 - 20:00	2	35	0.043	2	35	0.087	2	35	0.130
20:00 - 21:00	2	35	0.043	2	35	0.014	2	35	0.057
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.446			1.591			3.037

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:	32 - 37 (units:)
Survey date date range:	01/01/12 - 02/05/19
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 RESIDE
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	2	35	0.087	2	35	0.145	2	35	0.232
08:00 - 09:00	2	35	0.130	2	35	0.188	2	35	0.318
09:00 - 10:00	2	35	0.232	2	35	0.087	2	35	0.319
10:00 - 11:00	2	35	0.159	2	35	0.275	2	35	0.434
11:00 - 12:00	2	35	0.130	2	35	0.203	2	35	0.333
12:00 - 13:00	2	35	0.145	2	35	0.188	2	35	0.333
13:00 - 14:00	2	35	0.362	2	35	0.101	2	35	0.463
14:00 - 15:00	2	35	0.188	2	35	0.362	2	35	0.550
15:00 - 16:00	2	35	0.130	2	35	0.203	2	35	0.333
16:00 - 17:00	2	35	0.130	2	35	0.174	2	35	0.304
17:00 - 18:00	2	35	0.101	2	35	0.174	2	35	0.275
18:00 - 19:00	2	35	0.246	2	35	0.145	2	35	0.391
19:00 - 20:00	2	35	0.043	2	35	0.145	2	35	0.188
20:00 - 21:00	2	35	0.058	2	35	0.014	2	35	0.072
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.141			2.404			4.545

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

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

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Longman, Phillip

From:	Matt.Hogben@kent.gov.uk
Sent:	01 May 2020 11:38
To:	Longman, Phillip
Cc:	De Bhulbh, Fiachra; Maria Rosa Gallego
Subject:	RE: Otterpool Park C2 Extra Care trip rates
Follow Up Flag:	Follow up
Flag Status:	Completed

Hi Phil,

Thank you for the e-mail and the note. Can you just confirm that you wish to assess the extra care trip rates against the care home trip rates as set out in the note please? If this is the case then the use of the site will need to be strictly controlled as C2 land use class rather than C3 in the proposed Section 106 Legal Agreement.

If this is the case then I am happy with the proposed trip rates using the care home trip rate assessment.

I look forward to hearing from you.

Regards

Matthew Hogben | Principal Transport and Development Planner | Ashford / Folkestone and Hythe | Highways and Transportation | Kent County Council | Ashford Highway Depot, 4 Javelin Way, Henwood Industrial Estate, Ashford, Kent, TN24 8AD | 03000 41 81 81 | www.kent.gov.uk

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From: Longman, Phillip <Phillip.Longman@arcadis.com>
Sent: 30 April 2020 18:17
To: Hogben, Matt - GT HTW <Matt.Hogben@kent.gov.uk>
Cc: De Bhulbh, Fiachra <Fiachra.deBhulbh@arcadis.com>; Maria Rosa Gallego <MariaRosa.Gallego@arcadis.com>
Subject: Otterpool Park C2 Extra Care trip rates

Hi Matt

I attach a note that responds to your comment relating to the use of C3 Retirement Flats trip rates to represent our C2 Extra Care facility on Otterpool Park. The note provides a comparison between the C3 Retirement Flats trip rates and the C3 Sheltered Housing trip rates you suggested. We have also provided a comparison with C2 Care Home trip rates, which we believe to be the most appropriate match to the proposed Otterpool Park facility.

Please let us know what you think.

Kind regards,

Phil

Phillip Longman
Associate Technical Director
Highways & Transport

Phillip.Longman@arcadis.com
Arcadis Consulting (UK Limited)
Bernard Weatherill House, 8 Mint Walk, Croydon CR0 1EA

T: 020 3014 9100
www.arcadis.com

Be green, leave it on the screen.

APPENDIX E

TRICS sites used in derivation of C2 Extra Care Housing trip rates

Calculation Reference: AUDIT-111301-200513-0514

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : F - CARE HOME (ELDERLY RESIDENTIAL)
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
11	SCOTLAND		
	AG	ANGUS	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: Number of residents
Actual Range: 32 to 48 (units:)
Range Selected by User: 17 to 180 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 02/05/19

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
Thursday	1 days
Sunday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	1

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

Selected Location Sub Categories:

Residential Zone	3

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

Secondary Filtering selection:

Use Class:

C2	3 days

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

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	1 days

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

Population within 5 miles:

25,001 to 50,000	2 days
75,001 to 100,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	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:

No	3 days

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

PTAL Rating:

No PTAL Present	3 days

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

LIST OF SITES relevant to selection parameters

1	AG-05-F-01 NURSING HOME		ANGUS	
	SEATON GROVE ARBROATH SEATON ROAD Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of residents:	48		
	Survey date: SUNDAY	*20/05/12*	*Survey Type: MANUAL*	
2	NY-05-F-05 NURSING HOME		NORTH YORKSHIRE	
	SEAGRIM CRESCENT RICHMOND Edge of Town Residential Zone			
	Total Number of residents:	37		
	Survey date: MONDAY	*04/03/19*	*Survey Type: MANUAL*	
3	WK-05-F-01 NURSING HOME		WARWICKSHIRE	
	CLARENDON SQUARE LEAMINGTON SPA Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of residents:	32		
	Survey date: THURSDAY	*25/10/12*	*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 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 RESIDE
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	39	0.077	3	39	0.103	3	39	0.180
08:00 - 09:00	3	39	0.120	3	39	0.128	3	39	0.248
09:00 - 10:00	3	39	0.145	3	39	0.077	3	39	0.222
10:00 - 11:00	3	39	0.231	3	39	0.188	3	39	0.419
11:00 - 12:00	3	39	0.197	3	39	0.145	3	39	0.342
12:00 - 13:00	3	39	0.120	3	39	0.231	3	39	0.351
13:00 - 14:00	3	39	0.256	3	39	0.103	3	39	0.359
14:00 - 15:00	3	**39**	**0.282**	3	39	0.265	3	**39**	**0.547**
15:00 - 16:00	3	39	0.171	3	39	0.222	3	39	0.393
16:00 - 17:00	3	39	0.103	3	**39**	**0.274**	3	39	0.377
17:00 - 18:00	3	39	0.085	3	39	0.248	3	39	0.333
18:00 - 19:00	3	39	0.197	3	39	0.120	3	39	0.317
19:00 - 20:00	3	39	0.060	3	39	0.094	3	39	0.154
20:00 - 21:00	3	39	0.034	3	39	0.009	3	39	0.043
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.078			2.207			4.285

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 F

TRICS sites used in derivation of C3 Residential trip rates

Calculation Reference: AUDIT-111301-200513-0506

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : K - MIXED PRIV HOUS (FLATS AND HOUSES)
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	WS	WEST SUSSEX	1 days
03	SOUTH WEST		
	CW	CORNWALL	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
09	NORTH		
	CB	CUMBRIA	2 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: 15 to 371 (units:)
Range Selected by User: 15 to 618 (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: 01/01/12 to 23/05/19

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	2 days
Wednesday	1 days
Thursday	4 days

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

Selected survey types:

Manual count	8 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)	3
Edge of Town	5

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

Selected Location Sub Categories:

Industrial Zone	1
Residential Zone	7

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

Secondary Filtering selection:

Use Class:

C3	8 days

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

Population within 1 mile:

5,001 to 10,000	5 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days

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

Population within 5 miles:

25,001 to 50,000	5 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	4 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	2 days
No	6 days

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

PTAL Rating:

No PTAL Present	8 days

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

LIST OF SITES relevant to selection parameters

1 CA-03-K-01 MIXED HOUSES & FLATS CAMBRIDGESHIRE
WEASANHAM LANE
WISBECH
FENLAND
Edge of Town
Residential Zone
Total No of Dwellings: 100
Survey date: MONDAY 07/09/15 Survey Type: MANUAL

2 CA-03-K-04 MIXED HOUSES & FLATS CAMBRIDGESHIRE
FORDHAM ROAD
SOHAM

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 65
Survey date: WEDNESDAY 11/07/18 Survey Type: MANUAL

3 CB-03-K-01 FLATS & TERRACED CUMBRIA
BRIDGE LANE
CARLISLE

Edge of Town
Industrial Zone
Total No of Dwellings: 66
Survey date: THURSDAY 12/06/14 Survey Type: MANUAL

4 CB-03-K-02 SEMI-DETACHED & FLATS CUMBRIA
NATLAND ROAD
KENDAL

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 15
Survey date: TUESDAY 21/06/16 Survey Type: MANUAL

5 CW-03-K-01 MIXED HOUSES & FLATS CORNWALL
TRELOWEN DRIVE
PENRYN

Edge of Town
Residential Zone
Total No of Dwellings: 89
Survey date: THURSDAY 28/03/19 Survey Type: MANUAL

6 ES-03-K-01 MIXED HOUSES & FLATS EAST SUSSEX
LEWES ROAD
UCKFIELD
RIDGEWOOD
Edge of Town
Residential Zone
Total No of Dwellings: 64
Survey date: THURSDAY 14/07/16 Survey Type: MANUAL

7 NE-03-K-01 BLOCK OF FLATS NORTH EAST LINCOLNSHIRE
LADYSMITH ROAD
CLEETHORPES

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 67
Survey date: TUESDAY 06/05/14 Survey Type: MANUAL

8 WS-03-K-04 MIXED HOUSES & FLATS WEST SUSSEX
HILLS FARM LANE
HORSHAM
BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: THURSDAY 28/06/18 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/K - MIXED PRIV HOUS (FLATS AND HOUSES)
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	8	105	0.085	8	105	0.386	8	105	0.471
08:00 - 09:00	8	105	0.164	8	**105**	**0.631**	8	105	0.795
09:00 - 10:00	8	105	0.177	8	105	0.271	8	105	0.448
10:00 - 11:00	8	105	0.209	8	105	0.231	8	105	0.440
11:00 - 12:00	8	105	0.196	8	105	0.219	8	105	0.415
12:00 - 13:00	8	105	0.239	8	105	0.223	8	105	0.462
13:00 - 14:00	8	105	0.270	8	105	0.266	8	105	0.536
14:00 - 15:00	8	105	0.220	8	105	0.262	8	105	0.482
15:00 - 16:00	8	105	0.502	8	105	0.282	8	105	0.784
16:00 - 17:00	8	105	0.406	8	105	0.259	8	105	0.665
17:00 - 18:00	8	**105**	**0.602**	8	105	0.289	8	**105**	**0.891**
18:00 - 19:00	8	105	0.532	8	105	0.225	8	105	0.757
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.602			3.544			7.146

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.*

Calculation Reference: AUDIT-111301-200513-0509

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : L - MIXED AFFORD HOUS (FLATS AND HOUSES)
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	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: 51 to 51 (units:)
Range Selected by User: 19 to 59 (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: 01/01/12 to 15/10/19

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:
Tuesday 1 days

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

Selected survey types:
Manual count 1 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) 1

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

Selected Location Sub Categories:
Residential Zone 1

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

Secondary Filtering selection:

Use Class:
C3 1 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	1 days

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

Population within 5 miles:

100,001 to 125,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days

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	1 days

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

PTAL Rating:

No PTAL Present	1 days

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

LIST OF SITES relevant to selection parameters

1 ES-03-L-03 HOUSES & FLATS EAST SUSSEX
HUGHENDEN ROAD
HASTINGS
ORE VALLEY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 51
Survey date: TUESDAY 26/06/18 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/L - MIXED AFFORD HOUS (FLATS AND HOUSES)
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	1	51	0.078	1	51	0.529	1	51	0.607
08:00 - 09:00	1	51	0.314	1	51	**0.961**	1	51	**1.275**
09:00 - 10:00	1	51	0.451	1	51	0.588	1	51	1.039
10:00 - 11:00	1	51	0.294	1	51	0.333	1	51	0.627
11:00 - 12:00	1	51	0.294	1	51	0.275	1	51	0.569
12:00 - 13:00	1	51	0.294	1	51	0.157	1	51	0.451
13:00 - 14:00	1	51	0.157	1	51	0.275	1	51	0.432
14:00 - 15:00	1	51	0.216	1	51	0.255	1	51	0.471
15:00 - 16:00	1	51	0.686	1	51	0.275	1	51	0.961
16:00 - 17:00	1	51	**0.784**	1	51	0.412	1	51	1.196
17:00 - 18:00	1	51	0.667	1	51	0.373	1	51	1.040
18:00 - 19:00	1	51	0.529	1	51	0.275	1	51	0.804
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.764			4.708			9.472

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.*

Calculation Reference: AUDIT-111301-200513-0552

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	6 days
	HC	HAMPSHIRE	2 days
	KC	KENT	1 days
	OX	OXFORDSHIRE	1 days
	WS	WEST SUSSEX	7 days
03	SOUTH WEST		
	DC	DORSET	1 days
	DV	DEVON	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	3 days
06	WEST MIDLANDS		
	WK	WARWICKSHIRE	2 days
08	NORTH WEST		
	MS	MERSEYSIDE	2 days
09	NORTH		
	CB	CUMBRIA	1 days
10	WALES		
	CM	CARMARTHENSHIRE	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: 20 to 395 (units:)
Range Selected by User: 9 to 1412 (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: 01/01/12 to 14/11/19

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:

Tuesday	5 days
Wednesday	6 days
Thursday	11 days
Friday	7 days

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

Selected survey types:

Manual count	29 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)	7
Edge of Town	22

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:

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

Secondary Filtering selection:

Use Class:

C3	29 days

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

Population within 1 mile:

1,001 to 5,000	6 days
5,001 to 10,000	8 days
10,001 to 15,000	10 days
15,001 to 20,000	1 days
25,001 to 50,000	4 days

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

Population within 5 miles:

5,001 to 25,000	4 days
25,001 to 50,000	8 days
50,001 to 75,000	9 days
75,001 to 100,000	5 days
100,001 to 125,000	3 days

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

Car ownership within 5 miles:

0.6 to 1.0	7 days
1.1 to 1.5	20 days
1.6 to 2.0	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	21 days
No	8 days

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

PTAL Rating:

No PTAL Present	29 days

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

LIST OF SITES relevant to selection parameters

1 CA-03-M-01 MIXED HOUSES & FLATS CAMBRIDGESHIRE
BANNOLD ROAD
WATERBEACH

Edge of Town
Residential Zone
Total No of Dwellings: 52
Survey date: WEDNESDAY 20/06/18 Survey Type: MANUAL

2 CB-03-M-04 SEMI-DETACHED & TERRACED CUMBRIA
STANHOPE ROAD
CARLISLE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 20
Survey date: FRIDAY 24/06/16 Survey Type: MANUAL

3 CM-03-M-02 HOUSES & FLATS CARMARTHENSHIRE
COLLEGE ROAD
CARMARTHEN

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 49
Survey date: TUESDAY 14/10/14 Survey Type: MANUAL

4 DC-03-M-02 TERRACED & BUNGALOWS DORSET
KINGS ROAD
DORCHESTER
FORDINGTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 37
Survey date: FRIDAY 16/09/16 Survey Type: MANUAL

5 DV-03-M-02 MIXED HOUSES & FLATS DEVON
SAINT PETER'S QUAY
TOTNES

Edge of Town
Residential Zone
Total No of Dwellings: 90
Survey date: FRIDAY 29/03/19 Survey Type: MANUAL

6 ES-03-M-07 MIXED HOUSING EAST SUSSEX
SOUTH COAST ROAD
PEACEHAVEN

Edge of Town
Residential Zone
Total No of Dwellings: 188
Survey date: THURSDAY 12/11/15 Survey Type: MANUAL

7 ES-03-M-11 MIXED HOUSES & FLATS EAST SUSSEX
HEMPSTEAD LANE
HAILSHAM
UPPER HORSEBRIDGE
Edge of Town
Residential Zone
Total No of Dwellings: 354
Survey date: WEDNESDAY 13/07/16 Survey Type: MANUAL

8 ES-03-M-12 MIXED HOUSES & FLATS EAST SUSSEX
PARK ROAD
HAILSHAM

Edge of Town
Residential Zone
Total No of Dwellings: 93
Survey date: THURSDAY 21/06/18 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9 ES-03-M-15 MIXED HOUSES EAST SUSSEX
FIELD END
MARESFIELD

Edge of Town
Residential Zone
Total No of Dwellings: 80
Survey date: WEDNESDAY 13/03/19 Survey Type: MANUAL

10 ES-03-M-16 MIXED HOUSES & FLATS EAST SUSSEX
BARNHORN ROAD
BEXHILL
LITTLE COMMON
Edge of Town
Residential Zone
Total No of Dwellings: 119
Survey date: WEDNESDAY 10/07/19 Survey Type: MANUAL

11 ES-03-M-17 MIXED HOUSES & FLATS EAST SUSSEX
NEW ROAD
HAILSHAM
AMBERSTONE
Edge of Town
Residential Zone
Total No of Dwellings: 91
Survey date: THURSDAY 07/11/19 Survey Type: MANUAL

12 HC-03-M-09 MIXED HOUSES & FLATS HAMPSHIRE
ROMSEY ROAD
WINCHESTER
STANMORE
Edge of Town
Residential Zone
Total No of Dwellings: 157
Survey date: THURSDAY 07/06/18 Survey Type: MANUAL

13 HC-03-M-10 MIXED HOUSES & FLATS HAMPSHIRE
RAWLINGS LANE
ALTON

Edge of Town
Residential Zone
Total No of Dwellings: 176
Survey date: TUESDAY 05/03/19 Survey Type: MANUAL

14 KC-03-M-02 MIXED HOUSES AND FLATS KENT
HERMITAGE LANE
MAIDSTONE
BARMING
Edge of Town
No Sub Category
Total No of Dwellings: 119
Survey date: TUESDAY 05/06/18 Survey Type: MANUAL

15 MS-03-M-02 TERRACED MERSEYSIDE
LOVEL ROAD
LIVERPOOL
SPEKE
Edge of Town
Residential Zone
Total No of Dwellings: 27
Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

16 MS-03-M-03 SEMI DETACHED/TERRACED MERSEYSIDE
LOVEL ROAD
LIVERPOOL
SPEKE
Edge of Town
Residential Zone
Total No of Dwellings: 24
Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

17 NF-03-M-02 MIXED HOUSES NORFOLK
CAWSTON ROAD
AYLSHAM

Edge of Town
Out of Town
Total No of Dwellings: 250
Survey date: TUESDAY 17/09/19 Survey Type: MANUAL

18 NF-03-M-04 MIXED HOUSES & FLATS NORFOLK
HUNSTANTON ROAD
HUNSTANTON

Edge of Town
Residential Zone
Total No of Dwellings: 70
Survey date: THURSDAY 19/09/19 Survey Type: MANUAL

19 NF-03-M-14 MIXED HOUSES & FLATS NORFOLK
NORWICH COMMON
WYMONDHAM

Edge of Town
Residential Zone
Total No of Dwellings: 321
Survey date: THURSDAY 19/09/19 Survey Type: MANUAL

20 OX-03-M-01 MIXED HOUSES OXFORDSHIRE
WENMAN ROAD
THAME

Edge of Town
Industrial Zone
Total No of Dwellings: 100
Survey date: THURSDAY 28/06/18 Survey Type: MANUAL

21 WK-03-M-01 MIXED HOUSES & FLATS WARWICKSHIRE
BIRMINGHAM ROAD
STRATFORD UPON AVON

Edge of Town
Residential Zone
Total No of Dwellings: 395
Survey date: FRIDAY 29/06/18 Survey Type: MANUAL

22 WK-03-M-02 MIXED HOUSES WARWICKSHIRE
BISHOPTON LANE
STRATFORD UPON AVON
BISHOPTON
Edge of Town
Residential Zone
Total No of Dwellings: 130
Survey date: FRIDAY 29/06/18 Survey Type: MANUAL

23 WS-03-M-04 HOUSES & FLATS WEST SUSSEX
SUMMERSDALE ROAD
CHICHESTER

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 214
Survey date: THURSDAY 08/05/14 Survey Type: MANUAL

24 WS-03-M-06 SEMI DETACHED/DETACHED WEST SUSSEX
SOUTHFIELDS CLOSE
CHICHESTER

Edge of Town
Residential Zone
Total No of Dwellings: 67
Survey date: TUESDAY 27/01/15 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

25 WS-03-M-07 HOUSES & FLATS WEST SUSSEX
ROSE GREEN ROAD
BOGNOR REGIS
ALDWICK
Edge of Town
Residential Zone
Total No of Dwellings: 90
Survey date: WEDNESDAY 05/03/14 Survey Type: MANUAL

26 WS-03-M-16 MIXED FLATS & HOUSES WEST SUSSEX
BROYLE ROAD
CHICHESTER

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 252
Survey date: WEDNESDAY 21/03/18 Survey Type: MANUAL

27 WS-03-M-18 MIXED HOUSES & FLATS WEST SUSSEX
WESTLOATS LANE
BOGNOR REGIS
NORTH BERSTED
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 86
Survey date: THURSDAY 17/10/19 Survey Type: MANUAL

28 WS-03-M-19 MIXED HOUSES & FLATS WEST SUSSEX
ADLINGTON GARDENS
BOGNOR REGIS

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 32
Survey date: THURSDAY 17/10/19 Survey Type: MANUAL

29 WS-03-M-21 MIXED HOUSES WEST SUSSEX
CLAPPERS LANE
BRACKLESHAM BAY

Edge of Town
Residential Zone
Total No of Dwellings: 57
Survey date: THURSDAY 14/11/19 Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	29	129	0.123	29	129	0.513	29	129	0.636
08:00 - 09:00	29	129	0.197	**29**	**129**	**0.756**	**29**	**129**	**0.953**
09:00 - 10:00	29	129	0.196	29	129	0.300	29	129	0.496
10:00 - 11:00	29	129	0.187	29	129	0.242	29	129	0.429
11:00 - 12:00	29	129	0.224	29	129	0.262	29	129	0.486
12:00 - 13:00	29	129	0.264	29	129	0.233	29	129	0.497
13:00 - 14:00	29	129	0.267	29	129	0.270	29	129	0.537
14:00 - 15:00	29	129	0.248	29	129	0.278	29	129	0.526
15:00 - 16:00	**29**	**129**	**0.596**	29	129	0.334	29	129	0.930
16:00 - 17:00	29	129	0.492	29	129	0.291	29	129	0.783
17:00 - 18:00	29	129	0.584	29	129	0.317	29	129	0.901
18:00 - 19:00	29	129	0.529	29	129	0.281	29	129	0.810
19:00 - 20:00	1	119	0.176	1	119	0.025	1	119	0.201
20:00 - 21:00	1	119	0.151	1	119	0.017	1	119	0.168
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.234			4.119			8.353

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 G

TRICS sites used in derivation of C1 Hotel trip rates

Filtering Summary

Land Use	06/A	HOTEL, FOOD & DRINK/HOTELS
Selected Trip Rate Calculation Parameter Range	720-17624 sqm GFA	
Actual Trip Rate Calculation Parameter Range	720-4675 sqm GFA	
Date Range	Minimum: 01/01/12	Maximum: 16/10/19
Parking Spaces Range	All Surveys Included	
Days of the week selected	Tuesday	1
	Wednesday	1
	Thursday	1
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	1
	Edge of Town	2
Population <1 Mile ranges selected	5,001 to 10,000	2
	10,001 to 15,000	1
Population <5 Mile ranges selected	25,001 to 50,000	2
	100,001 to 125,000	1
Car Ownership <5 Mile ranges selected	1.1 to 1.5	3
PTAL Rating	No PTAL Present	3

Calculation Reference: AUDIT-111301-200513-0559

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : A - HOTELS
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

02	SOUTH EAST		
	BU	BUCKINGHAMSHIRE	1 days
03	SOUTH WEST		
	GS	GLOUCESTERSHIRE	1 days
11	SCOTLAND		
	AG	ANGUS	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: Gross floor area
Actual Range: 720 to 4675 (units: sqm)
Range Selected by User: 720 to 17624 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 16/10/19

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:

Tuesday	1 days
Wednesday	1 days
Thursday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
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:

Residential Zone	2
Out of Town	1

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

Secondary Filtering selection:

Use Class:

C1	3 days

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

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	1 days

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

Population within 5 miles:

25,001 to 50,000	2 days
100,001 to 125,000	1 days

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

Car ownership within 5 miles:

1.1 to 1.5	3 days

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

Travel Plan:

No	3 days

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

PTAL Rating:

No PTAL Present	3 days

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

LIST OF SITES relevant to selection parameters

1	AG-06-A-01	BOUTIQUE B&B		ANGUS
	CLIFFBURN ROAD			
	ARBROATH			
	HAYSHEAD			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:		720 sqm	
	Survey date: TUESDAY		*22/05/12*	*Survey Type: MANUAL*
2	BU-06-A-02	HOLIDAY INN		BUCKINGHAMSHIRE
	NEW ROAD			
	AYLESBURY			
	WESTON TURVILLE			
	Edge of Town			
	Out of Town			
	Total Gross floor area:		4675 sqm	
	Survey date: WEDNESDAY		*01/10/14*	*Survey Type: MANUAL*
3	GS-06-A-02	PREMIER INN		GLOUCESTERSHIRE
	GLOUCESTER ROAD			
	CHELTENHAM SPA			
	SAINT MARKS			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		2393 sqm	
	Survey date: THURSDAY		*28/11/13*	*Survey Type: MANUAL*

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2596	0.372	3	2596	1.002	3	2596	1.374
08:00 - 09:00	3	2596	0.411	3	**2596**	**1.066**	3	2596	1.477
09:00 - 10:00	3	2596	0.886	3	2596	0.629	3	2596	1.515
10:00 - 11:00	3	2596	0.475	3	2596	0.360	3	2596	0.835
11:00 - 12:00	3	2596	0.231	3	2596	0.642	3	2596	0.873
12:00 - 13:00	3	2596	0.282	3	2596	0.372	3	2596	0.654
13:00 - 14:00	3	2596	0.398	3	2596	0.449	3	2596	0.847
14:00 - 15:00	3	2596	0.475	3	2596	0.449	3	2596	0.924
15:00 - 16:00	3	2596	0.462	3	2596	0.706	3	2596	1.168
16:00 - 17:00	3	2596	0.732	3	2596	0.424	3	2596	1.156
17:00 - 18:00	3	2596	0.989	3	2596	0.501	3	2596	1.490
18:00 - 19:00	3	**2596**	**1.091**	3	2596	0.783	3	**2596**	**1.874**
19:00 - 20:00	3	2596	0.770	3	2596	0.770	3	2596	1.540
20:00 - 21:00	3	2596	0.693	3	2596	0.526	3	2596	1.219
21:00 - 22:00	3	2596	0.449	3	2596	0.449	3	2596	0.898
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.716			9.128			17.844

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

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

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APPENDIX O Mode Split Technical Note

OTTERPOOL PARK

Method for deriving Mode Splits

JUNE 2020

Incorporating

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VERSION CONTROL

Version	Date	Author	Changes
1	2/6/2017	PL	
2	October 2018	PL	Updates following scoping
3	June 2020	PL	Updates following KCC comments on 2019 Transport Assessment

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IMAGES

TABLES

APPENDICES

APPENDIX A

Appendix A.1 Scoping Discussions with Kent County Council and Folkestone & Hythe District Council

Appendix A.2 Scoping Discussions with Highways England

APPENDIX B

May 2020 Discussions with Kent County Council re: Train Mode Share

APPENDIX C

Adjustment to NTS Mode Splits to Derive External Local Mode Splits for Non-Work Trips

APPENDIX D

Calculations for Internal Mode Splits for Non-Work Trip Purposes

1 Introduction

1.1 Background

Arcadis Consulting (UK) Limited was appointed in August 2016 to develop a masterplan and planning submission in respect of the proposed garden town called Otterpool Park.

In April 2017, a meeting was held with Kent County Council and Folkestone & Hythe District Council to discuss our proposed method for trip generation, mode spit and distribution. Draft technical notes[1][2][3] describing the proposed methods for this work were subsequently produced and reviewed by Kent County Council, Folkestone & Hythe District Council and Highways England.

Discussions relating to the method for deriving mode splits were held with Kent County Council, Folkestone & Hythe District Council and Highways England between June and November 2017. Following comments received on the draft mode split technical note, a final version[4] was submitted with the outline planning application in 2019 and the method described in the note was used to inform the Transport Assessment[5] and other associated documents submitted with the application.

Following submission of the application, further comments relating to the derivation of mode splits were received. On 10th February 2020, a meeting was held with Kent County Council and Folkestone & Hythe District Council to agree how to resolve the comments raised. This note describes the method of deriving mode splits, incorporating the comments received, and will be used to inform a revised Transport Assessment.

1.2 Scoping Discussions

Discussions relating to the method for deriving mode splits for the 2019 Transport Assessment were held with Kent County Council, Folkestone & Hythe District Council and Highways England between May 2017 and November 2017. Discussions with Kent County Council and Folkestone & Hythe District Council are documented in Appendix A.1, while discussions with Highways England are documented in Appendix A.2. The comments received and the action taken to reach a resolution to each comment is summarised in Table 1.

Table 1 Kent County Council / Folkestone & Hythe District Council Comments on Trip Generation Method

Issue Raised	Resolution
Shouldn't A2 Business be personal business in the mode split allocation rather than leisure?	This is correct. There was an error in the table in the original Technical report. The personal business mode split is allocated to the A2 Business land use in the Trip Model. No further action is required.
Table B11 – Shouldn't the Bus / Minibus / Coach percentages be 2% for education, leisure and personal business or is this a rounding discrepancy?	The Bus / Minibus / Coach percentage for all mode splits in Table B11 were incorrect. The Table has been updated to reflect the issue raised.

[1] Otterpool Park Garden Settlement Trip Generation Calculation Method Technical Note (May 2017)
[2] Otterpool Park Garden Settlement Method for deriving Mode Splits (June 2017)
[3] Otterpool Park Garden Settlement Method for the Distribution of External Vehicle Trips (July 2017)
[4] Otterpool Park Method for deriving Mode Splits (October 2018)
[5] Otterpool Park Transport Assessment (February 2019)

1.3 Comments Received on 2019 Transport Assessment

Table 1 presents the comments received from Kent County Council relating to the mode split derivation method used to inform the 2019 Transport Assessment and how the issue has been resolved.

Table 2 Kent County Council Comments on 2019 Transport Assessment Mode Split Derivation Method and Agreed Resolution

Issue Raised	Resolution
The methodology used to calculate development trips by mode is acceptable to KCC, as Local Highway Authority.	No action required.
The proposed internal and external trip mode splits by trip purpose is acceptable to KCC, as Local Highway Authority.	
Table 34 - Allocation of Mode Splits by Trip Purpose to Land Use - The proposed modal split allocation for A2 Business Land Use, Trip Purpose (Personal Business) should be 'personal business' rather than 'leisure"' and should be revised.	Although Table 34 of the 2019 Transport Assessment suggested that the 'Leisure' mode split was applied to A2 Business Land Use, this was not the case; the 'Personal Business' mode split was used. Table 27 in Chapter 6 of this Note provides this clarification.
The proposed internal and external trips by mode cannot be agreed until the total multi-modal trip rates are agreed. Furthermore, it is not clear how these trips have been calculated in Tables 35-37 based on the trip generation summary in Table 31. It is requested that the applicant provides detailed justification as to how these trip rates have been calculated.	A separate note will be produced combining the mode splits derived in this note and the results of the trip generation method[6] and will contain trip rates by mode by land use.
The forecast number of rail trips, which is also based primarily on existing trip patterns and service provision, is low. It is expected that existing service provision would be capable of accommodating the increase in patronage suggested by the forecast. There is a need for a revised assessment of passenger demand, based on likely patronage from the new Otterpool population.	Discussions were held with Kent County Council is May 2020 to agree a revised method for forecasting trips by Train mode. Correspondence related to the discussions is contained in Appendix B to this report. The revised method and agreed mode share are described in section 3.2.3 of this Note.

1.4 Summary of Changes

The changes to method for deriving mode splits described in this Note compared to the method used for the 2019 Transport Assessment is summarised in Table 3.

Table 3 Summary of Changes to Method of Deriving Mode Splits

Change to Mode Split Derivation Method	Effect on Mode Splits
Increase in Train mode share and corresponding decrease in Driver mode share for external Commuting and Business trips (section 3.2.3)	Minor (1.7%) increase in Commuting and Business Train mode share and corresponding decrease in Driver mode share. Minor (less than 1%) increase in Train mode share and corresponding decrease in Driver mode share for all other trip purposes.

[6] Otterpool Park Trip Generation Calculation Method Technical Note (May 2020)

2 Overview of Method

2.1 Overview of Method for Deriving Mode Splits

The method used to derive internal and external mode splits is described in detail in the following Chapters. A summary of the method is provided as follows:

Work Related Trips:

a) The mode split for work related trips is based on Census 2011 travel to work data for Shepway (the mid-layer Super Output Area (SOA) that represents the district of Folkstone & Hythe);

b) For internal trips: Census travel to work data for trips made over distances up to 2km was used. The distance of 2km is the shortest distance for which mode split information is presented within Census data. It is also approximately the distance from the centre of the Otterpool Park site to the nearest settlements outside the site boundary. It is therefore assumed that trips made up to 2km in distance are likely to be internal to the site, while trips that are over 2km in distance would be external to the site;

c) For external trips: Census travel to work data for trips made over distances greater than 2km was used.

Non-Work Related Trips:

a) Non-work related NTS mode splits were used as the basis for mode splits;

b) The national average mode splits provided by NTS were adjusted to reflect travel conditions in Shepway by considering the difference between the Census 2011 travel to work mode split for Shepway and the NTS Commuter mode split. An 'NTS to Census' adjustment factor was derived and applied to the NTS mode splits;

c) For internal trips: the adjustment factor was derived using Census travel to work data for trips made over distances up to 2km;

d) For external Education trips: Census travel to work data for trips made over distances between 2km and 10km was used to derive the adjustment factor. Up to 10km is expected to represent the maximum distance most people are likely to travel for education purposes;

e) For all other external trips: Census travel to work data for trips made over distances greater than 2km was used to derive the adjustment factor.

2.2 Land Uses

The proposals for Otterpool Park Garden City include a number of land uses, as shown in Table 4.

Table 4 Proposed Land Uses by Class

Land Use	Class
Residential	C3
Extra Care Housing	C2
Hotel	C1
Commercial business in hubs	B1
Commercial business park	B1
Light Industrial business park	B2
Retail	A1
Business	A2
Café / Restaurant	A3
Pub / Takeway	A4
Secondary schools	D1
Primary School	D1
Nursery	D1
Community Centre	D1
Health	D1
Sports pavilion	D2
Indoor sports hall	D2

2.3 Trip Purposes

The method for the calculation of trip generation by land use was based on trip generation for a range of purposes, as defined within the NTS data. This Note refers to a number of trip purposes and culminates by allocating the derived mode splits to the trip purposes used in the trip generation calculations. Table 5 lists the trip purposes referred to in the Trip Generation Calculation Method Note and in this Note along with the definition of these purposes.

Table 5 Trip Purposes and Definitions

Trip Purpose	Description
Commuting	Trips to a usual place of work from home, or from work to home.
Business	Personal trips in course of work, including a trip in course of work back to work. This includes all work trips by people with no usual place of work (e.g. site workers) and those who work at or from home.
Education	Trips to school or college, etc. by full time students, students on day release and part time students following vocational courses.
Escort education	Trips made by people accompanying students making education trips
Shopping	All trips to shops or from shops to home, even if there was no intention to buy.
Other escort	Used when the traveller has no purpose of his or her own, other than to escort or accompany another person; for example, taking a child to school. 'Escort commuting' is escorting or accompanying someone from home to work or from work to home. Similarly, other escort purposes are related to the purpose of the person being escorted. Note that the purpose of a trip for a small child accompanying older children to school would be 'escort education'.
Personal business	Visits to services, e.g. hairdressers, launderettes, dry cleaners, betting shops, solicitors, banks, estate agents, libraries, churches; or for medical consultations or treatment; or for eating and drinking, unless the main purpose was entertainment or social.
Visiting friends at private home Visiting friends elsewhere	Visits to meet friends, relatives, or acquaintances, both at someone's home or at a pub, restaurant, etc.
Entertainment / public activity Sport: participate	All types of entertainment or sport, clubs, and voluntary work, nonvocational evening classes, political meetings, etc..
Holiday: base Day trip	Trips to or from any holiday (including stays of 4 or more nights with friends or relatives), or trips for pleasure (not otherwise classified as social or entertainment) within a single day.
Other including just walk	Walking trips for pleasure or exercise along public highways, including taking the dog for a walk and jogging.

3 Mode Splits for External Trips

3.1 Overview

Mode splits for external work-related trips (Commuting and Business trip purposes) were derived from Census 2011 travel to work data for Folkstone & Hythe for trips made over distances greater than 2km.

For mode splits for all other trip purposes, national average mode split data from the NTS database was used and adjusted using Census 2011 data to reflect local conditions.

This method is described in greater detail in this Chapter.

3.2 Mode Split for External Commuting and Business Trip Purposes

3.2.1 Census Mode Splits

Census 2011 travel to work data was utilised to derive the mode split for external trips made for Commuting and Business trip purposes. This includes Commuter and Business trips generated by the on-site residential land uses and incoming Commuting trips to on-site land uses from off-site locations.

Figure 1 shows the location of the proposed site (red outline) within the Census mid-layer SOAs for Folkstone & Hythe (black dashed lines and numbered 1 to 15). The figure shows how the site is primarily located within mid-layer SOA number 9 and partially in number 8.

Figure 1 Site Location and Census Mid-Layer SOAs for Folkstone & Hythe

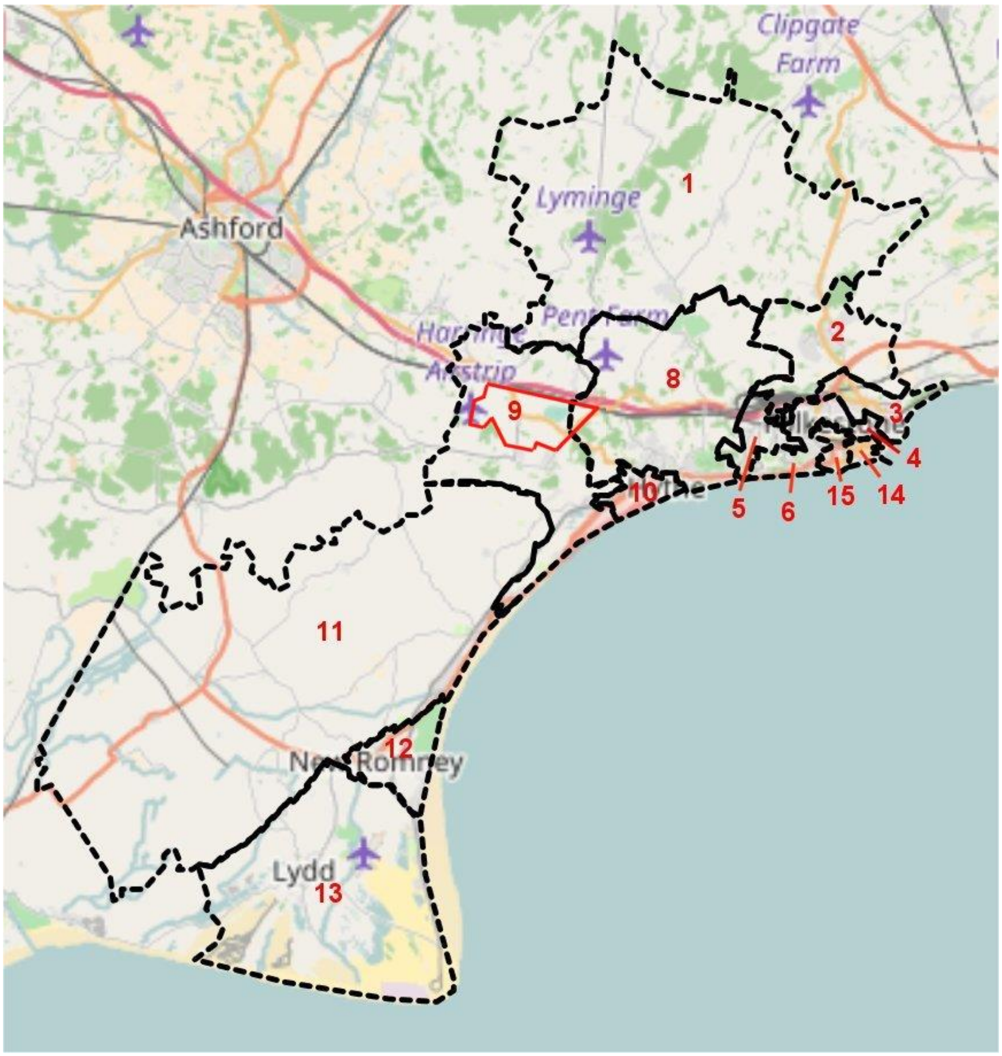

Table 6 presents the Census mode splits for trips made over distances greater than 2km for SOAs 8 and 9. As explained in Chapter 2, trips made over a distance greater than 2km are assumed to be external to the site. When considering trips by distance, Census combines Passenger/Taxi/Motorcycle into one mode share and does the same for all public transport mode shares.

Table 6 Census Mode Splits for Folkstone & Hythe SOAs 8 and 9 for trips >2km

Mode	Mode Share Over 2km SOA 8	Mode Share Over 2km SOA 9
Driver	81.3%	84.5%
Passenger / Taxi / Motorcycle	8.0%	7.0%
Train / Bus / Minibus / Coach / Light Rail	5.9%	5.2%
Bicycle	2.1%	1.5%
Walk	2.7%	1.8%
Total	**100%**	**100%**

Table 6 shows that the Driver mode share for people living in these SOAs is high while the public transport mode share is low.

SOA 9 includes Lympne, Newingreen, Sellindge and Stanford which are close to the site, but also includes areas along the coast such as Burmarsh and Dymchurch which have a similar level of bus service provision to the Otterpool Park location but are significantly further from the rail network. SOA 8 includes Postling, Beachborough and Etchinghill which are all some distance from the rail network and have a lower level of bus service provision. The mode splits for these SOAs, which are an average for all locations within the SOA, are therefore considered likely to have a lower public transport mode share than would be expected for people living on the Otterpool Park site.

Figure 1 showed that SOA 10 covers an area within Hythe, which has a superior level of public transport provision. Table 7 presents the mode split of this SOA for trips over 2km.

Table 7 Census Mode Split for Folkstone & Hythe SOA 10 (Hythe) for trips >2km

Mode	Mode Share Over 2km SOA 10
Driver	74.1%
Passenger / Taxi / Motorcycle	8.2%
Train / Bus / Minibus / Coach / Light Rail	11.6%
Bicycle	2.1%
Walk	4.0%
Total	**100%**

As expected, the public transport mode share for this SOA is greater than SOAs 8 and 9 while the Driver mode share is lower. Other mode shares are comparable across all three SOAs.

Since SOAs 8 and 9 include sites located further away from public transport nodes than the Otterpool Park site, mode splits from these SOAs would have a lower public transport and higher Driver mode shares than would be expected at Otterpool Park. SOA 10 provides a better comparator to Otterpool Park in terms of proximity to public transport, but is likely to have a better level of service provision. We therefore consider that the Otterpool Park mode split would be somewhere in between SOAs 8, 9 and 10. Table 8 shows a mode split that represents the weighted average for SOAs 8, 9 and 10.

Table 8 Weighted Average Census Mode Split for Folkestone & Hythe SOAs 8, 9 and 10 for trips >2km

Mode	Mode Share Over 2km SOA 008, 009, 010
Driver	80.1%
Passenger	7.8%
Taxi	
Motorcycle	
Train	7.3%
Bus / Minibus / Coach	
Light Rail	
Bicycle	1.9%
Walk	2.8%
Total	**100%**

3.2.2 Disaggregation of Combined Modes

As mentioned previously, Census combines Passenger/Taxi/Motorcycle into one mode share and does the same for all public transport modes. The assessment requires that these shares are disaggregated into their component modes.

This has been achieved by considering the combined Census mode split for SOAs 8 and 9 for trips of all distances, which provides a full mode split. The mode shares for Passenger/Taxi/Motorcycle and public transport in Table 8 have been adjusted based on the proportion of these mode shares in the full mode split for all distances. The result in shown in Table 9.

Table 9 Adjusted Mode Split for External Commuter and Business Trips

Mode	Mode Share		
	All distances	>2km	Adjusted
Driver	-	80.1%	80.1%
Passenger	5.4%	7.8%	6.0%
Taxi	0.3%		0.4%
Motorcycle	1.3%		1.4%
Train	2.1%	7.3%	2.7%
Bus / Minibus / Coach	3.6%		4.6%
Light Rail	0.1%		0.1%
Bicycle	-	1.9%	1.9%
Walk	-	2.8%	2.8%
Total	**-**	**100%**	**100%**

3.2.3 2020 Update for Rail Trips

The adjusted mode split in Table 9 was adopted as the external Commuter and Business trip mode split for the 2019 Transport Assessment. Following submission of the 2019 planning application, comments were received from Kent County Council regarding the number of rail trips being too low. Discussions were held with Kent County Council in May 2020 to agree a revised Train mode share for external trips. Correspondence related to the discussions is contained in Appendix B to this report.

The Folkestone & Hythe Census SOA 15 corresponds to the area which contains Folkestone Central station. Since the journey time by rail to London Kings Cross from Westenhanger station and Folkestone Central station are comparable, it was agreed to use the SOA 15 Train mode share for the Otterpool Park development. The mode splits by distance for SOA 15 are shown in Table 10.

Table 10 Census Mode Splits by Distance for Folkestone & Hythe SOA 15

Mode	Mode Splits		
	All distances		>2km
Driver	63.4%	63.4%	73.7%
Passenger	7.0%	8.5%	8.5%
Taxi	0.6%		
Motorcycle	0.9%		
Train	3.6%	10.9%	13.2%
Bus / Minibus / Coach	7.1%		
Light Rail	0.1%		
Bicycle	1.5%	1.5%	0.8%
Walk	15.8%	15.8%	3.8%
Total	**100.0%**	**100.0%**	**100.0%**

Since Census only provides individual mode shares for public transport modes for journeys made for all distances, it was necessary to sub-divide the public transport mode shares for the 2km to 10km and the 2km+ mode splits. This was achieved by dividing the public transport mode shares into Train, Bus and Light Rail by proportion of these the use of these modes according to the All distances mode split. This calculation is shown in Table 11.

Table 11 Subdivision of Public Transport Mode Shares by Distance for SOA 15

Mode	Mode Splits		
	All distances		>2km
Train	3.6%	33.2%	4.4%
Bus / Minibus / Coach	7.1%	65.7%	8.7%
Light Rail	0.1%	1.1%	0.2%
	10.9%	**100.0%**	**13.2%**

The Train mode share for the 2km+ distance was used to replace the Train mode share in Table 9. This increased Train mode share by 1.7 percentage points (4.4% – 2.7%). It was agreed with Kent County Council that the Driver mode share would be reduced by the same amount. The revised Commuter and Business trip mode share is shown in Table 12.

Table 12 Mode Split for External Commuter and Business Trips Adjusted for Rail Trips

Mode	Mode Split >2km
Driver	78.4%
Passenger	6.0%
Taxi	0.4%
Motorcycle	1.4%
Train	4.4%
Bus / Minibus / Coach	4.6%
Light Rail	0.1%
Bicycle	1.9%
Walk	2.8%
Total	**100%**

3.3 Mode Splits for External Non-Work Trip Purposes

3.3.1 NTS Mode Splits

Mode splits for non-work trips have been derived from NTS data. Table 13 presents the NTS mode splits for 6 categories of trip purpose.

Table 13 NTS Mode Splits by Trip Purpose

Mode	Mode Share				
	Commuting	Education	Shopping	Personal Business	Leisure
Driver	66%	46%	66%	85%	67%
Passenger					
Train	9%	2%	1%	0%	2%
Bus / Minibus / Coach	8%	10%	9%	3%	7%
Walk	10%	38%	21%	11%	20%
Other	7%	5%	3%	1%	4%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

The mode splits for the non-work related trip purposes form the basis of the mode splits for these purposes we propose to use in our assessment.

It is necessary to make a number of adjustments to the mode splits in Table 13 to make these national average mode splits representative of trips made to/from the Otterpool Park site. These adjustments are described in the following sections.

3.3.2 Adjustment for Taxi, Motorcycle and Bicycle Mode Shares

For the purposes of our Transport Assessment, it is necessary to calculate the number of trips generated by all modes listed in the Census mode split shown in Table 9. It has been assumed that the 'Other' mode share category in the NTS mode splits includes Taxi, Motorcycle and Bicycle mode shares and should therefore be re-allocated to them. This was achieved by considering the relative proportions of the mode shares for these categories within the Census mode split in Table 9, which provides the Commuter mode split for trips greater than 2km in distance. As we expect Education trips to be made over a shorter distance than other trips, we have derived Taxi, Motorcycle and Bicycle mode shares for Education trips from the Census mode split for trips between 2km and 10km in length.

Table 14 presents the Census mode shares for Taxi, Motorcycle and Bicycle for trips between 2km and 10km in length (for Education trips) and trips greater than 2km (for all other trip purposes) along with the proportion of the 'Other' mode share that is to be allocated to them.

Table 14 Re-Allocation of 'Other' Mode Share to Taxi, Motorcycle and Bicycle for External Non-Work Trips

Mode	Education Trips		All Other Trips	
	Census 2km to 10km	Proportion of 'Other' mode share	Census >2km	Proportion of 'Other' mode share
Taxi	0.5%	9%	0.4%	10%
Motorcycle	1.7%	35%	1.4%	39%
Bicycle	2.7%	56%	1.9%	51%
Total	**4.9%**	**100%**	**3.7%**	**100%**

The result of this re-allocation of 'Other' mode share to Taxi, Motorcycle and Bicycle is shown in Table 15.

Table 15 NTS Mode Splits by Trip Purpose adjusted for Taxi, Motorcycle and Bicycle

Mode	Mode Share				
	Commuting	Education	Shopping	Personal Business	Leisure
Driver Passenger	66%	46%	66%	85%	67%
Taxi	1%	0%	0%	0%	0%
Motorcycle	3%	2%	1%	1%	2%
Train	9%	2%	1%	0%	2%
Bus / Minibus / Coach	8%	10%	9%	3%	7%
Light Rail	0%	0%	0%	0%	0%
Bicycle	3%	3%	1%	1%	2%
Walk	10%	38%	21%	11%	20%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

3.3.3 Adjustment for Driver and Passenger Mode Shares

The NTS data also combines Driver and Passenger trips, which must be disaggregated for our assessment. This has been achieved by considering the car occupancy values for each trip purpose as this provides an indication of the ratio between the number of drivers and passengers.

Table 16 presents the combined Driver and Passenger mode shares by trip purpose from Table 15 with the NTS vehicle occupancy value for each trip purpose and the resulting disaggregated Driver and Passenger mode shares.

Table 16 Disaggregation of Driver and Passenger Mode Shares

Mode	Trip Purpose				
	Commuting	Education	Shopping	Personal Business	Leisure
Driver + Passenger	66%	46%	66%	85%	67%
NTS vehicle occupancy	1.13	1.43	1.64	1.63	2.02
Driver	59%	32%	40%	52%	33%
Passenger	8%	14%	26%	33%	34%

Table 17 combines the disaggregated Driver and Passenger mode shares in Table 16 with the other mode shares in Table 15.

Table 17 NTS Mode Splits by Trip Purpose adjusted for Driver and Passenger

Mode	Mode Share				
	Commuting	Education	Shopping	Personal Business	Leisure
Driver	59%	32%	40%	52%	33%
Passenger	8%	14%	26%	33%	34%
Taxi	1%	0%	0%	0%	0%
Motorcycle	3%	2%	1%	1%	2%
Train	9%	2%	1%	0%	2%
Bus / Minibus / Coach	8%	10%	9%	3%	7%
Light Rail	0%	0%	0%	0%	0%
Bicycle	3%	3%	1%	1%	2%
Walk	10%	38%	21%	11%	20%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

3.3.4 Adjustment from National to Local Mode Splits

Table 17 presents the mode splits for 6 trip purposes based on NTS data. Although these mode splits are partially derived from Census data for trips made over 2km, they primarily represent the national average mode shares for trips made over all distances.

Comparison of the national average Commuting mode share in Table 17 and the Commuting mode share in Table 8, which is based on local Census data and has been adjusted for trips greater than 2km in length, shows that the Driver mode share is significantly greater in the latter. We have therefore surmised that the mode splits in Table 16 potentially underestimate the level of Driver trips that would be generated at the Otterpool Park site and must be adjusted to achieve more accurate site-specific mode splits.

This has been achieved by considering the difference between the national average Commuting mode split and the external Commuting mode split derived for Otterpool Park from Census. As per our method for adjusting NTS mode splits for Education described in section 3.3.2, we have used the Census mode split for trips made between 2km and 10km to derive an adjustment for Education trips and the Census mode split for trips made over 2km for all other trip purposes.

Table 18 presents a comparison between NTS Commuting mode split and the Census Commuting mode splits for distances between 2km and 10km (for Education trips) and greater than 2km (for all other trip purposes). The comparison yields an 'NTS to Census factor', which is the factor applied to the NTS mode share to match the Census mode share. For example, The NTS Commuting Driver mode share for all distances (first row, second column of Table 18) is 59% whereas the Census 2km to 10km mode share is 74%. For the NTS mode share to match the Census mode share it would need to be increased by 127%, i.e. 59% x 127% = 74%.

Table 18 Adjustment to NTS Mode Splits to Derive Local External Mode Splits

Mode	Education Trips NTS Commuting All distances	Education Trips Census 2km to 10km	Education Trips NTS to Census factor	All Other Trips NTS Commuting All distances	All Other Trips Census >2km	All Other Trips NTS to Census factor
Driver	59%	73%	125%	59%	78%	134%
Passenger	8%	7%	96%	8%	6%	79%
Taxi	1%	0%	68%	1%	0%	56%
Motorcycle	3%	2%	68%	3%	1%	56%
Train	9%	5%	49%	9%	4%	47%
Bus / Minibus / Coach	8%	6%	76%	8%	5%	59%
Light Rail	0%	0%	100%	0%	0%	100%
Bicycle	3%	3%	81%	3%	2%	56%
Walk	10%	4%	38%	10%	3%	28%
Total	**100%**	**100%**	**-**	**100%**	**100%**	**-**

The NTS to Census factors in Table 18 were applied to the NTS mode shares in Table 17. Table 19 shows how the Education mode split was calculated by applying these factors. In the case of this example, the NTS Adjusted mode split only summed to 81% instead of 100%. To correct this, the remaining 19% was added to all mode shares proportionally to make the total equal to 100%.

Table 19 Adjustment to NTS Education Mode Split to Derive Local External Mode Split

Mode	Education Mode Split				
	NTS Mode Split	NTS to Census factor	NTS Adjusted Mode Split	% change to = 100%	Otterpool Mode Split
Driver	32%	125%	40%	10%	50%
Passenger	14%	96%	13%	3%	17%
Taxi	0%	68%	0%	0%	0%
Motorcycle	2%	68%	1%	0%	1%
Train	2%	49%	1%	0%	1%
Bus / Minibus / Coach	10%	76%	8%	2%	10%
Light Rail	0%	100%	0%	0%	0%
Bicycle	3%	81%	2%	1%	3%
Walk	38%	38%	14%	4%	18%
Total	**100%**	-	**80%**	**20%**	**100%**
adjustment			*20%*		

Appendix C presents the adjustment made to the mode splits for all other trip purposes using this method. The mode splits resulting from the adjustments described above are shown in Table 20.

Table 20 Otterpool Park Mode Splits by Trip Purpose for External Non-Work Trips

Mode	Mode Split				
	Education	Shopping	Personal Business	Leisure	Education escort
Driver	50%	62%	69%	53%	50%
Passenger	17%	23%	26%	32%	17%
Taxi	0%	0%	0%	0%	0%
Motorcycle	1%	1%	0%	1%	1%
Train	1%	1%	0%	1%	1%
Bus / Minibus / Coach	10%	6%	2%	5%	10%
Light Rail	0%	0%	0%	0%	0%
Bicycle	3%	1%	0%	1%	3%
Walk	18%	7%	3%	7%	18%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

These mode splits represent the external mode splits used in the Transport Assessment for these trip purposes.

4 Mode Splits for Internal Trips

4.1 Overview

Mode splits for internal work-related trips (Commuting and Business trip purposes) were derived from Census 2011 travel to work data for Folkstone & Hythe for trips made over distances up to 2km.

For mode splits for all other trip purposes, national average mode split data from the NTS database was used and adjusted using Census 2011 data to reflect local Shepway conditions.

This method is described in greater detail in this Chapter.

4.2 Mode Split for Internal Commuting and Business Trip Purposes

4.2.1 Bicycle and Walk Mode Shares

As for the mode splits for external Commuting and Business trip purposes, Census 2011 travel to work data was used to derive the mode split for internal trips made for these purposes. As well as Commuter and Business trips generated by the on-site residential land uses, this includes internal linked Commuting and Business trips made by people who live outside of Otterpool Park, as defined in the Trip Generation Method technical note.

We begin by presenting in Table 21 the Census mode splits for Folkstone & Hythe SOAs 8, 9 and 10 for trips made up to 2km. As explained in Chapter 2, trips made over a distance of less than 2km are assumed to be internal to the site.

Table 21 Census Mode Splits for Folkstone & Hythe SOAs 8, 9 and 10 for trips <2km

Mode	Mode Share Less than 2km		
	SOA 8	SOA 9	SOA 10
Driver	54%	62%	31%
Passenger Taxi Motorcycle	9%	4%	4%
Train Bus / Minibus / Coach Light Rail	3%	1%	2%
Bicycle	6%	3%	7%
Walk	28%	30%	56%
Total	**100%**	**100%**	**100%**

SOAs 8 and 9, which cover the location of the Otterpool Park site, have the two lowest Walk mode shares of any SOA in Folkstone & Hythe. This reflects the current poor pedestrian network, safety concerns and lack of local facilities within walking distance. A key feature of the Otterpool Park site proposals will be high quality, safe and direct pedestrian and cycle links connecting the key destinations across the site which will include most of the services residents will require, thus need to travel short distances by any modes other than Bicycle or Walk will be significantly reduced. For this reason, we anticipate Bicycle and Walk mode shares to be greater than currently suggested by Census for SOAs 8 and 9 and closer to SOA 10 (Hythe). We have therefore assumed that the Walk mode share for Otterpool Park will be comparable to Hythe at 56%.

Both hard and soft measures will be implemented on site to encourage travel by Bicycle mode. This is expected to include cycle infrastructure such as cycle lanes, segregated cycle lanes, cycle advance areas at junctions, TOUCAN crossings and cycle parking facilities at all key destinations. Green Travel Plans for residents, staff and visitors will promote cycle schemes and provide facilities such as showers and lockers to make cycling easier and more attractive. We expect Otterpool Park to be an exemplar for cycling within Shepway and as such believe that the Bicycle mode share should at least match the greatest Bicycle mode share in Shepway for trips up to 2km, which is 11% in SOA 13 which covers the area of Lydd and Dungeness.

4.2.2 Public Transport Mode Shares

The Folkstone & Hythe average public transport mode share for trips up to 2km is low at 4% and is comparable to the 3% public transport mode share for SOA 8, which covers the majority of the Otterpool Park site area.

All internal public transport trips will be Bus trips. Bus infrastructure improvements, such as high-quality shelters, service information and raised kerbs improving access to buses for the mobility impaired, as well as bus service improvements, including increased service frequency and services routing to Westenhanger Station, are all anticipated to form part of the proposals for Otterpool Park. For this reason, we expect the internal public transport mode share to improve on the current level for SOA 8.

We therefore propose a modest increase in public transport mode share from 3% to 5% for our transport assessment.

4.2.3 Driver, Passenger, Taxi and Motorcycle Mode Shares

Having defined the Bus (5%), Walk (56%) and Bicycle (11%) mode shares (totalling 72%), we distributed the remaining 28% over the Driver, Passenger, Taxi and Motorcycle mode shares by considering the existing mode share proportions of these modes for SOA 8 as previously presented in Table 21. This calculation is shown in Table 22.

Table 22 Driver, Passenger, Taxi and Motorcycle Internal Mode Share Calculation

Mode	Mode Share Less than 2km			
	Sustainable Modes	SOA 8		All Modes
		Census	Proportions	
Driver	-	54%	86%	24%
Passenger Taxi Motorcycle	-	9%	14%	4%
Train	0%	-	-	0%
Bus / Minibus / Coach	5%	-	-	5%
Light Rail	0%	-	-	0%
Bicycle	11%	-	-	11%
Walk	56%	-	-	56%
Total	**72%**	**63%**	**100%**	**100%**
remaining share	28%			

The remaining 28% share was distributed 24% to Driver and 4% to the other modes. The final step in the calculation was to disaggregate the Passenger/Taxi/Motorcycle mode shares into their constituent parts. This was achieved by considering the proportional shares of these modes within the Census mode split for SOA 8 for trips of all distances. This calculation is shown in Table 23.

Table 23 Mode Split for Internal Commuting and Business Trips

Mode	Mode Share less than 2km			
	Census		Commuting/Business	
	All distances	Proportions	< 2km	Adjusted
Driver	-	-	24%	24%
Passenger	5%	78%	4%	3%
Taxi	0%	2%		0%
Motorcycle	1%	20%		1%
Train	-	-	0%	0%
Bus / Minibus / Coach	-	-	5%	5%
Light Rail	-	-	0%	0%
Bicycle	-	-	11%	11%
Walk	-	-	56%	56%
Total	**6%**	**100%**	**100%**	**100%**

The calculations in Table 23 therefore conclude the derivation of the internal mode split for Commuting and Business trips.

4.3 Mode Split for Internal Non-Work Trip Purposes

The mode splits for all other internal trip purposes were determined using the same method used to derive the external mode splits for these modes, as described in Chapter 3. The only difference is the trip distance category of Census data applied. Where the external mode split calculations required the use of Census mode splits for trips made between 2km and 10km (for Education trips) and over 2km (for all other trip purposes), for the internal mode split calculations the Census mode split for trips made over a distance of up to 2km (the shortest distance category provided by Census) was used for all trip purposes.

The full calculations for determining internal mode splits for non-work trip purposes is contained in Appendix D. Table 24 presents the mode splits that represent the results of the calculations.

Table 24 Otterpool Park Mode Splits by Trip Purpose for Internal Non-Work Trips

Mode			Mode Split		
	Education	Shopping	Personal Business	Leisure	Education escort
Driver	5%	10%	21%	9%	5%
Passenger	2%	7%	13%	9%	2%
Taxi	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%
Bus / Minibus / Coach	2%	3%	2%	3%	2%
Light Rail	0%	0%	0%	0%	0%
Bicycle	3%	3%	2%	5%	3%
Walk	87%	76%	62%	75%	87%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

5 Summary of Mode Splits for Internal and External Trips

Table 25 and Table 26 present the mode splits for internal and external trips derived in Chapters 3 and 4.

Table 25 Otterpool Park Trip Mode Splits by Trip Purpose for Internal Trips

	Mode Split					
Mode	**Commuting**	**Education**	**Shopping**	**Personal Business**	**Leisure**	**Education escort**
Driver	24%	5%	10%	21%	9%	5%
Passenger	3%	2%	7%	13%	9%	2%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	5%	2%	3%	2%	3%	2%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	11%	3%	3%	2%	5%	3%
Walk	56%	87%	76%	62%	75%	87%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 26 Otterpool Park Trip Mode Splits by Trip Purpose for External Trips

	Mode Split					
Mode	**Commuting**	**Education**	**Shopping**	**Personal Business**	**Leisure**	**Education escort**
Driver	78%	50%	62%	69%	53%	50%
Passenger	6%	17%	23%	26%	32%	17%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	0%	1%	1%
Train	4%	1%	1%	0%	1%	1%
Bus / Minibus / Coach	5%	10%	6%	2%	5%	10%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	2%	3%	1%	0%	1%	3%
Walk	3%	18%	7%	3%	7%	18%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

It should be noted that these mode splits are largely based on current, site-specific conditions and do not reflect all the potential changes in the local transport networks that will be proposed as part of the development of Otterpool Park. For example, the derived Train mode share for non-work external trip purposes is influenced by the low national average for this mode and it is anticipated that a number of schemes to improve public transport provision and enhance local pedestrian and cycle links will be proposed that would increase the mode shares of sustainable modes and decrease Driver mode shares. These mode splits will therefore be used as part of a future case assessment of conditions as a worst-case assessment.

6 Allocation of Mode Splits

In Table 4 we presented the current land uses proposed for the Otterpool Park site, while in Table 5 we presented the trip purposes that formed the basis of the trip generation calculations.

In our Trip Generation Calculation Method Note we described how the residential trip purposes were allocated to on- and of-site land uses to determine the number of AM and PM peak trips each land use is expected to generate. In Table 27 we have combined the land uses, trip purposes and mode split categories to show how the mode splits derived in this Note will be applied to the trips generated by each land use to determine the number of trips by mode generated by each land use.

Table 27 Allocation of Mode Splits to Trip Purposes and Land Uses

Land Use	Trip Purpose	Mode Split Allocation
C2/C3 Residential	Commuting	Commuting
	Business	Commuting
	Education	Education
	Escort education	Education escort
	Shopping	Shopping
	Other escort	Other escort
	Personal business	Personal Business
	Visiting friends at private home	Leisure
	Visiting friends elsewhere	Leisure
	Entertainment / public activity	Leisure
	Sport: participate	Leisure
	Holiday: base	Leisure
	Day trip	Leisure
	Other including just walk	Leisure
C1 Hotel	Holiday: base	Leisure
B1 Commercial business in hubs	Commuting / Business	Commuting
B1 Commercial business park	Commuting / Business	Commuting
B2 Light Industrial business park	Commuting / Business	Commuting
A1 Retail	Shopping	Shopping
A2 Business	Personal business	Personal Business
A3 Café / Restaurant	Entertainment / public activity	Leisure
A4 Pub / Takeway	Entertainment / public activity	Leisure
D1 secondary schools	Education	Education
D1 Primary School	Education	Education
D1 Nursery	Education	Education
All Non-Residential Land Uses	Commuting (staff)	Commuting
	Escort education	Education escort
D1 Community Centre	Entertainment / public activity	Leisure
D1 Health	Personal Business	Personal Business
D2 Sports pavilion	Sport: participate	Leisure
D2 Indoor sports hall	Sport: participate	Leisure
All Non-Residential Land Uses	Commuting (staff)	Commuting
	Other escort	Other escort

APPENDIX A

Appendix A.1 Scoping Discussions with Kent County Council and Folkestone & Hythe District Council

Longman, Phillip

From:	Matt.Hogben@kent.gov.uk
Sent:	12 June 2017 12:30
To:	Longman, Phillip; james.hammond@shepway.gov.uk
Cc:	Kearney, Rebecca; James, Anthony; Myers, Emily
Subject:	RE: Otterpool Park: Mode Split Method Note
Follow Up Flag:	Follow up
Flag Status:	Completed

Hi Phil

Thank you for the email. I have no further comments to make.

Regards

Matthew Hogben | Principal Transport and Development Planner | Ashford and Shepway | Highways and Transportation | Kent County Council | Ashford Highway Depot, 4 Javelin Way, Henwood Industrial Estate, Ashford, Kent, TN24 8AD | 03000 41 81 81 | www.kent.gov.uk

---

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 12 June 2017 11:56
To: Hogben, Matt - GT KH; james.hammond@shepway.gov.uk
Cc: Kearney, Rebecca; Anthony James; Myers, Emily
Subject: RE: Otterpool Park: Mode Split Method Note

Matt

Thanks again for your comments. My responses below.

- **Table 21 – Shouldn't A2 Business be personal business in the mode split allocation rather than leisure?**

You are correct and this is an error in the table in the report as the personal business mode split is allocated to the A2 Business land use in the Trip Model.

- **Table B11 – Shouldn't the Bus / Minibus / Coach percentages be 2% for education, leisure and personal business or is this a rounding discrepancy?**

The Bus / Minibus / Coach percentage for all mode splits in Table B11 are incorrect. However, they are correct in Tables B7 to B10. The Table below is the correct version.

Mode	Education	Shopping	Mode Split Personal Business	Leisure	Education escort
Driver	5%	10%	21%	9%	5%
Passenger	2%	7%	13%	9%	2%
Taxi	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%
Bus / Minibus / Coach	2%	3%	2%	3%	2%
Light Rail	0%	0%	0%	0%	0%
Bicycle	3%	3%	2%	5%	3%
Walk	87%	76%	62%	75%	87%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

Thank you again for your time, your comments have provided a helpful review of the model outputs and valuable input to the revision of assumptions. I will issue a revised version of the report to reflect the above comments and responses. Do you have any other comments for us to consider on the mode split method?

Kind regards,

Phil

From: Matt.Hogben@kent.gov.uk [mailto:Matt.Hogben@kent.gov.uk]
Sent: 09 June 2017 12:54
To: Phillip Longman <Phillip.Longman@arcadis.com>; james.hammond@shepway.gov.uk
Cc: Kearney, Rebecca <rebecca.kearney@arcadis.com>; Anthony James <Anthony.James@arcadis.com>; Myers, Emily <emily.myers@arcadis.com>
Subject: RE: Otterpool Park: Mode Split Method Note

Dear Phil

As promised here are my comments on the mode split method note:

- Table 21 – Shouldn't A2 Business be personal business in the mode split allocation rather than leisure?
- Table B11 – Shouldn't the Bus / Minibus / Coach percentages be 2% for education, leisure and personal business or is this a rounding discrepancy?

Regards

Matthew Hogben | Principal Transport and Development Planner | Ashford and Shepway | Highways and Transportation | Kent County Council | Ashford Highway Depot, 4 Javelin Way, Henwood Industrial Estate, Ashford, Kent, TN24 8AD | 03000 41 81 81 | www.kent.gov.uk

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 02 June 2017 15:55
To: Hogben, Matt - GT KH; james.hammond@shepway.gov.uk
Cc: Kearney, Rebecca; Anthony James; Myers, Emily
Subject: Otterpool Park: Mode Split Method Note

Dear Matt and James

As promised, I attach a note detailing our proposed method for deriving mode splits for use on the transport assessment for the Otterpool Park project.

I would be very grateful for your comments.

Hopefully catch up with you next week. Have a great weekend.

Kind regards,

Phil

From: Phillip Longman
Sent: 31 May 2017 16:22
To: Matt.hogben@kent.gov.uk; james.hammond@shepway.gov.uk
Cc: Kearney, Rebecca <rebecca.kearney@arcadis.com>; Anthony James (Anthony.James@arcadis.com) <Anthony.James@arcadis.com>; Myers, Emily <emily.myers@arcadis.com>
Subject: Otterpool Park: Trip Generation Method Note

Dear Matt and James,

Many thanks for your time so far on the Otterpool Park project. I attach a note describing our proposed method for the calculation of trips generated by the proposed development. The note includes:

1. Current masterplan proposals in terms of development quantum by land use
2. Proposed method for deriving the number of trips generated by each land use
3. Proposed method for considering trip reductions related to linked trips

I will follow this note with two further notes relating to our proposed method for deriving mode splits and for the distribution of trips.

I would be very grateful if you could review this note and let me know your thoughts on the proposed method. I would be very happy to answer any questions you may have and discuss how we can agree a method that will enable us to begin testing the development proposals.

Kind regards,

Phil

Phillip Longman
Associate Technical Director
Transport Planning & Urban Design

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Appendix A.2 Scoping Discussions with Highways England

Longman, Phillip

From:	WALKDEN, NIGEL <Nigel.Walkden@highwaysengland.co.uk>
Sent:	02 November 2017 17:45
To:	Phillip Longman
Cc:	Nicolas Contentin; Bown, Kevin
Subject:	RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report
Follow Up Flag:	Follow up
Flag Status:	Completed

Hi Phil,

I've looked through everything again now. In terms of the distribution and mode share reports I am generally content with the derivations.

For the external B1 trips you discuss below you say that the vehicle trip rates are 0.07 and 0.06 vehicle trips lower than the rates that I derived from TRICS. While this does not sound like a large number of journeys, when you calculate the actual number of external vehicle trips it presumably adds up to a large number. Admittedly your B1 has a large proportion of external trips but if you look at employment as a whole the containment of 42% is similar as a percentage to that for Shepway commutes of up to 5km as a whole from the 2011 Census, so the proportion of external commuting trips overall looks reasonable, not high.

Therefore I think this needs some more thought. Travel planning measures for example for longer commutes are less effective than for short commutes due to fewer options, so managing down the longer vehicle trips (particularly such a high proportion) would be very challenging.

The only other issue is your use of data from the NTS0502 table on peak hour trip purposes. Your PM peak hour has been derived from 4-5PM proportions whereas it should come from 5-6PM proportions. 5-6PM shows a much higher percentage of commuting trips than you have quoted.

I thought it better to put this on paper before taking further as the numbers and complexity of your calculations makes it difficult to process over the phone. I can however discuss when I'm back in the office next week.

Have a good weekend,

Nigel

Nigel Walkden BA MSc MBA CMILT
Managing Consultant, Transportation

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From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 25 October 2017 11:29
To: WALKDEN, NIGEL
Cc: Nicolas Contentin
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel

Many thanks for your comments.

I attach a spreadsheet which hopefully explains how we derived the AM and PM peak trip purposes from NTS data. In summary; The AM and PM peak NTS trip purpose data included 8 trip purposes, while the daily NTS trip purpose data provided the more comprehensive list of 14 trip purposes that were relevant to Otterpool Park. We therefore used the daily NTS trip purpose data to sub-divide the peak hour data.

We regard to B1 vehicle trip rates; Our latest trip generation calculations (updated slightly from the version described in the technical note), assumes all-person trip rates of 0.39 per job in the AM peak and 0.40 in the PM peak. In the mode share technical note we show that the car driver mode share for external work trips is derived to be 80%. This generates an AM peak vehicle trip rate of 0.31 trips per job and a PM peak trip rate of 0.32 trips per job.

These trip rates are 0.07 and 0.06 trips per job lower than the rate you have derived from TRICS. Due to the nature of the site, we were trying to move away from using TRICS to derive trip rates as it is difficult to find sites within the database that we think would accurately reflect the very site-specific characteristics and conditions that Otterpool Park will offer. The mode share technical note explains how the 80% car driver mode share was derived from Census 2011 data adjusted for distance travelled. The Otterpool Park business park will be directly adjacent to Westenhanger Station and, with effective travel planning, I would anticipate that a lower car driver mode share than the 80% suggested by current travel behaviour could be achieved at Otterpool Park.

In addition, the total number of B1 jobs assumed in the calculations to be filled by on-site residents is just 10%. We consider that work trip containment of just 10% is conservative and that our calculations therefore represent a robust assessment of external trips.

Hopefully this information goes some way to answering your questions.

Please let me know when would be a suitable time to arrange a call.

Kind regards,

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 17 October 2017 14:15
To: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Phillip Longman <Phillip.Longman@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nicolas,

It is taking time to sense check everything that has been done. I have been through everything now but will need to go over it all again to make sure I haven't missed anything.

To date the issues that stand out are the business B1 trip rates that for cars are lower than expected for external trips. In your trip generation note para 4.3.2 you are using a peak hour trip rate of 0.35 person trips per job for local trips and assuming the same for longer distance external trips. I would have thought that the vast majority of part time jobs involved local commutes so the peak hour trip rates will be lower than for the external trips. I did a quick assessment using TRICS for business parks excluding London and non-England, town centre and edge of town centre and came up with 0.38 vehicle trips per employee.

Table 5 of the trip generation note gives NTS trip purposes for the AM and PM peaks. Can you show how these have been derived? I got very close re-creating the employment proportions but not some of the other purposes.

Feel free to give me a call to discuss if you need to. In the meantime I'll go through everything again.

Thanks

Nigel

Nigel Walkden BA MSc MBA CMILT
Managing Consultant, Transportation

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Web: http://www.highways.gov.uk

From: Nicolas Contentin [mailto:Nicolas.Contentin@arcadis.com]
Sent: 17 October 2017 10:31
To: Phillip Longman; WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel,

What time should I call you?

I have a meeting between 11:00 and 12:00. I also need to leave at 15:30 today.

Let me know when it is suitable to call you.

Regards,

Nicolas Contentin
Principal Transport Planner

Arcadis consulting UK Ltd,
34 York Way,
Kings Cross
London N1 9AB

☎ Direct : +44 (0) 2030 149 167
✉ Email: Nicolas.Contentin@Arcadis.com
Web: www.arcadis.com

From: Phillip Longman
Sent: 16 October 2017 11:05
To: WALKDEN, NIGEL <Nigel.Walkden@highwaysengland.co.uk>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel

That's no problem. I am not available tomorrow, but my colleague Nico will be.

Kind regards,

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 16 October 2017 10:44
To: Phillip Longman <Phillip.Longman@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Phil,

I'm still going through your reports at the moment, there is a lot to digest. I suggest talking through these tomorrow if you are available.

Nigel

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 13 October 2017 11:08
To: WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Good morning Nigel

That is perfectly understandable. I attach what I believe is the last correspondence we had on this matter.

Would you be available to chat late morning on Monday instead?

Kind regards,

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 13 October 2017 11:03
To: Phillip Longman <Phillip.Longman@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Good Morning Phil,

I will need to go through our last response with regards to the modelling before we talk. Late afternoon would be preferable if you wish to discuss today.

Thanks

Nigel

Nigel Walkden BA MSc MBA CMILT
Managing Consultant, Transportation

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From: WALKDEN, NIGEL
Sent: 10 October 2017 15:57
To: 'Phillip Longman'
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Phil,

Yes I am, after 10.30. If you want to call me the number is 07780 228427.

Nigel

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 10 October 2017 15:25
To: WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel

Would you be available on Friday?

Regards

Phil

-----Original Message-----
From: WALKDEN, NIGEL [Nigel.Walkden@highwaysengland.co.uk]
Received: Tuesday, 10 Oct 2017, 15:10
To: Phillip Longman [Phillip.Longman@arcadis.com]
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hello Phil,

Are you around later in the week?

Thanks,

Nigel

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 09 October 2017 13:21
To: Bown, Kevin; WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Dear Kevin, Nigel

I was hoping to give Nigel a call to go through these points you raise, but I do not seem to have Nigel's telephone number. Would you be able to send it to me?

Nigel – I was going to give you a call this afternoon, but if this is not convenient for you, please let me know when you would be available.

Kind regards,

Phil

From: Bown, Kevin [mailto:Kevin.Bown@highwaysengland.co.uk]
Sent: 25 August 2017 12:05
To: Phillip Longman <Phillip.Longman@arcadis.com>; 'Matt.hogben@kent.gov.uk' <Matt.hogben@kent.gov.uk>; 'James Hammond (James.Hammond@shepway.gov.uk)' <James.Hammond@shepway.gov.uk>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Planning SE <planningse@highwaysengland.co.uk>; Fisher, Rachael <Rachael.Fisher@highwaysengland.co.uk>; WALKDEN, NIGEL <Nigel.Walkden@highwaysengland.co.uk>
Subject: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Dear Phil

Our comments on your scoping report are as follows:

(1) Section 1.1 refers to KCC and SDC – *it should also include Highways England (noted this is to be included in the next draft).*

(2) The baseline is proposed to be 2017 - *this should be reflective of the year of submission e.g. 2018 (noted this has been acknowledged and will be amended).*

(3) Future forecast year is proposed to be 2037 to reflect end of local plan period. The 2037 forecast will include the full development scheme. *We will required information on what phases / proportion of the development will be built by 2037 and what will be after that. If a significant proportion of the development will be post-2037 we may require a further future year forecast.*

(4) Peak hours are to be assessed (0800-0900 and 1700-1800) – *agreed this is sensible however will need to be confirmed on review of traffic survey data.*

(5) Committed development (TBC) is to be taken into account. *This should include consideration of the overnight parking element of the Lorry Holding Area (500 spaces) and all sites allocated within relevant Local Plan(s). We would also wish to receive your thoughts on how Otterpool will incorporate resilience such that it continues to be able to operate when the likes of Operation Stack (or it's successors) are implemented.*

(6) Trip generation, mode share and distribution have been discussed separately so not included in this note. *We have no record of being consulted on this element of the assessment so are unable to comment.*

(7) The extent of assessment was discussed with HE on the 24th May. It includes (for the SRN):
- M20 J9 (referred to as # 27)
- M20 J10 (# 1)
- M20 J11 (# 2)

- M20 J11a (# 21)
- M20 J12 (# 22) – *note this is a roundabout not junction as quoted*
- M20 J13 (# 23) – *note this is a roundabout not junction as quoted*
- A260 Spitfire Way / White Horse Hill / A20 Slip Roads

All of the above will be assessed using appropriate LinSig, Arcady or Picady software, as well as a VISSIM model being produced to assess the local junctions most likely to be impacted, expect for M20 J9 and A260/A20 which will be considered in terms of percentage increases in flows.

Dependant on traffic flow volumes, there may be a requirement for merge / diverge assessments as per DMRB TD22/06 at relevant junctions.

The assessment of M20 J9 in terms of percentage increases in flows is not agreed – in terms of the percentage impact approach, a small percentage increase in a large volume of traffic could be a large number of additional vehicles. Equally in some places a single additional vehicle could cause safety and/ or operational issues at a junction. Therefore percentage increases in flows are not considered appropriate when assessing impacts/mitigation. While increase in traffic volume is an element which needs to be considered a key concern will be the impact of the development on safety and operation, which relates to changes in queues and delays. We will therefore require evidence that the proposed development will not increase queues and delays to a point where they impact the safety and operation of the SRN.

Consideration of the impact of the development on M20 J10a should also be included.

(8) The distribution of development vehicle flows between the site and a number of off-site origins/destinations has been calculated using a gravity model method. This distribution will be input a VISUM model to distribute the development flows on the network and allow us to identify the likely routing. A volume to capacity ratio analysis will then be carried out to identify sections across the network which perform above an 85% ratio and these junctions will then be assessed in a VISSIM model. The development flow distribution will be extracted from the VISUM model and input the VISSIM model statically. The model will be validated against the observed turning counts and journey time captured on site. *This appears to be a sensible approach in principle - we would need to see the gravity model to comment further.*

I hope our comments assist, but if you have any queries, please contact us. Rachael and I are both on leave for different periods over the next 2 weeks, so if you have any immediate queries, please contact Nigel.

Regards

Kevin Bown, Spatial (Town) Planning Manager BSc(Hons) MPhil CMS MRTPI

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From: Bown, Kevin
Sent: 08 August 2017 15:04
To: 'Phillip Longman'; Matt.hogben@kent.gov.uk; James Hammond (James.Hammond@shepway.gov.uk)
Cc: Nicolas Contentin; Planning SE; Fisher, Rachael; WALKDEN, NIGEL
Subject: RE: Otterpool Park development Transport scoping report

Dear Phil

Thanks for the TA Scoping. You should receive our response no later than 29 August, but hopefully sooner.

Team – please register as a pre-app under Otterpool folder and allocate to me.

Rachael/Nigel – I look forward to receiving your comments.

Regards

Kevin Bown, Spatial (Town) Planning Manager BSc(Hons) MPhil CMS MRTPI

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Web: http://www.highways.gov.uk

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From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 08 August 2017 13:31
To: Matt.hogben@kent.gov.uk; James Hammond (James.Hammond@shepway.gov.uk); Bown, Kevin
Cc: Nicolas Contentin
Subject: Otterpool Park development Transport scoping report

Dear Matt, James and Kevin

I attach our proposed scope for the transport assessment for the Otterpool Park development. This report includes our proposed scope and method for the highway capacity modelling based on our discussion in May. It refers to, but does not include, the technical notes previously issued relating to the methods for trip generation, mode split and distribution. These notes will be updated and re-issued to reflect an agreed position at the appropriate time.

I would greatly appreciate your views on the proposed scope and would be happy to arrange any further meetings necessary to progress this.

Hopefully catch up with you all soon. If you wish to discuss anything in the meantime, please feel welcome to contact me.

Kind regards,

Phil

Phillip Longman
Associate Technical Director
Transport Planning & Urban Design

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APPENDIX B

May 2020 Discussions with Kent County Council re: Train Mode Share

Longman, Phillip

From:	Longman, Phillip
Sent:	12 May 2020 15:13
To:	Matt.hogben@kent.gov.uk
Subject:	Otterpool Park rail mode shares
Attachments:	Otterpool Park Proposed Train Mode Shares v1.1.xlsx
Follow Up Flag:	Follow up
Flag Status:	Completed

Hi Matt

Further to our discussion around Train mode share for Otterpool, I have derived new mode shares from the Census output area containing Folkestone Central station. We have generated different mode splits for trips over different distances, so internal mode splits are derived from Census journeys made over distances less than 2km, external education mode split is derived from Census journeys between 2km and 10km and all other external mode shares from Census journeys made over 2km.

As Census mode splits by distance combine all public transport modes into one mode share, we have had to disaggregate the public transport mode share to obtain Train and Bus mode shares by distance. This was done by considering the Census mode split for all distances, which does have separate public transport mode shares, and using the proportions to disaggregate the public transport mode shares.

I have therefore had to use this method to derive Train mode share by distance from the Folkestone Central station output area. The calculation is shown in the attached. Would you be able to review the calculation and let me know if you agree with the method?

Let me know if I have not explained this clearly and I will give you a call.

Many thanks for your time

Phil

Phillip Longman
Associate Technical Director
Highways & Transport

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Otterpool Park Rail Mode Share Adjustment

2020 Adjustment for Rail Trips

1 Census output area Shepway 015 corresponds to the output area containing Folkstone Central station

2 Since the journey time by rail to London Kings Cross from Westenhanger station and Folkestone Central station are comparable, we had agreed to use the Folkestone Central train mode share for the Otterpool Park development

3 The method for calculation of mode splits for Otterpool Park uses mode splits by distance, as follows:

- Mode splits for journeys less than 2km for internal mode splits
- Mode splits for journeys between 2km and 10km for external education mode splits
- Mode splits for journeys greater than 2km for all other external mode splits

4 Only mode splits for journeys by all distances provide individual mode shares for each public transport mode. Mode splits by distance combine all public transport modes into one mode share.

5 Table 1 presents mode splits by distance for the Folkestone Central area

Table 1: Mode Splits by Distance for Census Output Area Containing Folkestone Central Station

Mode	Inner Folkestone E02006880 : Shepway 015			
	All distances		2km to 10km	>2km
Driver	63.4%	63.4%	69.7%	73.7%
Passenger	7.0%			
Taxi	0.6%	8.5%	9.5%	8.5%
Motorcycle	0.9%			
Train	3.6%			
Bus / Minibus / Coach	7.1%	10.9%	14.0%	13.2%
Light Rail	0.1%			
Bicycle	1.5%	2.4%	1.3%	0.8%
Walk	15.8%	6.1%	5.6%	3.8%
Total	**100.0%**	**91.2%**	**100.0%**	**100.0%**

6 For Otterpool Park, it was necessary to sub-divide the mode splits by distance into Train and Bus. This was done by proportion using the mode shares by all distances

Mode	Inner Folkestone E02006880 : Shepway 015			
	All distances		2km to 10km	>2km
Train	3.6%	33.2%	4.6%	4.4%
Bus / Minibus / Coach	7.1%	65.7%	9.2%	8.7%
Light Rail	0.1%	1.1%	0.2%	0.2%
	10.9%	**100.0%**	**14.0%**	**13.2%**

7 Proposed Train mode shares for Otterpool Park:

Internal trips =	0%
External education trips =	4.6%
all other External trips =	4.4%

Longman, Phillip

From:	Matt.Hogben@kent.gov.uk
Sent:	12 May 2020 15:33
To:	Longman, Phillip
Subject:	RE: Otterpool Park rail mode shares
Follow Up Flag:	Follow up
Flag Status:	Completed

Hi Phil

Many thanks for this.

I have no problems with this approach.

Regards

Matthew Hogben | Principal Transport and Development Planner | Ashford / Folkestone and Hythe | Highways and Transportation | Kent County Council | Ashford Highway Depot, 4 Javelin Way, Henwood Industrial Estate, Ashford, Kent, TN24 8AD | 03000 41 81 81 | www.kent.gov.uk

---

From: Longman, Phillip <Phillip.Longman@arcadis.com>
Sent: 12 May 2020 15:13
To: Hogben, Matt - GT HTW <Matt.Hogben@kent.gov.uk>
Subject: Otterpool Park rail mode shares

Hi Matt

Further to our discussion around Train mode share for Otterpool, I have derived new mode shares from the Census output area containing Folkestone Central station. We have generated different mode splits for trips over different distances, so internal mode splits are derived from Census journeys made over distances less than 2km, external education mode split is derived from Census journeys between 2km and 10km and all other external mode shares from Census journeys made over 2km.

As Census mode splits by distance combine all public transport modes into one mode share, we have had to disaggregate the public transport mode share to obtain Train and Bus mode shares by distance. This was done by considering the Census mode split for all distances, which does have separate public transport mode shares, and using the proportions to disaggregate the public transport mode shares.

I have therefore had to use this method to derive Train mode share by distance from the Folkestone Central station output area. The calculation is shown in the attached. Would you be able to review the calculation and let me know if you agree with the method?

Let me know if I have not explained this clearly and I will give you a call.

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APPENDIX C

Adjustment to NTS Mode Splits to Derive External Local Mode Splits for Non-Work Trips

Adjustments applied to NTS mode splits to derive mode splits for Otterpool Park taking into account local transport conditions reflected in Census mode splits, as described in section 3.3.4.

Table C.1 Adjustment to NTS Shopping Mode Split to Derive Local External Mode Split

Mode			Shopping		
	NTS Mode Split	NTS to Census factor	NTS Adjusted Mode Split	% change to = 100%	Otterpool Mode Split
Driver	40%	134%	54%	8%	62%
Passenger	26%	79%	20%	3%	23%
Taxi	0%	56%	0%	0%	0%
Motorcycle	1%	56%	1%	0%	1%
Train	1%	47%	0%	0%	1%
Bus / Minibus / Coach	9%	59%	5%	1%	6%
Light Rail	0%	100%	0%	0%	0%
Bicycle	1%	56%	1%	0%	1%
Walk	21%	28%	6%	1%	7%
Total	**100%**	-	**88%**	**12%**	**100%**
adjustment			*12%*		

Table C.2 Adjustment to NTS Personal Business Mode Split to Derive Local External Mode Split

Mode			Personal Business		
	NTS Mode Split	NTS to Census factor	NTS Adjusted Mode Split	% change to = 100%	Otterpool Mode Split
Driver	52%	134%	70%	-1%	69%
Passenger	33%	79%	26%	0%	26%
Taxi	0%	56%	0%	0%	0%
Motorcycle	1%	56%	0%	0%	0%
Train	0%	47%	0%	0%	0%
Bus / Minibus / Coach	3%	59%	2%	0%	2%
Light Rail	0%	100%	0%	0%	0%
Bicycle	1%	56%	0%	0%	0%
Walk	11%	28%	3%	0%	3%
Total	**100%**	-	**101%**	**-1%**	**100%**
adjustment			*-1%*		

Table C.3 Adjustment to NTS Leisure Mode Split to Derive Local External Mode Split

Mode			Leisure		
	NTS Mode Split	NTS to Census factor	NTS Adjusted Mode Split	% change to = 100%	Otterpool Mode Split
Driver	33%	134%	45%	8%	53%
Passenger	34%	79%	27%	5%	32%
Taxi	0%	56%	0%	0%	0%
Motorcycle	2%	56%	1%	0%	1%
Train	2%	47%	1%	0%	1%
Bus / Minibus / Coach	7%	59%	4%	1%	5%
Light Rail	0%	100%	0%	0%	0%
Bicycle	2%	56%	1%	0%	1%
Walk	20%	28%	6%	1%	7%
Total	**100%**	-	**84%**	**16%**	**100%**
adjustment			*16%*		

APPENDIX D

Calculations for Internal Mode Splits for Non-Work Trip Purposes

NTS Mode Splits

The calculation for internal non-work mode splits begins with the same NTS mode splits presented in Table 13 in Chapter 3. These mode splits are presented again in Table D.1.

Table D.1 NTS Mode Splits by Trip Purpose

Mode	Mode Share				
	Commuting	Education	Shopping	Personal Business	Leisure
Driver Passenger	66%	46%	66%	85%	67%
Train	9%	2%	1%	0%	2%
Bus / Minibus / Coach	8%	10%	9%	3%	7%
Walk	10%	38%	21%	11%	20%
Other	7%	5%	3%	1%	4%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

Adjustment for Taxi, Motorcycle and Bicycle Mode Shares

It has been assumed that the 'Other' mode share category includes Taxi, Motorcycle and Bicycle mode shares and should therefore be re-allocated to them. This was achieved by considering the relative proportions of the mode shares for these categories within the Census mode splits in Table 23 in Chapter 4, which provides the Commuter mode split for trips made over a distance up to 2km in distance.

Table D.2 presents the Census mode shares for Taxi, Motorcycle and Bicycle for trips up to 2km in length along with the proportion of the 'Other' mode share that was allocated to them.

Table D.2 Re-Allocation of 'Other' Mode Share to Taxi, Motorcycle and Bicycle for Internal Non-Work Trips

Mode	Adjustment	
	< 2km	Distribution
Taxi	0.1%	0.7%
Motorcycle	0.8%	6.4%
Bicycle	11.3%	92.9%
Total	**12.2%**	**100.0%**

The result of this re-allocation of 'Other' mode share to Taxi, Motorcycle and Bicycle is shown in Table D.3.

Table D.3 NTS Mode Splits by Trip Purpose adjusted for Taxi, Motorcycle and Bicycle

Mode	Mode Split				
	Commuting	Education	Shopping	Personal Business	Leisure
Driver Passenger	66%	46%	66%	85%	67%
Taxi	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%
Train	9%	2%	1%	0%	2%
Bus / Minibus / Coach	8%	10%	9%	3%	7%
Light Rail	0%	0%	0%	0%	0%
Bicycle	6%	4%	3%	1%	4%
Walk	10%	38%	21%	11%	20%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

Adjustment for Driver and Passenger Mode Shares

The Driver and Passenger trips were disaggregated by considering the car occupancy values for each trip purpose. Table D.4 presents the combined Driver and Passenger mode share from Table D.3, the NTS vehicle occupancy value and the resulting disaggregated Driver and Passenger mode shares for each trip purpose.

Table D.4 Disaggregation of Driver and Passenger Mode Shares

Mode	Trip Purpose				
	Commuting	Education	Shopping	Personal Business	Leisure
Driver + Passenger	66%	46%	66%	85%	67%
NTS vehicle occupancy	1.13	1.43	1.64	1.63	2.02
Driver	59%	32%	40%	52%	33%
Passenger	8%	14%	26%	33%	34%

The resulting adjusted mode splits are shown in Table D.5.

Table D.5 NTS Mode Splits by Trip Purpose adjusted for Driver and Passenger

Mode	Mode Split				
	Commuting	Education	Shopping	Personal Business	Leisure
Driver	59%	32%	40%	52%	33%
Passenger	8%	14%	26%	33%	34%
Taxi	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%
Train	9%	2%	1%	0%	2%
Bus / Minibus / Coach	8%	10%	9%	3%	7%
Light Rail	0%	0%	0%	0%	0%
Bicycle	6%	4%	3%	1%	4%
Walk	10%	38%	21%	11%	20%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

Adjustment from National to Local Mode Splits

The mode splits in Table D.5, which were derived from national average mode splits for trips made over all distances, were adjusted to represent trips made up to 2km in distance by considering the difference between the national Commuting mode split and the internal mode split for Commuting derived in Table 23 in Chapter 4. Table D.6 presents a comparison between NTS Commuting mode split and the internal Census Commuting mode split for distances up to 2km in length. The table shows the difference between the NTS and Census mode shares represented as a percentage change, i.e. the percentage increase or decrease that would need to be applied to the NTS mode shares to match the Census mode shares.

Table D.6 Adjustment to NTS Mode Splits to Derive Local Internal Mode Splits

Mode	Census <2km	All Trips NTS Commuting All distances	% Change NTS to Census
Driver	24%	59%	-60%
Passenger	3%	8%	-60%
Taxi	0%	0%	86%
Motorcycle	1%	0%	86%
Train	0%	9%	-100%
Bus / Minibus / Coach	5%	8%	-39%
Light Rail	0%	0%	0%
Bicycle	11%	6%	86%
Walk	56%	10%	464%
Total	**100%**	**100%**	**-**

The "% Change NTS to Census" values derived in Table D.6 were applied to the NTS mode shares in Table D.5. The % Change NTS to Census values were applied to the NTS mode split to produce an 'NTS Adjusted' mode split. If the NTS Adjusted mode split did not sum to 100%, the mode shares were increased or decreased proportionally until the mode split summed to 100%. Tables D.7 to D.10 present the adjustment made to the mode splits for all other trip purposes using this method.

Table D.7 Adjustment to NTS Education Mode Split to Derive Local Internal Mode Split

Mode	Education Mode Split: NTS Mode Split	NTS to Census factor	NTS Adjusted Mode Split	% change to = 100%	Otterpool Mode Split
Driver	32%	40%	13%	-8%	5%
Passenger	14%	40%	5%	-3%	2%
Taxi	0%	186%	0%	0%	0%
Motorcycle	0%	186%	1%	0%	0%
Train	2%	0%	0%	0%	0%
Bus / Minibus / Coach	10%	61%	6%	-4%	2%
Light Rail	0%	100%	0%	0%	0%
Bicycle	4%	186%	8%	-5%	3%
Walk	38%	564%	212%	-126%	87%
Total	**100%**	-	**245%**	**-145%**	**100%**
adjustment			*-145%*		

Table D.8 Adjustment to NTS Shopping Mode Split to Derive Local Internal Mode Split

Mode	Shopping: NTS Mode Split	NTS to Census factor	NTS Adjusted Mode Split	% change to = 100%	Otterpool Mode Split
Driver	40%	40%	16%	-6%	10%
Passenger	26%	40%	10%	-4%	7%
Taxi	0%	186%	0%	0%	0%
Motorcycle	0%	186%	0%	0%	0%
Train	1%	0%	0%	0%	0%
Bus / Minibus / Coach	9%	61%	5%	-2%	3%
Light Rail	0%	100%	0%	0%	0%
Bicycle	3%	186%	5%	-2%	3%
Walk	21%	564%	119%	-43%	76%
Total	**100%**	-	**156%**	**-56%**	**100%**
adjustment			*-56%*		

Table D.9 Adjustment to NTS Personal Business Mode Split to Derive Local Internal Mode Split

Mode	Personal Business				
	NTS Mode Split	NTS to Census factor	NTS Adjusted Mode Split	% change to = 100%	Otterpool Mode Split
Driver	52%	40%	21%	0%	21%
Passenger	33%	40%	13%	0%	13%
Taxi	0%	186%	0%	0%	0%
Motorcycle	0%	186%	0%	0%	0%
Train	0%	0%	0%	0%	0%
Bus / Minibus / Coach	3%	61%	2%	0%	2%
Light Rail	0%	100%	0%	0%	0%
Bicycle	1%	186%	2%	0%	2%
Walk	11%	564%	61%	1%	62%
Total	**100%**	-	**99%**	**1%**	**100%**
adjustment			*1%*		

Table D.10 Adjustment to NTS Leisure Mode Split to Derive Local Internal Mode Split

Mode	Leisure				
	NTS Mode Split	NTS to Census factor	NTS Adjusted Mode Split	% change to = 100%	Otterpool Mode Split
Driver	33%	40%	13%	-5%	9%
Passenger	34%	40%	13%	-5%	9%
Taxi	0%	186%	0%	0%	0%
Motorcycle	0%	186%	0%	0%	0%
Train	2%	0%	0%	0%	0%
Bus / Minibus / Coach	7%	61%	4%	-1%	3%
Light Rail	0%	100%	0%	0%	0%
Bicycle	4%	186%	7%	-2%	5%
Walk	20%	564%	113%	-39%	75%
Total	**100%**	-	**152%**	**-52%**	**100%**
adjustment			*-52%*		

Internal Non-Work Trip Mode Split Summary

The mode splits resulting from the adjustments described above are shown in Table D.11.

Table D.11 Otterpool Park Internal Mode Splits by Trip Purpose for Non-Work Trips

Mode	Mode Split				
	Education	Shopping	Personal Business	Leisure	Education escort
Driver	5%	11%	21%	9%	5%
Passenger	2%	7%	13%	9%	2%
Taxi	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%
Bus / Minibus / Coach	1%	2%	1%	1%	1%
Light Rail	0%	0%	0%	0%	0%
Bicycle	3%	3%	2%	5%	3%
Walk	87%	77%	62%	75%	87%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

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APPENDIX P Trip Rates by Mode by Land Use Technical Note

OTTERPOOL PARK
Trip Rates by Mode by Land Use

JUNE 2020

CONTACTS

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Arcadis House
34 York Way
London N1 9AB
United Kingdom

VERSION CONTROL

Version	Date	Author	Checker	Approver	Changes
1	21/5/20	PL	PL	PL	-
2	5/6/20	PL	PL	PL	Update in description of percentage of external trips made by car (section 4.1.1)

CONTENTS

TABLES

1 Introduction

1.1 Background

Arcadis Consulting (UK) Limited was appointed in August 2016 to develop a masterplan and planning submission in respect of the proposed garden town called Otterpool Park.

In April 2017, a meeting was held with Kent County Council and Folkestone & Hythe District Council to discuss our proposed method for trip generation, mode spit and distribution. Draft technical notes[1][2][3] describing the proposed methods for this work were subsequently produced and reviewed by Kent County Council, Folkestone & Hythe District Council and Highways England.

Discussions relating to the method of trip generation and derivation of mode splits were held with Kent County Council, Folkestone & Hythe District Council and Highways England between April 2017 and March 2018. Following comments received on the draft technical notes, final versions[4][5] were submitted with the outline planning application in 2019 and the method described in the note was used to inform the Transport Assessment[6] and other associated documents submitted with the application.

Following submission of the application, further comments relating to the method of trip generation and derivation of mode splits were received. On 10th February 2020, a meeting was held with Kent County Council and Folkestone & Hythe District Council to agree how to resolve the comments raised. Updated technical notes were submitted to reflect the conclusion of the discussions.

One of the comments received from Kent County Council was as follows:

> *"The proposed internal and external trips by mode cannot be agreed until the total multi-modal trip rates are agreed. Furthermore, it is not clear how these trips have been calculated in Tables 35-37 [of the 2019 Transport assessment] based on the trip generation summary in Table 31."*

This note provides mode splits and trips by mode for internal, external and all trips for all land uses proposed for the Otterpool Park development.

---

[1] Otterpool Park Garden Settlement Trip Generation Calculation Method Technical Note (May 2017)
[2] Otterpool Park Garden Settlement Method for deriving Mode Splits (June 2017)
[3] Otterpool Park Garden Settlement Method for the Distribution of External Vehicle Trips (July 2017)
[4] Otterpool Park Trip Generation Calculation Method Technical Note (September 2018)
[5] Otterpool Park Method for deriving Mode Splits (October 2018)
[6] Otterpool Park Transport Assessment (February 2019)

2 Trip Rates

2.1 Overview of Method for Deriving Trip Rates by Land Use

The aspiration for the development is that the site will provide a sufficient scale and range of services that will meet the demands of the local population such that the need to travel long distances by non-sustainable modes of transport will be minimised. It is also anticipated that the services provided will not be of a type that will attract significant trips from people living external to Otterpool Park. The development quantum will therefore be optimised to match on-site supply to on-site demand such that the number of external trips will be minimised.

By this definition, the majority of trips generated by the A- (Retail) and D-class (Community services) land uses are expected to originate from the on-site C-class (Residential) land uses. Along with the B-class (employment) land use, the C-class land use is therefore expected to be the main driver for trip generation. Trip rates for the B- and C-class land uses were calculated by deriving trip rates from comparator sites within the TRICS 7.7.1 database.

Since the majority of trips generated by the Retail and Community service land uses are expected to originate from on-site Residential land uses, the number of trips generated by the Retail and Community service land uses were calculated by considering the demand for these land uses that the on-site Residential land uses would generate. To achieve this, the on-site Residential land use trip generation was disaggregated by trip purpose and each purpose was assigned to an associated land use, e.g. shopping trips were assigned to Retail land use, education trips were assigned to education land uses.

This 'internal' demand for Retail and Community service land uses was uplifted by a suitable percentage to account for a small number of trips made to these land uses from outside Otterpool Park (external trips). This percentage was derived by considering the ratio of internal to external trips the land use would be likely to generate based on the propensity of each land use to attract trips from off-site locations compared to on-site locations, e.g. for the education land uses, the ratio was derived from the proportion of school spaces taken by on-site residents compared to the number taken by off-site residents.

Trip rates for all land uses were derived for the local AM and PM peak hours, which have been found to be 8-9am and 5-6pm based on local traffic count data.

A detailed description of the trip generation method and resulting trip rates by land use is contained in the Trip Generation Calculation Technical Note[7].

2.2 Total Trip Rates by Land Use

Table 1 presents the AM and PM peak trip rates that result from these trip generation methods based on the current proposed land use quantum as of 13th May 2020. Trip rates are trips per 100m^2 gross internal floor area except for C2 Extra Care and C3 Residential, which are trip rates per unit. It is important to note that the A- and D-class trip rates are calculated based on demand and are independent of floor area. Please note that the proposed land use quantum may change but the trip generation method and assumptions regarding the provision of services to meet the demands of the Otterpool Park population rather than attract significant external trips would not change.

[7] Otterpool Park Trip Generation Calculation Method Technical Note (May 2020)

Table 1 All-Mode Trip Rates by Land Use

Land Use	AM Peak			PM Peak		
	Arrivals	Departures	Total	Arrivals	Departures	Total
C3 Residential	0.19	0.74	**0.93**	0.59	0.31	**0.90**
C2 Extra Care Housing	0.12	0.13	**0.25**	0.09	0.25	**0.33**
C1 Hotel	0.41	1.07	**1.48**	0.99	0.50	**1.49**
B1 Commercial business in hubs	2.40	0.21	**2.61**	0.17	1.99	**2.17**
B1 Commercial business park	2.75	0.24	**2.98**	0.20	2.28	**2.47**
B2 Light Industrial business park	1.14	0.10	**1.24**	0.08	0.95	**1.03**
A1 Retail	4.25	1.31	**5.56**	4.60	6.77	**11.37**
A2 Business A3 Café / Restaurant A4 Pub / Takeway	3.78	0.98	**4.76**	3.55	5.64	**9.19**
D1 Secondary schools	4.03	1.31	**5.34**	0.18	0.52	**0.72**
D1 Primary School	8.54	2.77	**11.31**	0.37	1.13	**1.55**
D1 Nursery	9.60	2.70	**12.30**	0.60	2.53	**3.13**
D1 Community Centre	0.35	0.05	**0.40**	0.25	0.48	**0.73**
D1 Health	1.82	0.42	**2.24**	0.90	1.92	**2.82**
D2 Sports pavilion D2 Indoor sports hall	1.98	0.26	**2.24**	1.49	3.18	**4.67**

As described in section 2.1, the on-site facilities and services (A- and D-class land uses) would be provided at a scale that is sufficient to meet many of the demand requirements of the Otterpool Park residents and will not be designed to attract significant trips from off-site locations. This policy is intended to minimise the number of off-site external trips required to be made by Otterpool Park residents for shopping and services and minimise the number of trips attracted to the site by people living outside Otterpool Park. This is in-keeping with the aspirational to make Otterpool Park a self-sufficient, sustainable settlement that minimises impact on local transport networks.

The precise level of provision of A- and D-class land uses required to meet the demand of Otterpool Park residents will be defined by further retail and community service studies. The precise floor area requirements of these land uses are therefore to be confirmed, which means that the trip rates for these land uses are likely to increase or decrease depending on the floor area that is deemed to be required. However, since the demand for the A- and D-class land uses is influenced by the number of Otterpool Park residents and not by the floor area of these land uses, the number of trips these land uses would attract would not change.

2.3 Internal and External Trip Rates

Table 2 and Table 3 present the internal and external trip rates by land use. As with Table 1, Trip rates are trips per 100m^2 gross internal floor area except for C2 Extra Care and C3 Residential, which are trip rates per unit.

Table 2 All-Mode External Trip Rates by Land Use

Land Use	AM Peak			PM Peak		
	Arrivals	Departures	Total	Arrivals	Departures	Total
C3 Residential	0.06	0.31	**0.37**	0.28	0.13	**0.41**
C2 Extra Care Housing	0.04	0.05	**0.09**	0.04	0.09	**0.12**
C1 Hotel	0.13	1.04	**1.17**	0.97	0.27	**1.24**
B1 Commercial business in hubs	2.16	0.19	**2.35**	0.15	1.79	**1.95**
B1 Commercial business park	2.47	0.21	**2.69**	0.18	2.05	**2.23**
B2 Light Industrial business park	1.03	0.09	**1.12**	0.07	0.85	**0.93**
A1 Retail	0.54	0.09	**0.64**	0.21	0.54	**0.75**
A2 Business A3 Café / Restaurant A4 Pub / Takeway	0.60	0.11	**0.71**	0.44	0.65	**1.09**
D1 Secondary schools	1.39	0.42	**1.80**	0.02	0.26	**0.30**
D1 Primary School	2.88	0.90	**3.78**	0.03	0.43	**0.50**
D1 Nursery	0.65	0.10	**0.76**	0.03	0.40	**0.44**
D1 Community Centre	0.03	0.00	**0.04**	0.00	0.03	**0.03**
D1 Health	0.85	0.10	**0.95**	0.12	0.73	**0.86**
D2 Sports pavilion D2 Indoor sports hall	0.20	0.02	**0.22**	0.14	0.30	**0.44**

Table 3 All-Mode Internal Trip Rates by Land Use

Land Use	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
C3 Residential	0.13	0.43	**0.55**	0.30	0.18	**0.49**
C2 Extra Care Housing	0.08	0.08	**0.16**	0.06	0.16	**0.22**
C1 Hotel	0.28	0.02	**0.30**	0.02	0.23	**0.25**
B1 Commercial business in hubs	0.24	0.02	**0.26**	0.02	0.20	**0.22**
B1 Commercial business park	0.27	0.02	**0.30**	0.02	0.23	**0.25**
B2 Light Industrial business park	0.11	0.01	**0.12**	0.01	0.09	**0.10**
A1 Retail	3.71	1.21	**4.93**	4.39	6.23	**10.62**
A2 Business A3 Café / Restaurant A4 Pub / Takeway	3.18	0.87	**4.04**	3.11	4.99	**8.10**
D1 Secondary schools	2.64	0.89	**3.53**	0.16	0.25	**0.42**
D1 Primary School	5.66	1.86	**7.53**	0.35	0.70	**1.05**
D1 Nursery	8.95	2.59	**11.54**	0.56	2.13	**2.69**
D1 Community Centre	0.34	0.05	**0.39**	0.23	0.47	**0.70**
D1 Health	0.97	0.32	**1.29**	0.78	1.18	**1.96**
D2 Sports pavilion D2 Indoor sports hall	1.79	0.23	**2.02**	1.35	2.88	**4.23**

2.4 Trip Purposes

As described above, the method for the calculation of trip generation by non-residential land use is based on trip generation for a range of trip purposes, as defined within the NTS data. Table 4 provides a list of the trip purposes referred to in this Note and the definition of these purposes.

Table 4 Trip Purposes and Definitions

Trip Purpose	Description
Commuting	Trips to a usual place of work from home, or from work to home.
Business	Personal trips in course of work, including a trip in course of work back to work. This includes all work trips by people with no usual place of work (e.g. site workers) and those who work at or from home.
Education	Trips to school or college, etc. by full time students, students on day release and part time students following vocational courses.
Escort education	Trips made by people accompanying students making education trips
Shopping	All trips to shops or from shops to home, even if there was no intention to buy.
Other escort	Used when the traveller has no purpose of his or her own, other than to escort or accompany another person; for example, taking a child to school. 'Escort commuting' is escorting or accompanying someone from home to work or from work to home. Similarly, other escort purposes are related to the purpose of the person being escorted. Note that the purpose of a trip for a small child accompanying older children to school would be 'escort education'.
Personal business	Visits to services, e.g. hairdressers, launderettes, dry cleaners, betting shops, solicitors, banks, estate agents, libraries, churches; or for medical consultations or treatment; or for eating and drinking, unless the main purpose was entertainment or social.
Visiting friends at private home Visiting friends elsewhere	Visits to meet friends, relatives, or acquaintances, both at someone's home or at a pub, restaurant, etc.
Entertainment / public activity Sport: participate	All types of entertainment or sport, clubs, and voluntary work, nonvocational evening classes, political meetings, etc..
Holiday: base Day trip	Trips to or from any holiday (including stays of 4 or more nights with friends or relatives), or trips for pleasure (not otherwise classified as social or entertainment) within a single day.
Other including just walk	Walking trips for pleasure or exercise along public highways, including taking the dog for a walk and jogging.

3 Mode Splits

3.1 Overview of Method for Deriving Mode Splits

The method used to derive internal and external mode splits is described in detail in the following Chapters. A summary of the method is provided as follows:

Work Related Trips:

a) The mode split for work related trips is based on Census 2011 travel to work data for Folkstone & Hythe;

b) For internal trips: Census travel to work data for trips made over distances up to 2km was used. The distance of 2km is the shortest distance for which mode split information is presented within Census data. It is also approximately the distance from the centre of the Otterpool Park site to the nearest settlements outside the site boundary. It is therefore assumed that trips made up to 2km in distance are likely to be internal to the site, while trips that are over 2km in distance would be external to the site;

c) For external trips: Census travel to work data for trips made over distances greater than 2km was used.

Non-Work Related Trips:

a) Non-work related NTS mode splits were used as the basis for mode splits;

b) The national average mode splits provided by NTS were adjusted to reflect travel conditions in Shepway by considering the difference between the Census 2011 travel to work mode split for Shepway and the NTS Commuter mode split. An 'NTS to Census' adjustment factor was derived and applied to the NTS mode splits;

c) For internal trips: the adjustment factor was derived using Census travel to work data for trips made over distances up to 2km;

d) For external Education trips: Census travel to work data for trips made over distances between 2km and 10km was used to derive the adjustment factor. Up to 10km is expected to represent the maximum distance most people are likely to travel for education purposes;

e) For all other external trips: Census travel to work data for trips made over distances greater than 2km was used to derive the adjustment factor.

3.2 Summary of Mode Splits for External and Internal Trips

External trips are defined as trips to/from Otterpool Park originating from or destined to areas outside of Otterpool Park. Internal trips are trips made within the boundary of Otterpool Park.

Table 5 and Table 6 present the mode splits for external and internal trips derived using the method described in the Mode Split Method technical note[8].

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[8] Otterpool Park Method for deriving Mode Splits (May 2020)

Table 5 Otterpool Park Trip Mode Splits by Trip Purpose for External Trips

Mode	Mode Split					
	Commuting	Education	Shopping	Personal Business	Leisure	Education escort
Driver	78%	50%	62%	69%	53%	50%
Passenger	6%	17%	23%	26%	32%	17%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	0%	1%	1%
Train	4%	1%	1%	0%	1%	1%
Bus / Minibus / Coach	5%	10%	6%	2%	5%	10%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	2%	3%	1%	0%	1%	3%
Walk	3%	18%	7%	3%	7%	18%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 6 Otterpool Park Trip Mode Splits by Trip Purpose for Internal Trips

Mode	Mode Split					
	Commuting	Education	Shopping	Personal Business	Leisure	Education escort
Driver	24%	5%	10%	21%	9%	5%
Passenger	3%	2%	7%	13%	9%	2%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	5%	2%	3%	2%	3%	2%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	11%	3%	3%	2%	5%	3%
Walk	56%	87%	76%	62%	75%	87%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

It should be noted that these mode splits are largely based on current, site-specific conditions and do not reflect all the potential changes in the local transport networks that will be proposed as part of the development of Otterpool Park. For example, the derived Train mode share for non-work external trip purposes is influenced by the low national average for this mode and it is anticipated that a number of schemes to improve public transport provision and enhance local pedestrian and cycle links will be proposed that would increase the mode shares of sustainable modes and decrease Driver mode shares. These mode splits will therefore be used as part of a future case assessment of conditions as a worst-case assessment.

3.3 Allocation of Mode Splits

In our Trip Generation Calculation Method Note we describe how the residential trip purposes were allocated to on- and of-site land uses to determine the number of AM and PM peak trips each land use is expected to generate. Table 7 presents the land uses proposed for the Otterpool Park site, the trip purpose associated with the land use and the mode split assigned to the trip purpose. This explains how the mode splits from Table 5 and Table 6 are applied to the trips generated by each land use to determine the number of trips by mode generated by each land use.

Table 7 Allocation of Mode Splits to Trip Purposes and Land Uses

Land Use	Trip Purpose	Mode Split Allocation
C2/C3 Residential	Commuting	Commuting
	Business	Commuting
	Education	Education
	Escort education	Education escort
	Shopping	Shopping
	Other escort	Other escort
	Personal business	Personal Business
	Visiting friends at private home	Leisure
	Visiting friends elsewhere	Leisure
	Entertainment / public activity	Leisure
	Sport: participate	Leisure
	Holiday: base	Leisure
	Day trip	Leisure
	Other including just walk	Leisure
C1 Hotel	Holiday: base	Leisure
B1 Commercial business in hubs	Commuting / Business	Commuting
B1 Commercial business park	Commuting / Business	Commuting
B2 Light Industrial business park	Commuting / Business	Commuting
A1 Retail	Shopping	Shopping
A2 Business	Personal business	Personal Business
A3 Café / Restaurant	Entertainment / public activity	Leisure
A4 Pub / Takeway	Entertainment / public activity	Leisure
D1 secondary schools	Education	Education
D1 Primary School	Education	Education
D1 Nursery	Education	Education
All Non-Residential Land Uses	Commuting (staff)	Commuting
	Escort education	Education escort
D1 Community Centre	Entertainment / public activity	Leisure
D1 Health	Personal Business	Personal Business
D2 Sports pavilion	Sport: participate	Leisure
D2 Indoor sports hall	Sport: participate	Leisure
All Non-Residential Land Uses	Commuting (staff)	Commuting
	Other escort	Other escort

4 Trip Rates by Mode by Land Use

4.1 External Trips

4.1.1 C3 Residential

The mode split for C3 Residential trips is influenced by a combination of trips for all purposes. Table 8 presents the combined mode split for AM and PM peak C3 Residential trips and Table 9 presents the corresponding trip rates by mode.

Table 8 C3 Residential External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	59%	67%	66%	67%	58%	64%
Passenger	17%	12%	13%	17%	27%	20%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	2%	3%	3%	3%	1%	2%
Bus / Minibus / Coach	7%	6%	6%	5%	5%	5%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	2%	2%	2%	2%	1%	1%
On foot	11%	8%	8%	5%	7%	5%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 9 C3 Residential External Trip Rates by Mode

Mode	Trip Rates per Unit					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.04	0.21	0.24	0.19	0.07	0.26
Passenger	0.01	0.04	0.05	0.05	0.03	0.08
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.00	0.00	0.00	0.00	0.00
Train	0.00	0.01	0.01	0.01	0.00	0.01
Bus / Minibus / Coach	0.00	0.02	0.02	0.01	0.01	0.02
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.00	0.01	0.01	0.00	0.00	0.01
On foot	0.01	0.02	0.03	0.01	0.01	0.02
Total	**0.06**	**0.31**	**0.37**	**0.28**	**0.13**	**0.41**

Around one third of all external trips are made by car. Public transport mode share is 9% in the AM peak and 7 % in the PM peak; it is marginally greater in the AM peak due to the number of Education trips made in that period, which has a greater public transport mode share.

4.1.2 C2 Extra Care Housing

Like the C3 Residential land use, the mode split for C2 Extra Care Housing trips is also influenced by a combination of trips for all purposes. Table 10 presents the combined mode split for AM and PM peak and Table 11 presents the trip rates by mode.

Table 10 C2 Extra Care Housing External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	59%	64%	62%	65%	57%	60%
Passenger	26%	21%	23%	19%	28%	25%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	1%	2%	2%	2%	1%	1%
Bus / Minibus / Coach	5%	5%	5%	5%	5%	5%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	1%	1%	1%	2%	1%	1%
On foot	7%	6%	6%	5%	7%	6%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 11 C2 Extra Care Housing External Trip Rates by Mode

Mode	Trip Rates per Unit					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.02	0.03	0.06	0.02	0.05	0.07
Passenger	0.01	0.01	0.02	0.01	0.02	0.03
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.00	0.00	0.00	0.00	0.00
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.00	0.00	0.00	0.00	0.00	0.01
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.00	0.00	0.00	0.00	0.00	0.00
On foot	0.00	0.00	0.01	0.00	0.01	0.01
Total	**0.04**	**0.05**	**0.09**	**0.04**	**0.09**	**0.12**

The C2 Extra Care Housing land use has a marginally smaller Driver mode share and greater Passenger mode share than the C3 Residential, reflecting the lower number of residents travelling for Commuting purposes and the greater proportion of trips made for Shopping, Personal business and Leisure purposes.

4.1.3 C1 Hotel

The mode splits for trips to/from the C1 Hotel land use are influenced by visitors, assumed to be travelling for leisure purposes, and staff, who are assigned the Commuting mode split. Table 12 presents the combined mode split for AM and PM peak and Table 13 presents the trip rates by mode.

Table 12 C1 Hotel External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	66%	53%	55%	53%	58%	54%
Passenger	18%	32%	30%	32%	26%	31%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	3%	1%	1%	1%	2%	1%
Bus / Minibus / Coach	5%	5%	5%	5%	5%	5%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	2%	1%	1%	1%	1%	1%
On foot	5%	7%	7%	7%	6%	7%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 13 C1 Hotel External Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.09	0.55	0.64	0.51	0.16	0.67
Passenger	0.02	0.33	0.35	0.31	0.07	0.38
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.01	0.01	0.01	0.00	0.01
Train	0.00	0.01	0.01	0.01	0.00	0.01
Bus / Minibus / Coach	0.01	0.05	0.06	0.05	0.01	0.06
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.00	0.01	0.02	0.01	0.00	0.02
On foot	0.01	0.07	0.08	0.07	0.02	0.08
Total	**0.13**	**1.04**	**1.17**	**0.97**	**0.27**	**1.24**

The high Passenger mode share reflects the fact that people visiting Hotels often do so in groups and travel together.

4.1.4 B1 Commercial Business and B2 Light Industrial

Staff working at the B1 and B2 land uses are assumed to travel as commuters, and therefore are assigned the Commuting mode split. The mode split and trip rate by mode for trips to/from these land uses are shown in Table 14, Table 15 and Table 16. It is important to note that, although the trip rates per 100m^2 are different for each B1/B2 land use type, the trip rate for these land uses is calculated as a trip rate per job, which is assumed to be the same for each B1/B2 land use type. The number of jobs generated by the B-class land uses was calculated using the HCA employment densities of 12m^2 NIA per job for B1 land uses and 36m^2 GIA per job for B2 land uses. This accounts for the difference in trip rates per 100m^2 between the B1 and B2 land uses, with the B2 land use having a lower trip rate per 100m^2 because it generates fewer jobs per 100m^2. The difference in trip rates per 100m^2 between the B1 Commercial Business in Hubs and B1 Commercial Business Park trip rates can be explained by the difference in conversion of floor areas from

Net Internal Area (the metric in which the HCA employment densities are calculated for B1 land use) to Gross Internal Area (the metric in which the trip rates are presented) as the conversion from NIA to GIA is lower for B1 Commercial Business Park. This means that the number of jobs per 100m^2 is greater for the Business Park and thus, the trip rate per 100m^2 is also greater.

Table 14 B1 Commercial Business in Hubs External Mode Split and Trip Rates by Mode

Mode	Mode Split	Trip Rate per 100sqm GIA					
		AM Peak			PM Peak		
		Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	78%	1.70	0.15	1.84	0.12	1.41	1.53
Passenger	6%	0.13	0.01	0.14	0.01	0.11	0.12
Taxi	0%	0.01	0.00	0.01	0.00	0.01	0.01
Motorcycle	1%	0.03	0.00	0.03	0.00	0.03	0.03
Train	4%	0.09	0.01	0.10	0.01	0.08	0.09
Bus / Minibus / Coach	5%	0.10	0.01	0.11	0.01	0.08	0.09
Light Rail	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	2%	0.04	0.00	0.04	0.00	0.03	0.04
On foot	3%	0.06	0.01	0.07	0.00	0.05	0.06
Total	**100%**	**2.16**	**0.19**	**2.35**	**0.15**	**1.79**	**1.95**

Table 15 B1 Commercial Business Park External Mode Split and Trip Rates by Mode

Mode	Mode Split	Trip Rate per 100sqm GIA					
		AM Peak			PM Peak		
		Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	78%	1.94	0.17	2.11	0.14	1.61	1.75
Passenger	6%	0.15	0.01	0.16	0.01	0.12	0.13
Taxi	0%	0.01	0.00	0.01	0.00	0.01	0.01
Motorcycle	1%	0.04	0.00	0.04	0.00	0.03	0.03
Train	4%	0.11	0.01	0.12	0.01	0.09	0.10
Bus / Minibus / Coach	5%	0.11	0.01	0.12	0.01	0.09	0.10
Light Rail	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	2%	0.05	0.00	0.05	0.00	0.04	0.04
On foot	3%	0.07	0.01	0.08	0.00	0.06	0.06
Total	**100%**	**2.47**	**0.21**	**2.69**	**0.18**	**2.05**	**2.23**

Table 16 B2 Light Industrial External Mode Split and Trip Rates by Mode

Mode	Mode Split	Trip Rate per 100sqm GIA					
		AM Peak			PM Peak		
		Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	78%	0.81	0.07	0.88	0.06	0.67	0.73
Passenger	6%	0.06	0.01	0.07	0.00	0.05	0.06
Taxi	0%	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	1%	0.01	0.00	0.02	0.00	0.01	0.01
Train	4%	0.05	0.00	0.05	0.00	0.04	0.04
Bus / Minibus / Coach	5%	0.05	0.00	0.05	0.00	0.04	0.04
Light Rail	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	2%	0.02	0.00	0.02	0.00	0.02	0.02
On foot	3%	0.03	0.00	0.03	0.00	0.02	0.03
Total	**100%**	**1.03**	**0.09**	**1.12**	**0.07**	**0.85**	**0.93**

4.1.5 A1/A2/A3/A4 Land Uses

Trips to/from A-class land uses are influenced by the travel patterns of staff (considered commuters) and visitors. As shown in Table 7, visitors to the A1 Retail land uses are assumed to be travelling for shopping purposes and are therefore assigned the Shopping mode split. The mode splits and trip rates for the A1 Retail land uses shown in Table 17 and Table 18 are therefore influenced by the Shopping and Commuter mode shares.

Table 17 A1 Retail External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	73%	67%	72%	64%	71%	69%
Passenger	11%	17%	12%	21%	13%	16%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	3%	2%	3%	1%	3%	2%
Bus / Minibus / Coach	5%	5%	5%	6%	5%	5%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	2%	1%	2%	1%	1%	1%
On foot	4%	5%	4%	6%	5%	5%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 18 A1 Retail External Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.40	0.06	0.46	0.13	0.39	0.52
Passenger	0.06	0.02	0.08	0.04	0.07	0.12
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.01	0.00	0.01	0.00	0.01	0.01
Train	0.02	0.00	0.02	0.00	0.01	0.02
Bus / Minibus / Coach	0.03	0.01	0.03	0.01	0.03	0.04
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.01	0.00	0.01	0.00	0.01	0.01
On foot	0.02	0.01	0.03	0.01	0.02	0.04
Total	**0.54**	**0.09**	**0.64**	**0.21**	**0.54**	**0.75**

Table 7 shows that visitors to the A2 Business land uses are assigned the Personal Business travel mode share, while visitors to the A3/A4 land uses are assigned the Leisure mode share. Since the Otterpool Park development schedule provides a combined floor area for A2/A3/A4 land uses, the external mode splits and trip rates by mode for these land uses are combined in Table 19 and Table 20.

Table 19 A2/A3/A4 Land Uses External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	74%	70%	74%	69%	73%	71%
Passenger	13%	19%	14%	24%	16%	19%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	0%	1%	1%
Train	3%	1%	3%	0%	2%	2%
Bus / Minibus / Coach	4%	3%	4%	2%	3%	3%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	1%	1%	1%	1%	1%	1%
On foot	3%	4%	3%	4%	3%	3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 20 A2/A3/A4 Land Uses External Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.45	0.08	0.53	0.30	0.47	0.78
Passenger	0.08	0.02	0.10	0.11	0.10	0.21
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.01	0.00	0.01	0.00	0.01	0.01
Train	0.02	0.00	0.02	0.00	0.01	0.02
Bus / Minibus / Coach	0.02	0.00	0.03	0.01	0.02	0.03
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.01	0.00	0.01	0.00	0.01	0.01
On foot	0.02	0.00	0.02	0.02	0.02	0.04
Total	**0.60**	**0.11**	**0.71**	**0.44**	**0.65**	**1.09**

The trip rates per 100m^2 are greater for the A1 Retail land uses than the A2/A3/A4 land uses because a greater proportion of C3 Residential and C2 Extra Care Housing trips are generated for Shopping purposes that for the other A-class land uses, and the primary influencer of A-class trip generation is the on-site C-class land uses.

4.1.6 D1 Schools

The travel behaviour of people travelling to/from the on-site schools is influenced by the staff (travelling by the Commuter mode split) and pupils (Education mode split) and parents (Education escort mode split). As can be seen in the following tables, this produces varying mode splits and trip rates for the Secondary, Primary and Nursery schools.

Table 21 D1 Secondary School External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	55%	52%	54%	76%	71%	71%
Passenger	15%	16%	15%	7%	9%	9%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	2%	1%	2%	4%	3%	4%
Bus / Minibus / Coach	9%	9%	9%	5%	6%	6%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	2%	3%	2%	2%	2%	2%
On foot	15%	17%	16%	4%	7%	7%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 22 D1 Secondary School External Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.76	0.22	0.98	0.01	0.18	0.21
Passenger	0.21	0.07	0.27	0.00	0.02	0.03
Taxi	0.00	0.00	0.01	0.00	0.00	0.00
Motorcycle	0.02	0.01	0.02	0.00	0.00	0.00
Train	0.02	0.01	0.03	0.00	0.01	0.01
Bus / Minibus / Coach	0.12	0.04	0.16	0.00	0.02	0.02
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.03	0.01	0.04	0.00	0.01	0.01
On foot	0.21	0.07	0.29	0.00	0.02	0.02
Total	**1.39**	**0.42**	**1.80**	**0.02**	**0.26**	**0.30**

Table 23 D1 Primary School External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	54%	51%	53%	76%	68%	69%
Passenger	15%	16%	16%	7%	10%	10%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	1%	1%	1%	4%	3%	3%
Bus / Minibus / Coach	9%	9%	9%	5%	6%	6%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	3%	3%	3%	2%	2%	2%
On foot	16%	17%	17%	4%	8%	8%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 24 D1 Primary School External Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	1.54	0.46	2.01	0.02	0.29	0.34
Passenger	0.44	0.15	0.59	0.00	0.04	0.05
Taxi	0.01	0.00	0.01	0.00	0.00	0.00
Motorcycle	0.04	0.01	0.05	0.00	0.01	0.01
Train	0.04	0.01	0.05	0.00	0.01	0.02
Bus / Minibus / Coach	0.26	0.09	0.35	0.00	0.03	0.03
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.07	0.02	0.10	0.00	0.01	0.01
On foot	0.47	0.16	0.62	0.00	0.04	0.04
Total	**2.88**	**0.90**	**3.78**	**0.03**	**0.43**	**0.50**

Table 25 D1 Nursery School External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	71%	61%	69%	78%	78%	78%
Passenger	9%	12%	9%	6%	6%	6%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	3%	2%	3%	4%	4%	4%
Bus / Minibus / Coach	6%	8%	6%	5%	5%	5%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	2%	2%	2%	2%	2%	2%
On foot	7%	12%	8%	3%	3%	3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 26 D1 Nursery School External Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.46	0.06	0.53	0.03	0.31	0.34
Passenger	0.06	0.01	0.07	0.00	0.03	0.03
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.01	0.00	0.01	0.00	0.01	0.01
Train	0.02	0.00	0.03	0.00	0.02	0.02
Bus / Minibus / Coach	0.04	0.01	0.05	0.00	0.02	0.02
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.01	0.00	0.02	0.00	0.01	0.01
On foot	0.05	0.01	0.06	0.00	0.01	0.01
Total	**0.65**	**0.10**	**0.76**	**0.03**	**0.40**	**0.44**

PM peak mode splits have lower trip rates and a greater Driver mode share than the AM peak mode splits because the number of trips made by pupils and parents in the PM peak is very low and therefore travel patterns are dominated by the commuting travel behaviour of the staff. Driver mode share for Primary schools is lower than for Secondary and Nursery schools because the number of staff compared to the number of pupils is lower, therefore the higher Driver mode share of the staff has less influence on combined staff and pupils/parents mode splits.

Trip rates are greatest for Nursery schools and lowest for Secondary schools as the size of the school in comparison to the number of pupils increases for schools in higher age groups.

4.1.7 D1/D2 Community, Health and Leisure

All D1/D2 Community, Health and Leisure land uses attract trips from staff (Community mode split) and visitors. For the D1 Community Centre and D2 Sports Pavilion and Indoor Sports Hall, visitors are assumed to eb travelling for leisure purposes and therefore travel by the Leisure mode split in Table 5. Visitors to the D1 Health facility are assumed to be travelling using the Personal Business mode split. This is reflected in the following combined staff and visitor's mode split and trip rates by mode for these land uses.

Table 27 D1 Community Centre External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	78%	78%	78%	78%	78%	78%
Passenger	6%	6%	6%	6%	6%	6%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	4%	4%	4%	4%	4%	4%
Bus / Minibus / Coach	5%	5%	5%	5%	5%	5%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	2%	2%	2%	2%	2%	2%
On foot	3%	3%	3%	3%	3%	3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 28 D1 Community Centre External Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.03	0.00	0.03	0.00	0.02	0.02
Passenger	0.00	0.00	0.00	0.00	0.00	0.00
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.00	0.00	0.00	0.00	0.00
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.00	0.00	0.00	0.00	0.00	0.00
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.00	0.00	0.00	0.00	0.00	0.00
On foot	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.03**	**0.00**	**0.04**	**0.00**	**0.03**	**0.03**

Table 29 D1 Health Facility External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	77%	75%	77%	73%	77%	77%
Passenger	8%	12%	8%	17%	9%	10%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	4%	3%	4%	2%	4%	4%
Bus / Minibus / Coach	4%	4%	4%	3%	4%	4%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	2%	1%	2%	1%	2%	2%
On foot	3%	3%	3%	3%	3%	3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 30 D1 Health Facility External Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.66	0.07	0.73	0.09	0.57	0.66
Passenger	0.07	0.01	0.08	0.02	0.06	0.08
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.01	0.00	0.01	0.00	0.01	0.01
Train	0.03	0.00	0.04	0.00	0.03	0.03
Bus / Minibus / Coach	0.04	0.00	0.04	0.00	0.03	0.03
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.01	0.00	0.02	0.00	0.01	0.01
On foot	0.02	0.00	0.03	0.00	0.02	0.02
Total	**0.85**	**0.10**	**0.95**	**0.12**	**0.73**	**0.86**

Table 31 D2 Sports Pavilion and Sports Hall External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	73%	66%	72%	55%	62%	60%
Passenger	11%	19%	12%	30%	23%	24%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	4%	3%	4%	1%	2%	2%
Bus / Minibus / Coach	5%	5%	5%	5%	5%	5%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	2%	2%	2%	1%	2%	2%
On foot	4%	5%	4%	6%	5%	6%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 32 D2 Sports Pavilion and Sports Hall External Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.14	0.02	0.16	0.08	0.19	0.26
Passenger	0.02	0.00	0.03	0.04	0.07	0.11
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.00	0.00	0.00	0.00	0.00
Train	0.01	0.00	0.01	0.00	0.01	0.01
Bus / Minibus / Coach	0.01	0.00	0.01	0.01	0.01	0.02
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.00	0.00	0.00	0.00	0.00	0.01
On foot	0.01	0.00	0.01	0.01	0.02	0.02
Total	**0.20**	**0.02**	**0.22**	**0.14**	**0.30**	**0.44**

4.2 Internal Trips

This section provides the same information as provided in section 4.1, but for internal trips.

4.2.1 C3 Residential

Table 33 C3 Residential Internal Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	9%	11%	11%	15%	13%	14%
Passenger	4%	4%	4%	7%	8%	7%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	3%	3%	3%	3%	3%	3%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	4%	5%	5%	5%	4%	5%
On foot	80%	77%	77%	69%	72%	70%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 34 C3 Residential Internal Trip Rates by Mode

Mode	Trip Rates per Unit					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.01	0.05	0.06	0.05	0.02	0.07
Passenger	0.01	0.02	0.02	0.02	0.01	0.04
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.00	0.00	0.00	0.00	0.00
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.00	0.01	0.02	0.01	0.01	0.02
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.00	0.02	0.03	0.02	0.01	0.02
On foot	0.10	0.33	0.43	0.21	0.13	0.34
Total	**0.13**	**0.43**	**0.55**	**0.30**	**0.18**	**0.49**

4.2.2 C2 Extra Care Housing

Table 35 C2 Extra Care Housing Internal Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	14%	15%	15%	16%	13%	14%
Passenger	7%	7%	7%	7%	8%	8%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	3%	3%	3%	3%	3%	3%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	5%	5%	5%	6%	4%	4%
On foot	70%	69%	69%	68%	72%	71%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 36 C2 Extra Care Housing Internal Trip Rates by Mode

Mode	Trip Rates per Unit					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.01	0.01	0.02	0.01	0.02	0.03
Passenger	0.01	0.01	0.01	0.00	0.01	0.02
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.00	0.00	0.00	0.00	0.00
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.00	0.00	0.01	0.00	0.00	0.01
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.00	0.00	0.01	0.00	0.01	0.01
On foot	0.06	0.06	0.11	0.04	0.12	0.15
Total	**0.08**	**0.08**	**0.16**	**0.06**	**0.16**	**0.22**

4.2.3 C1 Hotel

Table 37 C1 Hotel Internal Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	24%	24%	24%	24%	24%	24%
Passenger	3%	3%	3%	3%	3%	3%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	5%	5%	5%	5%	5%	5%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	11%	11%	11%	11%	11%	11%
On foot	56%	56%	56%	56%	56%	56%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 38 C1 Hotel Internal Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.07	0.01	0.07	0.00	0.05	0.06
Passenger	0.01	0.00	0.01	0.00	0.01	0.01
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.00	0.00	0.00	0.00	0.00
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.01	0.00	0.01	0.00	0.01	0.01
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.03	0.00	0.03	0.00	0.03	0.03
On foot	0.16	0.01	0.17	0.01	0.13	0.14
Total	**0.28**	**0.02**	**0.30**	**0.02**	**0.23**	**0.25**

4.2.4 B1 Commercial Business and B2 Light Industrial

Table 39 B1 Commercial Business in Hubs Internal Mode Split and Trip Rates by Mode

Mode	Mode Split	Trip Rate per 100sqm GIA					
		AM Peak			PM Peak		
		Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	24%	0.06	0.00	0.06	0.00	0.05	0.05
Passenger	3%	0.01	0.00	0.01	0.00	0.01	0.01
Taxi	0%	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	1%	0.00	0.00	0.00	0.00	0.00	0.00
Train	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	5%	0.01	0.00	0.01	0.00	0.01	0.01
Light Rail	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	11%	0.03	0.00	0.03	0.00	0.02	0.02
On foot	56%	0.14	0.01	0.15	0.01	0.11	0.12
Total	**100%**	**0.24**	**0.02**	**0.26**	**0.02**	**0.20**	**0.22**

Table 40 B1 Commercial Business Park Internal Mode Split and Trip Rates by Mode

Mode	Mode Split	Trip Rate per 100sqm GIA					
		AM Peak			PM Peak		
		Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	24%	0.06	0.01	0.07	0.00	0.05	0.06
Passenger	3%	0.01	0.00	0.01	0.00	0.01	0.01
Taxi	0%	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	1%	0.00	0.00	0.00	0.00	0.00	0.00
Train	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	5%	0.01	0.00	0.01	0.00	0.01	0.01
Light Rail	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	11%	0.03	0.00	0.03	0.00	0.03	0.03
On foot	56%	0.15	0.01	0.17	0.01	0.13	0.14
Total	**100%**	**0.27**	**0.02**	**0.30**	**0.02**	**0.23**	**0.25**

Table 41 B2 Light Industrial Internal Mode Split and Trip Rates by Mode

Mode	Mode Split	Trip Rate per 100sqm GIA					
		AM Peak			PM Peak		
		Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	24%	0.03	0.00	0.03	0.00	0.02	0.02
Passenger	3%	0.00	0.00	0.00	0.00	0.00	0.00
Taxi	0%	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	1%	0.00	0.00	0.00	0.00	0.00	0.00
Train	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	5%	0.01	0.00	0.01	0.00	0.00	0.00
Light Rail	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	11%	0.01	0.00	0.01	0.00	0.01	0.01
On foot	56%	0.06	0.01	0.07	0.00	0.05	0.06
Total	**100%**	**0.11**	**0.01**	**0.12**	**0.01**	**0.09**	**0.10**

4.2.5 A1/A2/A3/A4 Land Uses

Table 42 A1 Retail Internal Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	16%	12%	15%	11%	13%	12%
Passenger	5%	6%	5%	7%	6%	6%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	4%	4%	4%	3%	4%	4%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	6%	4%	6%	3%	5%	4%
On foot	68%	74%	70%	76%	72%	74%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 43 A1 Retail Internal Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.59	0.14	0.73	0.47	0.82	1.29
Passenger	0.19	0.08	0.27	0.29	0.37	0.65
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.02	0.00	0.02	0.01	0.02	0.03
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.15	0.04	0.19	0.15	0.23	0.38
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.24	0.05	0.29	0.14	0.29	0.44
On foot	2.53	0.90	3.43	3.32	4.50	7.83
Total	**3.71**	**1.21**	**4.93**	**4.39**	**6.23**	**10.62**

Table 44 A2/A3/A4 Land Uses External Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	22%	20%	22%	21%	21%	21%
Passenger	8%	11%	9%	12%	10%	11%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	3%	2%	3%	2%	3%	2%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	7%	4%	6%	3%	5%	4%
On foot	59%	63%	60%	62%	61%	61%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 45 A2/A3/A4 Land Uses Internal Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.71	0.17	0.88	0.64	1.07	1.71
Passenger	0.26	0.09	0.35	0.38	0.51	0.90
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.01	0.00	0.02	0.01	0.02	0.02
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.10	0.02	0.12	0.06	0.12	0.18
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.21	0.03	0.25	0.08	0.23	0.31
On foot	1.88	0.55	2.43	1.94	3.03	4.97
Total	**3.18**	**0.87**	**4.04**	**3.11**	**4.99**	**8.10**

4.2.6 D1 Schools

Table 46 D1 Secondary School Internal Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	6%	5%	6%	6%	9%	8%
Passenger	2%	2%	2%	2%	2%	2%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	3%	3%	3%	3%	3%	3%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	3%	3%	3%	3%	5%	4%
On foot	86%	86%	86%	86%	81%	83%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 47 D1 Secondary School Internal Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.15	0.05	0.20	0.01	0.02	0.03
Passenger	0.06	0.02	0.08	0.00	0.01	0.01
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.01	0.00	0.01	0.00	0.00	0.00
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.07	0.02	0.09	0.00	0.01	0.01
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.09	0.03	0.12	0.01	0.01	0.02
On foot	2.27	0.77	3.04	0.14	0.21	0.34
Total	**2.64**	**0.89**	**3.53**	**0.16**	**0.25**	**0.42**

Table 48 D1 Primary School Internal Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	6%	6%	6%	7%	12%	10%
Passenger	2%	2%	2%	2%	3%	2%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	3%	3%	3%	3%	3%	3%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	4%	3%	4%	4%	6%	6%
On foot	85%	86%	85%	84%	75%	78%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 49 D1 Primary School Internal Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.36	0.10	0.46	0.02	0.09	0.11
Passenger	0.13	0.04	0.17	0.01	0.02	0.03
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.01	0.00	0.02	0.00	0.00	0.00
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.15	0.05	0.20	0.01	0.02	0.03
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.21	0.06	0.27	0.01	0.04	0.06
On foot	4.80	1.60	6.40	0.29	0.52	0.82
Total	**5.66**	**1.86**	**7.53**	**0.35**	**0.70**	**1.05**

Table 50 D1 Nursery School Internal Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	9%	6%	9%	10%	19%	17%
Passenger	2%	2%	2%	2%	3%	3%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	1%	1%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	3%	3%	3%	3%	4%	4%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	5%	4%	5%	5%	9%	8%
On foot	80%	85%	81%	79%	64%	68%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 51 D1 Nursery School Internal Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.82	0.17	0.99	0.05	0.40	0.45
Passenger	0.22	0.06	0.27	0.01	0.06	0.07
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.03	0.01	0.04	0.00	0.01	0.02
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.27	0.07	0.33	0.02	0.09	0.11
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.44	0.10	0.54	0.03	0.20	0.22
On foot	7.17	2.19	9.37	0.45	1.37	1.82
Total	**8.95**	**2.59**	**11.54**	**0.56**	**2.13**	**2.69**

4.2.7 D1/D2 Community, Health and Leisure

Table 52 D1 Community Centre Internal Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	22%	17%	21%	10%	17%	15%
Passenger	4%	6%	4%	8%	6%	7%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	0%	1%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	4%	4%	4%	3%	4%	4%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	10%	8%	10%	5%	8%	7%
On foot	59%	65%	59%	73%	65%	68%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 53 D1 Community Centre Internal Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.07	0.01	0.08	0.02	0.08	0.10
Passenger	0.01	0.00	0.02	0.02	0.03	0.05
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.00	0.00	0.00	0.00	0.00
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.02	0.00	0.02	0.01	0.02	0.02
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.04	0.00	0.04	0.01	0.04	0.05
On foot	0.20	0.03	0.23	0.17	0.30	0.47
Total	**0.34**	**0.05**	**0.39**	**0.23**	**0.47**	**0.70**

Table 54 D1 Health Facility Internal Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	22%	21%	22%	21%	22%	22%
Passenger	10%	12%	10%	13%	11%	12%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	3%	2%	3%	2%	2%	2%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	5%	3%	5%	3%	4%	4%
On foot	60%	61%	60%	61%	60%	61%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 55 D1 Health Facility Internal Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.21	0.07	0.28	0.17	0.26	0.42
Passenger	0.09	0.04	0.13	0.10	0.13	0.23
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.00	0.00	0.00	0.00	0.00
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.03	0.01	0.03	0.01	0.03	0.04
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.05	0.01	0.06	0.02	0.05	0.07
On foot	0.58	0.20	0.78	0.48	0.71	1.19
Total	**0.97**	**0.32**	**1.29**	**0.78**	**1.18**	**1.96**

Table 56 D2 Sports Pavilion and Sports Hall Internal Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	21%	16%	20%	10%	15%	13%
Passenger	4%	6%	4%	9%	7%	7%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	4%	4%	4%	3%	4%	3%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	10%	8%	10%	5%	7%	6%
On foot	60%	66%	61%	74%	67%	70%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 57 D2 Sports Pavilion and Sports Hall Internal Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.37	0.04	0.41	0.13	0.43	0.53
Passenger	0.07	0.01	0.09	0.12	0.19	0.31
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.01	0.00	0.01	0.00	0.01	0.02
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.08	0.01	0.09	0.04	0.10	0.14
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.18	0.02	0.20	0.07	0.21	0.27
On foot	1.07	0.15	1.23	1.00	1.94	2.96
Total	**1.79**	**0.23**	**2.02**	**1.35**	**2.88**	**4.23**

4.3 Combined Internal and External Trips

This section combines the internal and external trips by mode to produce total mode splits and trips by mode for all land uses.

4.3.1 C3 Residential

Table 58 C3 Residential Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	26%	35%	33%	41%	31%	37%
Passenger	8%	7%	8%	12%	16%	13%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	1%	1%	1%	1%	0%	1%
Bus / Minibus / Coach	4%	4%	4%	4%	4%	4%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	3%	4%	4%	4%	3%	3%
On foot	57%	48%	50%	38%	45%	40%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 59 C3 Residential Trip Rates by Mode

Mode	Trip Rates per Unit					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.05	0.26	0.30	0.24	0.10	0.34
Passenger	0.02	0.05	0.07	0.07	0.05	0.12
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.01	0.01	0.00	0.00	0.01
Train	0.00	0.01	0.01	0.01	0.00	0.01
Bus / Minibus / Coach	0.01	0.03	0.04	0.02	0.01	0.04
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.01	0.03	0.03	0.02	0.01	0.03
On foot	0.11	0.35	0.46	0.22	0.14	0.36
Total	**0.19**	**0.74**	**0.93**	**0.59**	**0.31**	**0.90**

4.3.2 C2 Extra Care Housing

Table 60 C2 Extra Care Housing Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	29%	34%	32%	35%	28%	30%
Passenger	14%	13%	13%	12%	15%	14%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	0%	1%
Train	0%	1%	1%	1%	0%	0%
Bus / Minibus / Coach	4%	4%	4%	4%	4%	4%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	4%	4%	4%	4%	3%	3%
On foot	49%	44%	47%	43%	49%	48%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 61 C2 Extra Care Housing Trip Rates by Mode

Mode	Trip Rates per Unit					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.03	0.04	0.08	0.03	0.07	0.10
Passenger	0.02	0.02	0.03	0.01	0.04	0.05
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.00	0.00	0.00	0.00	0.00
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.00	0.01	0.01	0.00	0.01	0.01
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.00	0.00	0.01	0.00	0.01	0.01
On foot	0.06	0.06	0.12	0.04	0.12	0.16
Total	**0.12**	**0.13**	**0.25**	**0.09**	**0.25**	**0.33**

4.3.3 C1 Hotel

Table 62 C1 Hotel Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	37%	52%	48%	52%	42%	49%
Passenger	8%	31%	25%	31%	16%	26%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	1%	1%	1%
Train	1%	1%	1%	1%	1%	1%
Bus / Minibus / Coach	5%	5%	5%	5%	5%	5%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	8%	2%	3%	2%	6%	3%
On foot	40%	8%	17%	8%	29%	15%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 63 C1 Hotel Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.15	0.56	0.71	0.52	0.21	0.73
Passenger	0.03	0.33	0.36	0.31	0.08	0.39
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.01	0.01	0.01	0.00	0.01
Train	0.00	0.01	0.01	0.01	0.00	0.01
Bus / Minibus / Coach	0.02	0.05	0.07	0.05	0.02	0.07
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.03	0.02	0.05	0.02	0.03	0.05
On foot	0.16	0.08	0.25	0.08	0.15	0.22
Total	**0.41**	**1.07**	**1.48**	**0.99**	**0.50**	**1.49**

4.3.4 B1 Commercial Business and B2 Light Industrial

Table 64 B1 Commercial Business in Hubs Mode Split and Trip Rates by Mode

Mode	Mode Split	Trip Rate per 100sqm GIA					
		AM Peak			PM Peak		
		Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	73%	1.75	0.15	1.90	0.12	1.45	1.58
Passenger	6%	0.14	0.01	0.15	0.01	0.11	0.12
Taxi	0%	0.01	0.00	0.01	0.00	0.01	0.01
Motorcycle	1%	0.03	0.00	0.04	0.00	0.03	0.03
Train	4%	0.09	0.01	0.10	0.01	0.08	0.09
Bus / Minibus / Coach	5%	0.11	0.01	0.12	0.01	0.09	0.10
Light Rail	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	3%	0.07	0.01	0.07	0.00	0.06	0.06
On foot	8%	0.20	0.02	0.21	0.01	0.16	0.18
Total	**100%**	**2.40**	**0.21**	**2.61**	**0.17**	**1.99**	**2.17**

Table 65 B1 Commercial Business Park Mode Split and Trip Rates by Mode

Mode	Mode Split	Trip Rate per 100sqm GIA					
		AM Peak			PM Peak		
		Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	73%	2.00	0.17	2.18	0.14	1.66	1.80
Passenger	6%	0.16	0.01	0.17	0.01	0.13	0.14
Taxi	0%	0.01	0.00	0.01	0.00	0.01	0.01
Motorcycle	1%	0.04	0.00	0.04	0.00	0.03	0.03
Train	4%	0.11	0.01	0.12	0.01	0.09	0.10
Bus / Minibus / Coach	5%	0.13	0.01	0.14	0.01	0.11	0.11
Light Rail	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	3%	0.08	0.01	0.08	0.01	0.06	0.07
On foot	8%	0.23	0.02	0.24	0.02	0.19	0.20
Total	**100%**	**2.75**	**0.24**	**2.98**	**0.20**	**2.28**	**2.47**

Table 66 B2 Light Industrial Mode Split and Trip Rates by Mode

Mode	Mode Split	Trip Rate per 100sqm GIA					
		AM Peak			PM Peak		
		Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	73%	0.83	0.07	0.91	0.06	0.69	0.75
Passenger	6%	0.07	0.01	0.07	0.00	0.05	0.06
Taxi	0%	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	1%	0.02	0.00	0.02	0.00	0.01	0.01
Train	4%	0.05	0.00	0.05	0.00	0.04	0.04
Bus / Minibus / Coach	5%	0.05	0.00	0.06	0.00	0.04	0.05
Light Rail	0%	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	3%	0.03	0.00	0.04	0.00	0.03	0.03
On foot	8%	0.09	0.01	0.10	0.01	0.08	0.08
Total	**100%**	**1.14**	**0.10**	**1.24**	**0.08**	**0.95**	**1.03**

4.3.5 A1/A2/A3/A4 Land Uses

Table 67 A1 Retail Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	23%	16%	21%	13%	18%	16%
Passenger	6%	7%	6%	7%	6%	7%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	0%	0%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	4%	4%	4%	4%	4%	4%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	6%	4%	5%	3%	4%	4%
On foot	60%	69%	62%	73%	67%	69%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 68 A1 Retail Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.98	0.21	1.19	0.61	1.20	1.81
Passenger	0.25	0.09	0.34	0.33	0.44	0.77
Taxi	0.00	0.00	0.00	0.00	0.00	0.01
Motorcycle	0.02	0.00	0.03	0.01	0.03	0.04
Train	0.02	0.00	0.02	0.00	0.01	0.02
Bus / Minibus / Coach	0.17	0.05	0.22	0.16	0.26	0.42
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.25	0.05	0.30	0.15	0.30	0.45
On foot	2.55	0.90	3.46	3.34	4.53	7.86
Total	**4.25**	**1.31**	**5.56**	**4.60**	**6.77**	**11.37**

Table 69 A2/A3/A4 Land Uses Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	31%	26%	30%	27%	27%	27%
Passenger	9%	12%	9%	14%	11%	12%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	0%	1%	0%	0%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	3%	3%	3%	2%	3%	2%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	6%	3%	5%	2%	4%	4%
On foot	50%	56%	52%	55%	54%	54%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 70 A2/A3/A4 Land Uses Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	1.15	0.25	1.41	0.94	1.54	2.49
Passenger	0.33	0.11	0.45	0.49	0.62	1.11
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.02	0.00	0.02	0.01	0.02	0.03
Train	0.02	0.00	0.02	0.00	0.01	0.02
Bus / Minibus / Coach	0.12	0.02	0.15	0.07	0.15	0.22
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.22	0.03	0.26	0.09	0.24	0.32
On foot	1.90	0.55	2.45	1.95	3.05	5.01
Total	**3.78**	**0.98**	**4.76**	**3.55**	**5.64**	**9.19**

4.3.6 D1 Schools

Table 71 D1 Secondary School Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	23%	20%	22%	13%	40%	33%
Passenger	7%	7%	7%	3%	6%	5%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	0%	1%	1%
Train	1%	0%	1%	0%	2%	1%
Bus / Minibus / Coach	5%	5%	5%	3%	4%	4%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	3%	3%	3%	3%	3%	3%
On foot	62%	64%	62%	78%	43%	52%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 72 D1 Secondary School Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.91	0.26	1.18	0.02	0.21	0.24
Passenger	0.27	0.09	0.35	0.00	0.03	0.04
Taxi	0.01	0.00	0.01	0.00	0.00	0.00
Motorcycle	0.03	0.01	0.03	0.00	0.00	0.01
Train	0.02	0.01	0.03	0.00	0.01	0.01
Bus / Minibus / Coach	0.19	0.06	0.25	0.00	0.02	0.03
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.12	0.04	0.16	0.01	0.02	0.02
On foot	2.48	0.84	3.32	0.14	0.22	0.37
Total	**4.03**	**1.31**	**5.34**	**0.18**	**0.52**	**0.72**

Table 73 D1 Primary School Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	22%	21%	22%	11%	34%	28%
Passenger	7%	7%	7%	3%	5%	5%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	0%	1%	1%
Train	0%	0%	0%	0%	1%	1%
Bus / Minibus / Coach	5%	5%	5%	3%	5%	4%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	3%	3%	3%	4%	5%	4%
On foot	62%	64%	62%	79%	50%	57%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 74 D1 Primary School Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	1.90	0.57	2.47	0.04	0.38	0.43
Passenger	0.57	0.19	0.76	0.01	0.06	0.07
Taxi	0.01	0.00	0.02	0.00	0.00	0.00
Motorcycle	0.05	0.02	0.07	0.00	0.01	0.01
Train	0.04	0.01	0.05	0.00	0.01	0.02
Bus / Minibus / Coach	0.41	0.13	0.54	0.01	0.05	0.06
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.28	0.09	0.37	0.01	0.05	0.07
On foot	5.27	1.76	7.03	0.29	0.56	0.88
Total	**8.54**	**2.77**	**11.31**	**0.37**	**1.13**	**1.55**

Table 75 D1 Nursery School Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	13%	9%	12%	14%	28%	25%
Passenger	3%	3%	3%	3%	3%	3%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	0%	0%	0%	0%	1%	1%
Train	0%	0%	0%	0%	1%	1%
Bus / Minibus / Coach	3%	3%	3%	3%	4%	4%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	5%	4%	5%	5%	8%	7%
On foot	75%	82%	77%	75%	55%	59%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 76 D1 Nursery School Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	1.28	0.23	1.51	0.08	0.71	0.79
Passenger	0.27	0.07	0.35	0.02	0.09	0.10
Taxi	0.01	0.00	0.01	0.00	0.00	0.00
Motorcycle	0.04	0.01	0.05	0.00	0.02	0.02
Train	0.02	0.00	0.03	0.00	0.02	0.02
Bus / Minibus / Coach	0.30	0.08	0.38	0.02	0.11	0.13
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.45	0.10	0.55	0.03	0.20	0.23
On foot	7.22	2.21	9.43	0.45	1.38	1.83
Total	**9.60**	**2.70**	**12.30**	**0.60**	**2.53**	**3.13**

4.3.7 D1/D2 Community, Health and Leisure

Table 77 D1 Community Centre Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	27%	20%	26%	11%	20%	17%
Passenger	4%	6%	4%	8%	6%	7%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	0%	1%	1%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	4%	4%	4%	3%	4%	4%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	10%	8%	9%	5%	8%	7%
On foot	54%	61%	55%	72%	62%	65%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 78 D1 Community Centre Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.09	0.01	0.10	0.03	0.10	0.12
Passenger	0.01	0.00	0.02	0.02	0.03	0.05
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.00	0.00	0.00	0.00	0.00	0.00
Train	0.00	0.00	0.00	0.00	0.00	0.00
Bus / Minibus / Coach	0.02	0.00	0.02	0.01	0.02	0.03
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.03	0.00	0.04	0.01	0.04	0.05
On foot	0.19	0.03	0.22	0.18	0.30	0.47
Total	**0.35**	**0.05**	**0.40**	**0.25**	**0.48**	**0.73**

Table 79 D1 Health Facility Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	28%	60%	44%	51%	26%	40%
Passenger	11%	10%	10%	10%	11%	11%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	0%	1%	1%	1%	0%	1%
Train	0%	3%	1%	2%	0%	1%
Bus / Minibus / Coach	3%	4%	3%	3%	2%	3%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	5%	2%	4%	2%	4%	3%
On foot	53%	21%	37%	31%	56%	42%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 80 D1 Health Facility Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.51	0.25	0.98	0.46	0.49	1.12
Passenger	0.19	0.04	0.23	0.09	0.21	0.30
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.01	0.00	0.02	0.01	0.01	0.02
Train	0.00	0.01	0.03	0.02	0.00	0.04
Bus / Minibus / Coach	0.05	0.01	0.07	0.03	0.05	0.08
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.09	0.01	0.08	0.02	0.08	0.09
On foot	0.97	0.09	0.84	0.28	1.07	1.18
Total	**1.82**	**0.42**	**2.24**	**0.90**	**1.92**	**2.82**

Table 81 D2 Sports Pavilion and Sports Hall Mode Splits

Mode	Mode Splits					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	26%	21%	25%	12%	20%	17%
Passenger	5%	7%	5%	10%	8%	9%
Taxi	0%	0%	0%	0%	0%	0%
Motorcycle	1%	1%	1%	0%	1%	0%
Train	0%	0%	0%	0%	0%	0%
Bus / Minibus / Coach	4%	4%	4%	3%	4%	3%
Light Rail	0%	0%	0%	0%	0%	0%
Bicycle	9%	7%	9%	5%	7%	6%
On foot	54%	60%	55%	70%	60%	64%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 82 D2 Sports Pavilion and Sports Hall Trip Rates by Mode

Mode	Trip Rate per 100sqm GIA					
	AM Peak			PM Peak		
	Arrivals	Departures	Combined	Arrivals	Departures	Combined
Driver	0.52	0.05	0.57	0.18	0.64	0.79
Passenger	0.10	0.02	0.12	0.15	0.26	0.42
Taxi	0.00	0.00	0.00	0.00	0.00	0.00
Motorcycle	0.01	0.00	0.02	0.01	0.02	0.02
Train	0.01	0.00	0.01	0.00	0.01	0.01
Bus / Minibus / Coach	0.09	0.01	0.10	0.04	0.12	0.16
Light Rail	0.00	0.00	0.00	0.00	0.00	0.00
Bicycle	0.18	0.02	0.20	0.07	0.21	0.27
On foot	1.08	0.16	1.23	1.04	1.92	2.99
Total	**1.98**	**0.26**	**2.24**	**1.49**	**3.18**	**4.67**

Otterpool Park
Trip Rates by Mode by Land Use

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APPENDIX Q Trip distribution Technical Note (vehicles)

ARCADIS Design & Consultancy for natural and built assets

OTTERPOOL PARK

Method for the Distribution of External Vehicle Trips

OCTOBER 2018

Incorporating

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VERSION CONTROL

Version	Date	Author	Changes
1	7/7/2017	PL	-
2	October 2018	PL	

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1 Introduction

Arcadis Consulting (UK) Limited was appointed in August 2016 to develop a masterplan and planning submission in respect of the proposed garden town called Otterpool Park. In December 2016, a Feasibility and Capacity Study[1] was completed to mark the first stage in the creation of the masterplan, comprising an assessment of the area and analysis of the constraints and opportunities. In January 2017, a Study into the capacity of the M20 Junction 11 was concluded to accompany the Stage 1 report. This Study investigated the existing operation of the junction and modelled a number of Otterpool Park development scenarios using trip forecasts from a high-level trip generation calculation exercise based on vehicle trip rates provided by Folkestone & Hythe District Council.

Following the initial high-level capacity assessment in January 2017, a Trip Model was developed to more accurately calculate the number of trips generated by the site, the mode of travel in which the trips will occur and the spatial distribution of the trips.

In April 2017, a meeting was held with Kent County Council and Folkestone & Hythe District Council to discuss our proposed method for trip generation, mode spit and distribution. Draft Technical notes[2][3][4] describing the proposed methods for this work was subsequently produced and reviewed by Kent County Council, Folkestone & Hythe District Council and Highways England.

This Note describes our proposed method for the distribution of external vehicle trips. The method described in this Note has been used to inform the Transport Assessment and other associated documents to be produced as part of the planning application.

1.1 Scoping Discussions

Discussions relating to the method for the distribution of trips were held with Kent County Council, Folkestone & Hythe District Council and Highways England between July 2017 and March 2018. Discussions with Kent County Council and Folkestone & Hythe District Council are documented in Appendix A.1, while discussions with Highways England are documented in Appendix A.2. The comments received and the action taken to reach a resolution to each comment is summarised in Table 1.

Table 1 Kent County Council / Folkestone & Hythe District Council Comments on Trip Generation Method

Issue Raised	Resolution
Non-work distribution by OD – Table 15 states that 48% of all trips will be contained within the Folkestone & Hythe District with 42% in the Ashford District. When I look at Figure 2 the percentage that goes in the Ashford direction either on the A20 / M20 is much higher at 60%, yet the percentage that goes in the Folkstone & Hythe direction is only 35%, 5% on M20, 3% on A20, 23% on A261 and 4% on West Hythe Road. Please can you explain the reason why the figures are different?	Figure 2 shows the resulting distribution to all ODs. The 35% routing along the M20 to/from the west includes traffic routing to/from a number of destinations including Ashford, Canterbury, Maidstone, Dartford, Tonbridge and Malling, Medway, Tunbridge Wells, Swale and all London traffic. Likewise, the 25% routing along the A20 to/from the west includes traffic to/from Ashford, Sellindge and Swale. To the east; the 5% on the M20 is routing to/from Folkestone, Old Hawkinge, north Folkestone & Hythe and Dover. The 3% on the A20 are routing to/from Lyminge and some parts of north and east Folkstone & Hythe. The 23% routing through Hythe includes traffic to/from Hythe, Folkestone and Dover. The 4% on the West Hythe Road are routing to/from south and central Folkstone & Hythe areas.

[1] Otterpool Park Garden Town Stage 1 Feasibility and Capacity Study (December 2016)
[2] Otterpool Park Garden Settlement Trip Generation Calculation Method Technical Note (May 2017)
[3] Otterpool Park Garden Settlement Method for deriving Mode Splits (June 2017)
[4] Otterpool Park Garden Settlement Method for the Distribution of External Vehicle Trips (July 2017)

Issue Raised	Resolution
Work trip distribution for incoming commuter trips – Table 13 doesn't seem to tally with figure 4 as the vast majority of the trips are from the east not the west i.e Folkestone and Dover rather than from Ashford and further afield.	The flows on the M20 in Figure 4 are incorrect – in fact they are the opposite way around. The flows are updated in the revised method note.

1.2 Structure of this Note

The remainder of this Note is structured as follows:

Chapter 2 **Overview of Method**

Chapter 3 **Trip Origins and Destinations** describes the method for defining the off-site locations that trips outgoing from Otterpool park will be destined to and incoming trips will originate from;

Chapter 4 **Gravity Model Inputs** describes how the deterrence function and activity of each origin/destination was calculated; and

Chapter 5 **Trip Distributions** describes how the gravity model inputs were applied to the origin/destinations to calculate the distribution of trips.

2 Overview of Method

2.1 Land Uses

The proposals for Otterpool Park Garden City include a variety of land uses, as shown in Table 2.

Table 2 Current Proposed Land Uses and Quantum

Land Use	Class
Residential	C3
Extra Care Housing	C2
Hotel	C1
Commercial business in hubs	B1
Commercial business park	B1
Light Industrial business park	B2
Retail	A1
Business	A2
Café / Restaurant	A3
Pub / Takeway	A4
Secondary schools	D1
Primary School	D1
Nursery	D1
Community Centre	D1
Health	D1
Sports pavilion	D2
Indoor sports hall	D2

2.2 Trip Purposes

The method for the calculation of trip generation by land use was based on trip generation for a range of purposes, as defined within the NTS data and the method described in this Note refers to work and non-work trip purposes. Table 3 lists the trip purposes referred to in the Trip Generation Calculation Method Note and the Method for deriving Mode Splits and groups them into work and non-work trip purposes.

Table 3 Trip Purposes and Definitions

Trip Purpose	Description
Commuting	Trips to a usual place of work from home, or from work to home.
Business	Personal trips in course of work, including a trip in course of work back to work. This includes all work trips by people with no usual place of work (e.g. site workers) and those who work at or from home.
Education	Trips to school or college, etc. by full time students, students on day release and part time students following vocational courses.
Escort education	Trips made by people accompanying students making education trips
Shopping	All trips to shops or from shops to home, even if there was no intention to buy.
Other escort	Used when the traveller has no purpose of his or her own, other than to escort or accompany another person; for example, taking a child to school. 'Escort commuting' is escorting or accompanying someone from home to work or from work to home. Similarly, other escort purposes are related to the purpose of the person being escorted. Note that the purpose of a trip for a small child accompanying older children to school would be 'escort education'.
Personal business	Visits to services, e.g. hairdressers, launderettes, dry cleaners, betting shops, solicitors, banks, estate agents, libraries, churches; or for medical consultations or treatment; or for eating and drinking, unless the main purpose was entertainment or social.
Visiting friends at private home Visiting friends elsewhere	Visits to meet friends, relatives, or acquaintances, both at someone's home or at a pub, restaurant, etc.
Entertainment / public activity Sport: participate	All types of entertainment or sport, clubs, and voluntary work, nonvocational evening classes, political meetings, etc..
Holiday: base Day trip	Trips to or from any holiday (including stays of 4 or more nights with friends or relatives), or trips for pleasure (not otherwise classified as social or entertainment) within a single day.
Other including just walk	Walking trips for pleasure or exercise along public highways, including taking the dog for a walk and jogging.

2.3 Overview of Method

External vehicle trips generated by the Otterpool Park development have been distributed by identifying off-site origins and destinations that are expected to attract/generate trips and then using a gravity modelling approach to determine the number of trips that are expected to route to/from the origins/destinations (ODs). The route the trips are expected to take on the network is then determined through use of a VISUM model. The method by which the trips are input the VISUM and re-assigned is described in a separate technical note[5].

The gravity model method assumes that the number of trips routing to/from an OD declines with increasing distances, cost and time of travel (deterrence functions) but is positively correlated with the size of the attractor/generator at the OD.

Separate gravity models have been developed to distribute work-related and non-work trips between the site and primary off-site locations. A total of four gravity distribution models were developed, as follows:

[5] Otterpool Park Garden Settlement Scope of Highway Capacity Modelling (Arcadis, July 2017)

1. Distribution of non-work trips made by Otterpool Park residents;
2. Distribution of commuter trips made by Otterpool Park residents;
3. Distribution of commuter trips made by off-site residents to the Otterpool Park Business park; and
4. Distribution of commuter trips made by off-site residents to the Otterpool Park Business hubs.

For the work trip gravity models, the activity is represented by Census 2011 origin/destination data (i.e. the number of incoming/outgoing commuter vehicle trips), while the activity for non-work trips is represented by the resident population of the location. For the purposes of the gravity model, the relationship between the number of trips attracted to a location and the scale of activity is linear assuming all other factors (i.e. distance, cost) are equal.

All gravity models also utilise a value of time which represents the travel time between the site and the location on the highway network. The time value represents the deterrence function and we propose to use a function based on a log-normal distribution as an alternative to the commonly used Tanner, exponential or power functions.

$$X = e^{\mu + \sigma Z}$$

Where $\boldsymbol{\mu}$ and $\boldsymbol{\sigma}$ are variables and $\boldsymbol{Z}$ is a standard normal variable. The values for $\boldsymbol{\mu}$ and $\boldsymbol{\sigma}$ were derived by calibrating the trip distribution by distance values generated by the gravity models with observed trip distribution by distance data within the NTS.

3 Trip Origins and Destinations

3.1 Introduction

This Chapter describes how we identified the off-site locations that represent the ODs of trips generated by the Otterpool Park site.

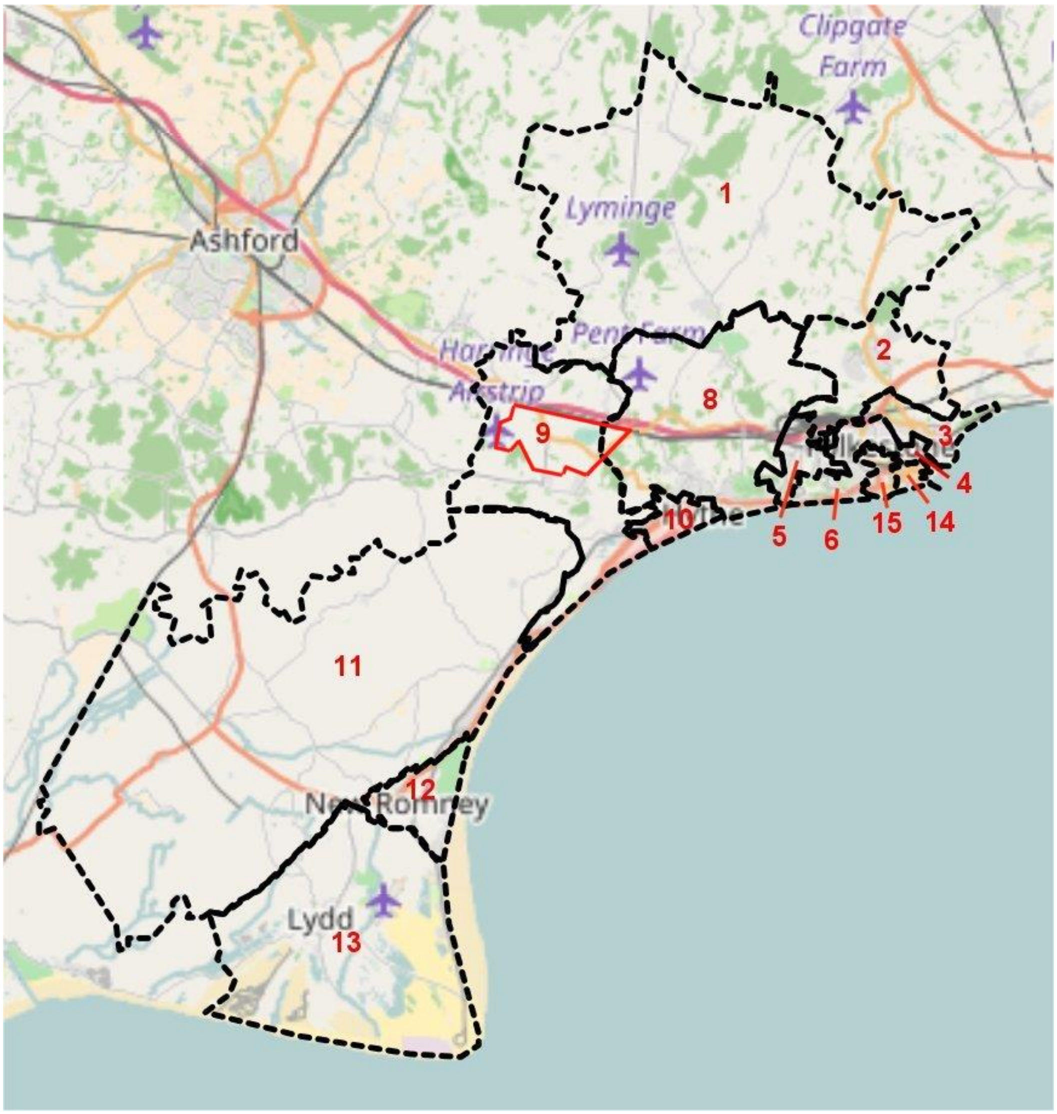
The ODs were identified in two steps;

1. ODs within Folkstone & Hythe, identified by the size of population settlements, and
2. ODs outside Folkstone & Hythe, which were identified through the consideration of current commuter trip patterns.

3.2 Origins/Destinations within Folkstone & Hythe

Census provides a sub-division of Folkstone & Hythe into Super Output Areas (SOAs) at mid and lower layer levels, the lower level providing smaller and a greater number of SOAs. Figure 1 shows the Folkstone & Hythe SOA boundaries at the mid layer. The red numbers correspond to the Folkstone & Hythe SOA number. The figure also shows the proposed site boundary (red outline) and illustrates how the site is primarily located within mid-layer SOA number 9 and partially in number 8.

Figure 1 Site Location and Census Mid-Layer SOAs for Folkstone & Hythe



Likely ODs for trips within Folkstone & Hythe were selected by considering the size of settlement populations within the district as recorded in the 2011 Census. Where a population is considered sufficiently large to be a generator or attractor of trips, it has been designated as an OD. Table 4 presents a list of Folkstone & Hythe settlement areas and the corresponding populations. The table also provides the lower layer SOA number from which the populations have been derived.

Table 4 Folkstone & Hythe Settlement Areas, Populations and Census SOA numbers

Origin/Destination	Population	Census SOA numbers
Otterpool / Lympne / Stanford	2,004	9C
Sellindge	1,601	9D
Lyminge	1,342	1D
Hythe	10,274	8A, 8C, 10
Palmarsh	1,464	9B
Folkstone	52,589	2A, 3, 4, 5, 6, 14, 15
East and north of Otterpool	3,548	8B, 8D
Old Hawkinge	8,002	2B, 2C, 2E, 2F
Dymchurch	2,022	11A
Burmarsh	1,703	9A
North of Hawkinge	1,399	1B
North East Folkstone & Hythe	1,447	1C
Central Folkstone & Hythe	3,679	11B, 11C, 11E
North Folkstone & Hythe	2,087	1A
New Romney	6,996	12
South East Folkstone & Hythe	1,245	11D
Lydd	6,567	13
Folkstone & Hythe Total	**107,969**	-

The areas listed in Table 4 have been chosen as ODs for trips between the Otterpool Park site and locations within Folkstone & Hythe. Each Census SOA number represents an individual OD, for example seven ODs have been identified in Folkstone. It was considered necessary to create ODs in this way as it affects the routing assumptions to/from the ODs as described in Chapter 4.

3.3 Origins/Destinations outside Folkstone & Hythe

ODs outside Folkstone & Hythe were also identified using Census 2011 data. On this occasion, ODs were identified by considering the areas that people commute to from Folkstone & Hythe and the areas from which people commute into Folkstone & Hythe. Table 5 presents the main ODs for commuter trips into and out of Folkstone & Hythe. Since the gravity models are designed to distribute vehicle trips, the trips in Table 5 are vehicle trips only.

Table 5 ODs for Commuter Vehicle Trips into and out of Folkstone & Hythe

Origin/Destination	Commuter Direction	
	from Folkstone & Hythe	to Folkstone & Hythe
Ashford	4,058	2,338
Canterbury	1,582	927
Dover	2,172	3,764
Maidstone	714	231
Rother	165	176
Dartford	93	14
Tonbridge and Malling	326	78
Medway	186	160
Tunbridge Wells	111	55
Thanet	254	473
London	625	113
Other UK	915	512
Total	**11,436**	**9,047**

These settlement areas have been chosen as ODs between the Otterpool Park site and locations outside of Folkstone & Hythe. For the purposes of identifying the trip distribution through the M20 junctions 9 and 10 it was necessary to disaggregate Ashford into five separate ODs to represent the different areas of Ashford that are accessed from the north and south arms of the M20 Junction 9 and the one north and two southern arms of Junction 10. Likewise, it was necessary to disaggregate Canterbury into 23 separate ODs to accurately define the routing of traffic through the City.

4 Gravity Model Inputs

4.1 Introduction

As described in Chapter 2, the gravity models incorporate a deterrence function and an attractor/generator value. The deterrence function has been defined as the travel time between the site and the ODs. The attractor/generator values have been defined as the population of an area for the non-work trip gravity model. For the work trip gravity models, the attractor/generator values are defined as the number of commuter trips attracted to/generated by an area as calculated from Census.

This Chapter describes how these inputs to the gravity models were calculated.

4.2 Deterrence Function: Travel Time

4.2.1 Routes to/from Origins/Destinations

To calculate the travel time along the highway network between the site and the ODs it was first necessary to identify routes that vehicles travelling between the site and each OD would be likely to take. To achieve this, it was necessary to choose a location on the highway network that represents the OD spatially. For each of the ODs, this location was chosen to be at the centre of the largest settlement conurbation in the corresponding SOA or district. Appendix B shows the locations chosen for the ODs within Folkstone & Hythe listed in Table 4.

The routes along the highway network a vehicle would be expected to take between the site and the OD locations was determined using the route directions application in Google Maps. Two start/end points for the routes were chosen within Otterpool Park; one at the access to the Business Park to represent trips routing to/from the Business Park and a second point around the centre of the site on the A20 Ashford Road to represent the average route length for trips routing to/from all other locations within the site.

For most ODs, the application defined two routes between the site and the OD; one route that utilises the M20 and one that does not. Where this was the case, both routes were included as route options int eh gravity model. Appendix C presents the route assumptions for all routes between the site and the OD locations in the form of a list of the roads used to traverse the route.

4.2.2 Route Distance and Travel Time

For each route, the distance and the travel time were recorded and input the gravity model as the deterrence function. As the Google Maps application utilises real-time and average traffic data to suggest the best routes for any given time period, all records were taken during the AM peak and routes were checked for anomalies that may have been influenced by unusual traffic conditions. Appendix C presents the route distances and travel times between the site and ODs inside Folkstone & Hythe for routes both on and off the M20 derived using this method.

4.3 Attractor/Generator Values: Resident Population and Commuter Vehicle Trips

4.3.1 Non-Work Trip Distribution

Table 3 presents all trip purposes included in the trip generation and distribution calculations. Non-work trips include the following trip purposes:

1. Education and Escort Education;
2. Shopping;
3. Personal Business;
4. Visiting friends at private home and elsewhere;
5. Entertainment / Public activity;
6. Sport: participate;

7. Holiday and Day trip;
8. Other, including just walk; and
9. Other escort.

Resident population has been chosen as the OD attractor/generator value for the non-work gravity model as it is assumed to be a significant contributing factor to the attraction or generation of trips. For example, the distribution of Visiting friends trips will be influenced by where the local population centres are and the number of Visiting friends trips likely to be attracted to the population will be related to the size of the population. It is also assumed that the greater the population at an OD, the greater the number of attracting facilities will be located there and therefore the greater the probability that Shopping, Personal Business, Education and any other non-work activity will be attracted there. Likewise, it has been assumed that the number of trips for non-work purposes incoming from an OD will be proportional to the size of the population at the OD.

The distribution of non-work trips has been assumed to be directly proportional to the population of the OD if all other factors are equal. For example, it is assumed that an OD with a population of 1,000 people that is located 10km from the site would have twice the attraction of an OD with a population of 500 people that was located 10km from the site. While we acknowledge this assumption represents a simplification of the complex decision-making process that is involved when a person decides where to travel to for any given purpose, we believe the assumption is suitably robust for the purposes of our assessment.

The populations of ODs within Folkstone & Hythe have previously been presented in Table 4. The populations for the full list of ODs is presented in Table 6. These populations represent the activity value required as input for the non-work trip gravity model.

Table 6 Population Assumptions by OD

Origin/Destination	Population
within Folkstone & Hythe	
Otterpool / Lympne / Stanford	2,004
Sellindge	1,601
Lyminge	1,342
Hythe	10,274
Palmarsh	1,464
Folkstone	52,589
East and north of Otterpool	3,548
Old Hawkinge	8,002
Dymchurch	2,022
Burmarsh	1,703
North of Hawkinge	1,399
North East Folkstone & Hythe	1,447
Central Folkstone & Hythe	3,679
North Folkstone & Hythe	2,087
New Romney	6,996
South East Folkstone & Hythe	1,245
Lydd	6,567
Folkstone & Hythe Total	**107,969**
outside Folkstone & Hythe	
Ashford	74,204
Canterbury	151,145
Dover	31,022
Maidstone	113,137
Rother	92,900
Dartford	97,365
Tonbridge and Malling	120,805
Medway	274,015
Tunbridge Wells	64,783
Swale	142,400
Thanet	139,800
London	8,665,000
Other UK	54,789,697
outside Folkstone & Hythe Total	**64,756,273**

4.3.2 Work Trip Distribution

4.3.2.1 Outgoing Work Trips

The distribution of external Commuter and Business (work) trips originating from on-site Residential land uses has been derived from the distribution of commuter trips as measured in the 2011 Census. Table 5 presented the number of Commuter vehicle trips to and from Folkstone & Hythe for the ODs outside of Folkstone & Hythe. However, we also need to derive a distribution for work trips from the site to ODs within Folkstone & Hythe.

Census also provides us with commuting patterns within Folkstone & Hythe at a mid layer level. The total number of outgoing commuter vehicle trips from each mid layer SOA in Folkstone & Hythe is shown in Table 7.

Table 7 Outgoing Commuter Vehicle Trips to Folkstone & Hythe SOAs

Census SOA (Mid Layer)	Outgoing Commuter Vehicle Trips	
	Total	%
1	410	3%
2	301	2%
3	495	4%
4	274	2%
5	660	5%
6	2,913	21%
8	1,178	8%
9	847	6%
10	1,073	8%
11	488	4%
12	829	6%
13	1,176	8%
14	1,883	14%
15	1,379	10%
All SOAs	**13,906**	**100%**

As previously shown in Table 4, the ODs disaggregate Folkstone & Hythe Census SOAs 1, 2, 8, 9 and 11 into smaller (lower level) SOAs. Since Census only provides commuter trip data at mid layer level, we must derive commuter trip values for the lower layer levels to match the ODs. This was achieved by distributing the commuter vehicle trips in Table 7 over the lower level SOAs according to the population of the lower level SOAs. This calculation is shown in Table 8.

Table 8 Outgoing Commuter Vehicle Trip Distribution by ODs in Folkstone & Hythe

Census SOA (lower layer)	Origin/Destination	Population		Census Commuter Vehicle Trips		Commuter Vehicle Trip Distribution	
		Total	%	%	Total	Population %	Distribution
1							
1A	North Folkstone & Hythe	2,087	33%	3%	**410**	33%	**136**
1B	North of Hawkinge	1,399	22%			22%	**91**
1C	North East Folkstone & Hythe	1,447	23%			23%	**95**
1D	Lyminge	1,342	21%			21%	**88**
2							
2A	Folkstone 1	1,522	16%	2%	**301**	16%	**48**
2BCEF	Old Hawkinge	8,002	84%			84%	**253**
3	Folkstone 2	8,348	-	4%	**495**	-	**495**
4	Folkstone 3	7,745	-	2%	**274**	-	**274**
5	Folkstone 4	9,093	-	5%	**660**	-	**660**
6	Folkstone 5	12,263	-	21%	**2,913**	-	**2,913**
8							
8A	Hythe 1	1,548	24%	8%	**1,178**	24%	**278**
8C	Hythe 2	1,466	22%			22%	**263**
8BD	East and north of Otterpool	3,548	54%			54%	**637**
9							
9A	Burmarsh	1,703	25%	6%	**847**	25%	**213**
9B	Palmarsh (west)	1,464	22%			22%	**183**
9C	Otterpool / Lympne / Stanford	2,004	30%			30%	**251**
9D	Sellindge	1,601	24%			24%	**200**
10	Hythe 3	7,260	-	8%	**1,073**	-	**1,073**
11							
11A	Dymchurch	2,022	29%	4%	**488**	29%	**142**
11D	South East Folkstone & Hythe	1,245	18%			18%	**87**
11BCE	Central Folkstone & Hythe	3,679	53%			53%	**258**
12	New Romney	6,996	-	6%	**829**	-	**829**
13	Lydd	6,567	-	8%	**1,176**	-	**1,176**
14	Folkstone 6	6,698	-	14%	**1,883**	-	**1,883**
15	Folkstone 7	6,920	-	10%	**1,379**	-	**1,379**
All SOAs	**Folkstone & Hythe**	**107,969**	**-**	**100%**	**13,906**	**-**	**13,906**

The final two columns in Table 8 have been combined with the Commuter Vehicle Trips from Folkstone & Hythe to ODs outside Folkstone & Hythe calculated in Table 5 to produce work trip distribution for trips originating from the Otterpool Park site (i.e. outgoing work trips), which is presented in Table 9.

Table 9 Outgoing Work Trip Distribution between the Site and ODs

Origin/Destination	Work Trips from Otterpool Park	
	Trips	Distribution
within Folkstone & Hythe		
Otterpool / Lympne / Stanford	251	1%
Sellindge	200	1%
Lyminge	88	0%
Hythe	1,614	6%
Palmarsh	183	1%
Folkstone	7,652	30%
East and north of Otterpool	637	3%
Old Hawkinge	253	1%
Dymchurch	142	1%
Burmarsh	213	1%
North of Hawkinge	91	0%
North East Folkstone & Hythe	95	0%
Central Folkstone & Hythe	258	1%
North Folkstone & Hythe	136	1%
New Romney	829	3%
South East Folkstone & Hythe	87	0%
Lydd	1,176	5%
Total Folkstone & Hythe	**13,906**	**55%**
outside Folkstone & Hythe		
Ashford	4,058	16%
Canterbury	1,582	6%
Dover	2,172	9%
Maidstone	714	3%
Rother	165	1%
Dartford	93	0%
Tonbridge and Malling	326	1%
Medway	186	1%
Tunbridge Wells	111	0%
Thanet	254	1%
London	625	2%
Other UK	915	4%
Total outside Folkstone & Hythe	**11,436**	**45%**
All ODs	**25,342**	**100%**

Table 9 shows that 55% of all outgoing work trips are expected to be destined for ODs in Folkstone & Hythe, of which 30% are expected to route to Folkestone. The primary ODs outside Folkstone & Hythe that are expected to attract work trips from the site are Ashford (16% of all outgoing work trips) and Dover (9%).

4.3.2.2 Incoming Work Trips

Incoming work trips were calculated using the same method as for outgoing work trips, but this time utilising Census data that describes incoming commuter work trips instead of outgoing. Table 10 presents the total number of incoming commuter vehicle trips to each mid layer SOA in Folkstone & Hythe from other SOAs in Folkstone & Hythe.

Table 10 Incoming Commuter Vehicle Trips between Folkstone & Hythe SOAs

Census SOA (Mid Layer)	Incoming Commuter Vehicle Trips	
	Total	%
1	725	5%
2	1550	11%
3	1111	8%
4	845	6%
5	1413	10%
6	1759	13%
8	821	6%
9	944	7%
10	835	6%
11	905	7%
12	991	7%
13	946	7%
14	425	3%
15	636	5%
All SOAs	**13,906**	**100%**

The commuter vehicle trips in Table 10 were disaggregated into the necessary lower level SOAs according to the population of the lower level SOAs. This calculation is shown in Table 11.

Table 11 Incoming Commuter Vehicle Trip Distribution by ODs in Folkstone & Hythe

Census SOA (lower layer)	Origin/Destination	Population		Census Commuter Vehicle Trips		Commuter Vehicle Trip Distribution	
		Total	%	%	Total	Population %	Distribution
1							
1A	North Folkstone & Hythe	2,087	33%	5%	725	33%	241
1B	North of Hawkinge	1,399	22%			22%	162
1C	North East Folkstone & Hythe	1,447	23%			23%	167
1D	Lyminge	1,342	21%			21%	155
2							
2A	Folkstone 1	1,522	16%	11%	1,550	16%	248
2BCEF	Old Hawkinge	8,002	84%			84%	1,302
3	Folkstone 2	8,348	-	8%	1,111	-	1,111
4	Folkstone 3	7,745	-	6%	845	-	845
5	Folkstone 4	9,093	-	10%	1,413	-	1,413
6	Folkstone 5	12,263	-	13%	1,759	-	1,759
8							
8A	Hythe 1	1,548	24%	6%	821	24%	194
8C	Hythe 2	1,466	22%			22%	183
8BD	East and north of Otterpool	3,548	54%			54%	444
9							
9A	Burmarsh	1,703	25%	7%	944	25%	237
9B	Palmarsh (west)	1,464	22%			22%	204
9C	Otterpool / Lympne / Stanford	2,004	30%			30%	279
9D	Sellindge	1,601	24%			24%	223
10	Hythe 3	7,260	-	6%	835	-	835
11							
11A	Dymchurch	2,022	29%	7%	905	29%	263
11D	South East Folkstone & Hythe	1,245	18%			18%	162
11BCE	Central Folkstone & Hythe	3,679	53%			53%	479
12	New Romney	6,996	-	7%	991	-	991
13	Lydd	6,567	-	7%	946	-	946
14	Folkstone 6	6,698	-	3%	425	-	425
15	Folkstone 7	6,920	-	5%	636	-	636
All SOAs	**Folkstone & Hythe**	**107,969**	**-**	**100%**	**13,906**	**-**	**13,906**

The final two columns in Table 11 have been combined with the Commuter Vehicle Trips to Folkstone & Hythe from ODs outside Folkstone & Hythe calculated in Table 5 to produce work trip distribution for trips originating from the Otterpool Park site (i.e. outgoing work trips), which is presented in Table 12.

Table 12 Incoming Work Trip Distribution between the Site and ODs

Origin/Destination	Work Trips to Otterpool Park	
	Trips	Distribution
within Folkstone & Hythe		
Otterpool / Lympne / Stanford	279	1%
Sellindge	223	1%
Lyminge	155	1%
Hythe	1,212	5%
Palmarsh	204	1%
Folkstone	6,437	28%
East and north of Otterpool	444	2%
Old Hawkinge	1,302	6%
Dymchurch	263	1%
Burmarsh	237	1%
North of Hawkinge	162	1%
North East Folkstone & Hythe	167	1%
Central Folkstone & Hythe	479	2%
North Folkstone & Hythe	241	1%
New Romney	991	4%
South East Folkstone & Hythe	162	1%
Lydd	946	4%
Total Folkstone & Hythe	**13,906**	**61%**
outside Folkstone & Hythe		
Ashford	2,338	10%
Canterbury	927	4%
Dover	3,764	16%
Maidstone	231	1%
Rother	176	1%
Dartford	14	0%
Tonbridge and Malling	78	0%
Medway	160	1%
Tunbridge Wells	55	0%
Thanet	473	2%
London	113	0%
Other UK	512	2%
Total outside Folkstone & Hythe	**9,047**	**39%**
All ODs	**22,953**	**100%**

Table 12 shows that 61% of all outgoing work trips are expected to be destined for ODs in Folkstone & Hythe, of which 28% are expected to route to Folkestone. The primary ODs outside Folkstone & Hythe that are expected to attract work trips from the site are again expected to be Ashford (10% of all outgoing work trips) and Dover (16%).

5 Gravity Model Trip Distributions

5.1 Introduction

This Chapter describes how the gravity model inputs and ODs were combined within the gravity models to create trip distributions for work and non-work trips. The trip distribution figures in this Chapter are based on the 2044 Otterpool Park scenario, which includes 8,500 homes.

5.2 Non-Work Trip Distribution

5.2.1 Gravity Model Inputs

The inputs to the non-work trip distribution gravity model calculated in Chapter 4 are as follows:

1. The ODs within and outside Folkstone & Hythe between which trips to/from the site would be made;
2. The routes along the highway that vehicles could make between the ODs;
3. The travel time along each route during peak periods; and
4. The population associated with each OD.

The travel time deterrence functions and OD population attractor/generator functions were used to create an 'attraction factor' for each route. The attraction factor was calculated by multiplying the log-normal function of the travel time (the deterrence function) by the population (the activity). This represents the assumed linear relationship between attraction and population (all other factors being equal) and the assumption that attraction decreases as distance increases at a log-normal rate. To calculate the log-normal of the travel time it was necessary to define the values for μ and σ, which determine the distribution of trips by distance. These values were determined by calibrating the distribution results with observed trip distribution by distance data from NTS, as described in the following section.

5.2.2 Determination of the Values of μ and σ

In order to determine the μ and σ values for the log-normal function, we calibrated the gravity model trip distribution by distance against the trip distribution by distance for non-work trips from NTS data. Table 13 presents the distribution of non-work trips by distance suggested by the NTS.

Table 13 NTS Non-Work Trip Distribution by Distance

Distance (miles)	Distribution
<1	9%
1 to 2	24%
2 to 3	15%
3 to 5	18%
5 to 10	18%
10 to 15	7%
15 to 25	5%
25 to 35	2%
35 to 50	1%
50 to 100	1%
100 to 200	1%
200 +	0%
All	**100%**

The distribution in Table 13 shows how, after the first mile, the number of trips by distance decreases as distances increases.

All OD locations within Folkstone & Hythe, as described in section 4.2 and Appendix B, are within 15 miles of the site by road. The only other OD within 15 miles of the site is Ashford. From Table 13 we can determine that 90% of all non-work trips are made within a distance of 15 miles. We would therefore expect that 90% of all non-work trips would be made within Folkstone & Hythe or Ashford. The gravity model was calibrated on this basis, returning a value for μ of 2.48 and a value for σ of 0.53.

5.2.3 Non-Work Trip Distribution

The resulting attraction factor calculated was then used to derive the distribution of trips along each route, the distribution to each route being the attraction factor of the route expressed as a percentage of the sum of attraction factors on all routes. This calculation is shown in Appendix D, which presents the deterrence function (travel time), the attractor/generator function (population), attraction factor and resultant distribution for non-work trips along all routes.

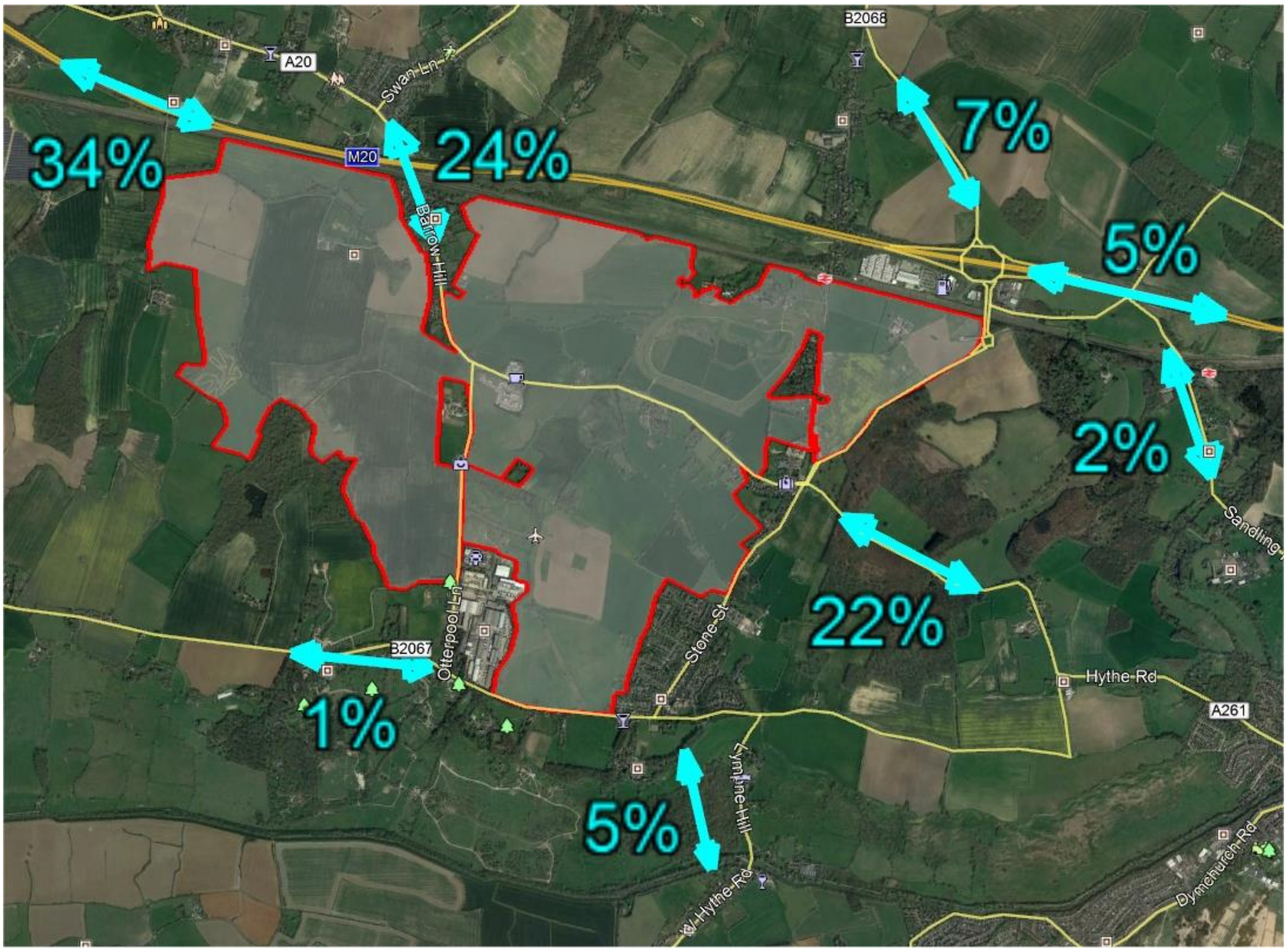
Table 14 presents the distribution of non-work trips between the site and each OD and shows that 48% of all non-work trips are expected to be made between the site and locations in Folkstone & Hythe.

Table 14 Non-Work Trip Distribution by OD

Origin/Destination	Distribution
within Folkstone & Hythe	
Otterpool / Lympne / Stanford	0.6%
Sellindge	0.0%
Lyminge	0.6%
Hythe	3.3%
Palmarsh	0.6%
Folkstone	31%
East and north of Otterpool	1.5%
Old Hawkinge	2.3%
Dymchurch	1.6%
Burmarsh	1.4%
North of Hawkinge	0.4%
North East Folkstone & Hythe	0.5%
Central Folkstone & Hythe	0.9%
North Folkstone & Hythe	0.2%
New Romney	1.4%
South East Folkstone & Hythe	0.1%
Lydd	0.6%
Folkstone & Hythe Total	**47%**
outside Folkstone & Hythe	
Ashford	40%
Canterbury	7.0%
Dover	4.3%
Maidstone	0.3%
Rother	0.2%
Dartford	0.0%
Tonbridge and Malling	0.0%
Medway	0.1%
Tunbridge Wells	0.0%
Thanet	0.2%
London	0.0%
Other UK	0.0%
outside Folkstone & Hythe Total	**53%**
All ODs	**100%**

Figure 2 presents the resulting trip distribution on the local highway network.

Figure 2 Non-Work Trip Distribution



The distribution shows that the majority of non-work trips are expected to route to/from Ashford (24% along the A20, 34% along the M20) and Hythe (22%).

5.3 Work Trip Distribution by Route

The distribution of outgoing and incoming work trips between the site and each OD was calculated directly from Census and was presented in Table 9 and Table 12 respectively. The work trip gravity models were used to determine the proportion of work trips between the site and each OD that would use each of the two routes (one on the M20 and one off) identified between the site and each OD as described in section 4.2. This was achieved using the same principle as was used for the non-work trip gravity model, except that separate gravity models were created for each OD.

Since the attractor/generator value – the number of commuter trips – is the same for each route for each OD (as they both go to the same OD), the attraction factor was calculated directly from the log-normal function of the travel time. The values for μ and σ defined for the non-work trip model were also used in the work trip gravity model. This provided an attraction factor for each of the two routes for each OD.

The attraction factors were then used to derive the distribution of trips along each of the two routes, the distribution to each route being the attraction factor of the route expressed as a percentage of the sum of the attraction factors of both routes. This provided us with the proportion of work trips between each OD that would use the M20 and the proportion that would use an alternative route. For example, Table 9 shows that

30% of all outgoing work trips from Otterpool Park would route to Folkestone. Since the route to Folkestone is quicker along the M20 than any other route to Folkestone, the gravity model determined that 69% of all work trips to Folkstone would route along the M20. Thus, 21% of all outgoing commuter trips (69% of 30%) would route along the M20 to Folkstone.

Three work trip gravity models were created, as follows:

1. Otterpool park residents commuting out of the site;
2. Workers commuting from off-site locations to the Business Park; and
3. Workers commuting from off-site locations to the Business Hubs across the site.

In Appendix E, Tables E.1 to E.3 present the travel time, attraction factor and resultant distribution for outgoing work trips to all ODs for each of these gravity models. Figure 3 to Figure 5 provides a summary of the resulting trip distribution on the highway network for work trips for each gravity model.

Figure 3 Otterpool Park Residents' Work Trip Distribution

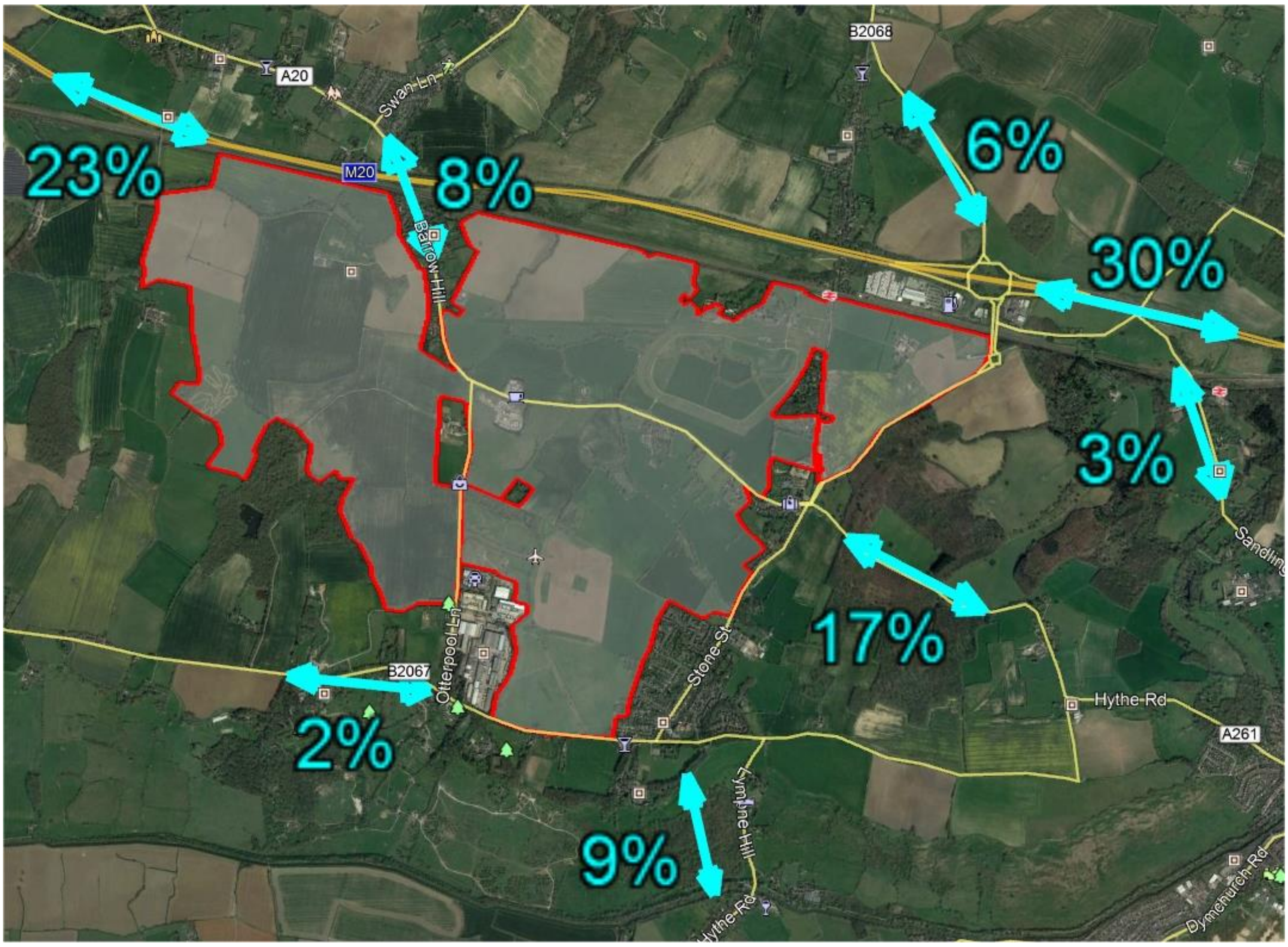


Figure 4 Work Trip Distribution for Incoming Commuter Trips to Otterpool Park Business Park

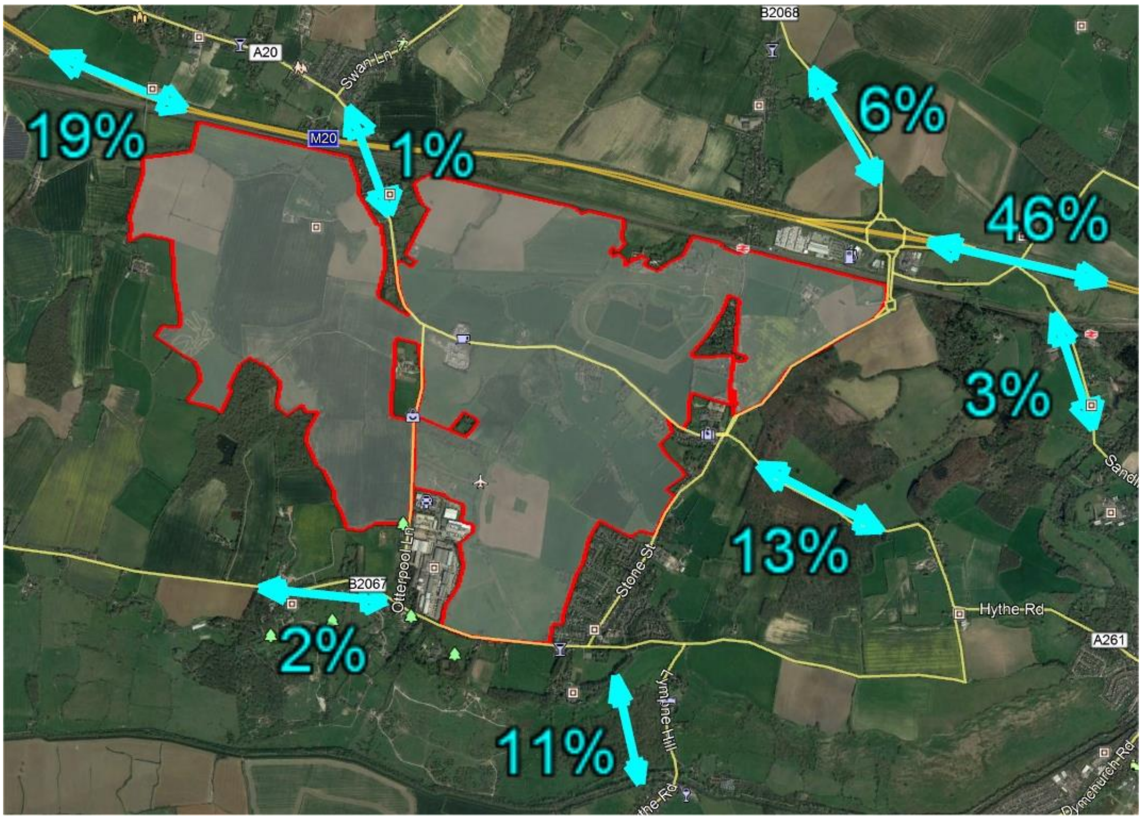
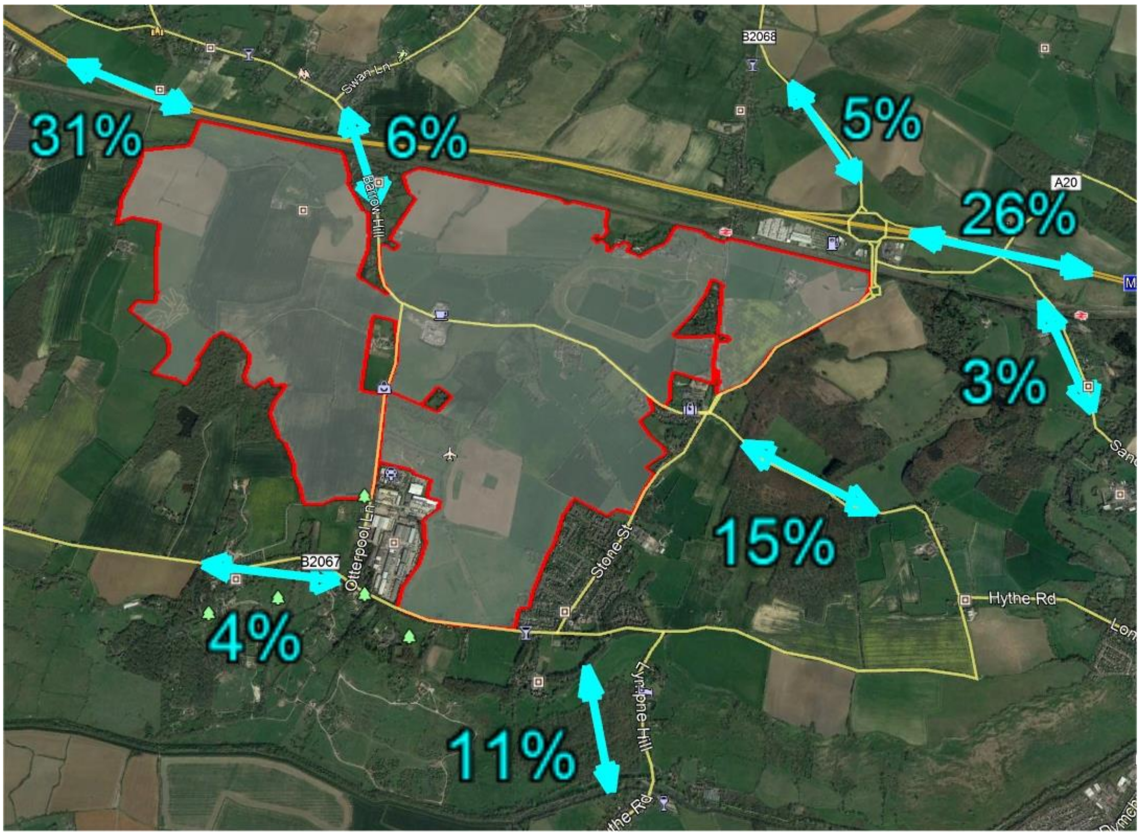


Figure 5 Work Trip Distribution for Incoming Commuter Trips to Otterpool Park Business Hubs



6 VISUM Trip Assignment

The distribution of development vehicle flows between the site and a number of off-site ODs is calculated using a gravity model method as described in the previous Chapters of this note. This distribution will be input a VISUM model, which will be used to assist the validation and calibration of the VISSIM model matrices.

The VISUM model will also be used to distribute the development flow on the network and identify the likely future routing of traffic taking into account background traffic growth as well as Otterpool Park development traffic. The VISUM model area covers a variety of route choice, including the choice between the M20 or other A-class roads to the east and west. The VISUM analysis will determine the volume of traffic on the route network within the modelling study area. The proposed extent of the VISUM model is shown in **Error! Reference source not found.**.

The development flow distribution will be extracted from the VISUM model and input the LinSig, Arcady and VISSIM models statically. The VISUM model will be validated against the observed turning counts and journey time captured on site.

APPENDIX A

Appendix A.1 Scoping Discussions with Kent County Council and Folkestone & Hythe District Council

Longman, Phillip

From: Matt.Hogben@kent.gov.uk
Sent: 17 July 2017 08:10
To: Phillip Longman; James.Hammond@shepway.gov.uk
Cc: Janice Hughes; Anthony James; Myers, Emily; Kearney, Rebecca
Subject: RE: Otterpool Park: Trip Distribution Method Note

Hi Phil

Thank you for confirming this. I will be at the Otterpool Park meeting this morning so we can discuss then in further detail if needed.

Regards

Matthew Hogben | Principal Transport and Development Planner | Ashford and Shepway | Highways and Transportation | Kent County Council | Ashford Highway Depot, 4 Javelin Way, Henwood Industrial Estate, Ashford, Kent, TN24 8AD | 03000 41 81 81 | www.kent.gov.uk

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From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 14 July 2017 16:24
To: Hogben, Matt - GT KH; James.Hammond@shepway.gov.uk
Cc: Janice Hughes; Anthony James; Myers, Emily; Kearney, Rebecca
Subject: RE: Otterpool Park: Trip Distribution Method Note

Apologies, that was the image from the report. The correct distribution is shown below. We will update all technical reports once the methods have been agreed.

From: Phillip Longman
Sent: 14 July 2017 16:05
To: 'Matt.Hogben@kent.gov.uk' <Matt.Hogben@kent.gov.uk>; James.Hammond@shepway.gov.uk
Cc: Janice Hughes <Janice.Hughes@arcadis.com>; Anthony James <Anthony.James@arcadis.com>; Myers, Emily <emily.myers@arcadis.com>; Kearney, Rebecca <rebecca.kearney@arcadis.com>
Subject: RE: Otterpool Park: Trip Distribution Method Note

Dear Matt

Thank you very much for getting back to me on this. I have tried to respond to your comments below – please let me know if you have any further questions or comments related to our proposed distribution method. Please note that the distribution is an initial forecast that will be input a VISUM model that will dynamically assign traffic, taking into account network performance.

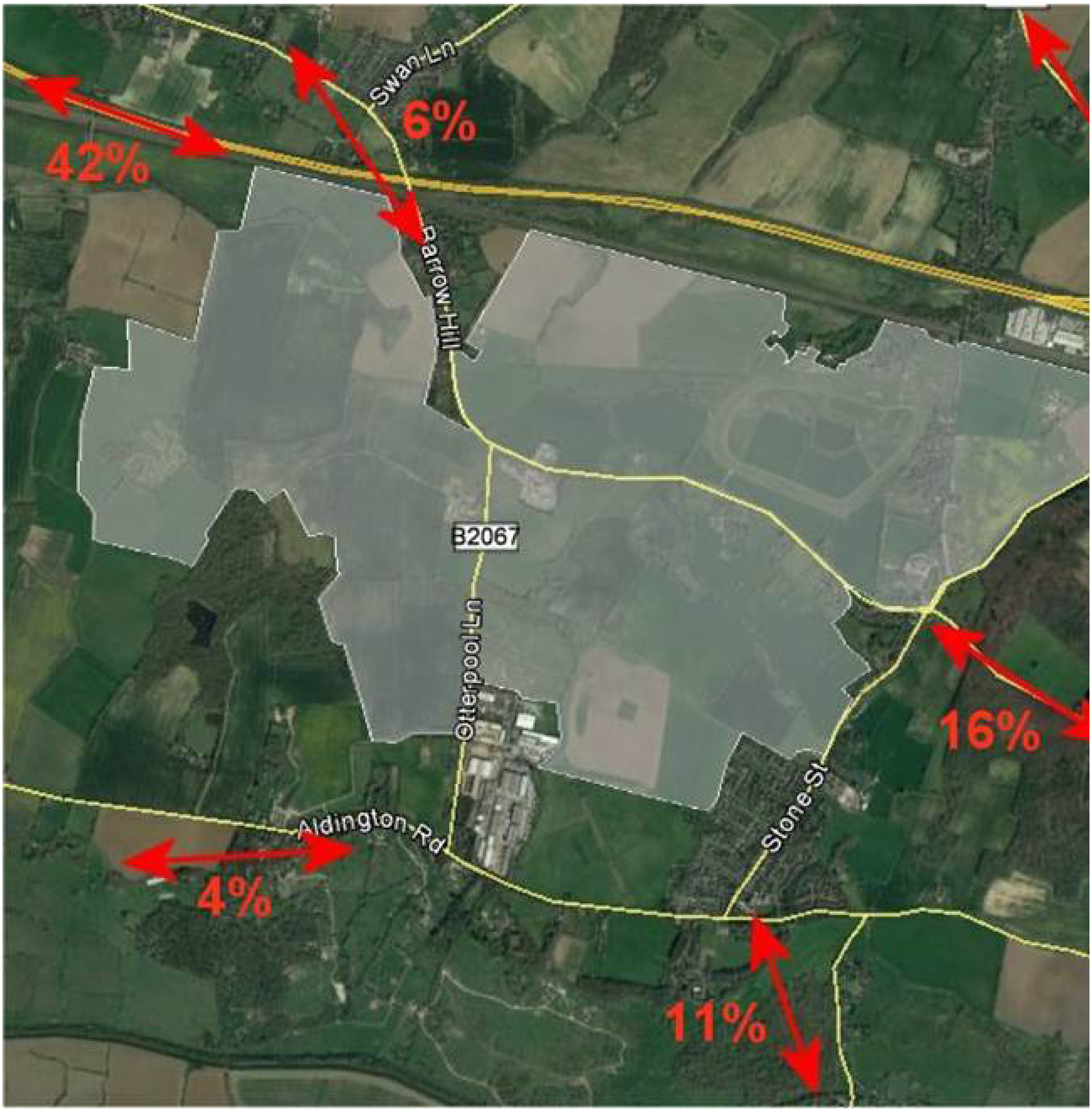
1) Non-work distribution by OD – Table 15 states that 48% of all trips will be contained within the Shepway District with 42% in the Ashford District. When I look at Figure 2 the percentage that goes in the Ashford direction either on the A20 / M20 is much higher at 60%, yet the percentage that goes in the Shepway direction is only 35%, 5% on M20, 3% on A20, 23% on A261 and 4% on West Hythe Road. Please can you explain the reason why the figures are different?

Figure 2 shows the resulting distribution to all ODs. The 35% routing along the M20 to/from the west includes traffic routing to/from a number of destinations including Ashford, Canterbury, Maidstone, Dartford, Tonbridge and Malling, Medway, Tunbridge Wells, Swale and all London traffic. Likewise, the 25% routing along the A20 to/from the west includes traffic to/from Ashford, Sellindge and Swale.

To the east; the 5% on the M20 is routing to/from Folkestone, Old Hawkinge, north Shepway and Dover. The 3% on the A20 are routing to/from Lyminge and some parts of north and east Shepway. The 23% routing through Hythe includes traffic to/from Hythe, Folkestone and Dover. The 4% on the West Hythe Road are routing to/from south and central Shepway areas.

2) Work trip distribution for incoming commuter trips – Table 13 doesn't seem to tally with figure 4 as the vast majority of the trips are from the east not the west i.e Folkestone and Dover rather than from Ashford and further afield.

The flows on the M20 in Figure 4 are incorrect – in fact they are the opposite way around. The figure below shows the correct distribution.



From: Matt.Hogben@kent.gov.uk [mailto:Matt.Hogben@kent.gov.uk]
Sent: 12 July 2017 12:04
To: Phillip Longman <Phillip.Longman@arcadis.com>; James.Hammond@shepway.gov.uk
Cc: Janice Hughes <Janice.Hughes@arcadis.com>; Anthony James <Anthony.James@arcadis.com>; Myers, Emily <emily.myers@arcadis.com>; Kearney, Rebecca <rebecca.kearney@arcadis.com>
Subject: RE: Otterpool Park: Trip Distribution Method Note

Dear Phil

Thank you for the email and attached note on the trip distribution for the Otterpool Park site. I have the following queries / comments below:

1) Non-work distribution by OD – Table 15 states that 48% of all trips will be contained within the Shepway District with 42% in the Ashford District. When I look at Figure 2 the percentage that goes in the Ashford direction either on the A20 / M20 is much higher at 60%, yet the percentage that goes in the Shepway direction is only 35%, 5% on M20, 3% on A20, 23% on A261 and 4% on West Hythe Road. Please can you explain the reason why the figures are different?

2) Work trip distribution for incoming commuter trips – Table 13 doesn't seem to tally with figure 4 as the vast majority of the trips are from the east not the west i.e Folkestone and Dover rather than from Ashford and further afield.

Regards

Matthew Hogben | Principal Transport and Development Planner | Ashford and Shepway | Highways and Transportation | Kent County Council | Ashford Highway Depot, 4 Javelin Way, Henwood Industrial Estate, Ashford, Kent, TN24 8AD | 03000 41 81 81 | www.kent.gov.uk

---

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 07 July 2017 14:58
To: Hogben, Matt - GT KH; James Hammond (James.Hammond@shepway.gov.uk)
Cc: Janice Hughes; Anthony James; Myers, Emily; Kearney, Rebecca
Subject: Otterpool Park: Trip Distribution Method Note

Dear Matt and James,

I hope you are both well. Thank for your time today to discuss the Newingreen junction, Matt. As promised, here is a note setting out our proposed method for the distribution of trips on the highway network external to the site. The resulting distribution will be input the VISSIM model where trips will be dynamically re-assigned. Next week we will issue the proposed scope and method for the highway capacity modelling based on our discussions to date.

As ever, I would be grateful for your comment on this proposed method of trip distribution.

Kind regards,

Phil

Phillip Longman
Associate Technical Director
Transport Planning & Urban Design

Phillip.Longman@arcadis.com
Arcadis Consulting (UK Limited)
Bernard Weatherill House, 8 Mint Walk, Croydon CR0 1EA

T: 020 3014 9100
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Appendix A.2 Scoping Discussions with Highways England

Longman, Phillip

From:	WALKDEN, NIGEL <Nigel.Walkden@highwaysengland.co.uk>
Sent:	06 March 2018 14:33
To:	Phillip Longman
Subject:	RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report
Follow Up Flag:	Follow up
Flag Status:	Completed

Hi Phil,

Thank you for sending the details through.

We're generally content with all of the points in the email below. In terms of the documentation sent the approach using the gravity model approach for external vehicle trips looks acceptable. The TRICS outputs look acceptable on this occasion - we wouldn't necessarily agree on exclusion of the neighbourhood centre sites but the percentage reductions in doing so are not excessive.

Section 2.5 of your traffic survey note mentions forecasting using SETRM. Can you explain what this is – do you mean SERTM?

We would question any forecasting based upon SERTM. This model is effectively a base from which more detailed models can be produced as it has limited disaggregation of matrices and limited network coverage. Any forecasts even those produced recently are likely to be out of date as Local Authority OANs locally (Ashford, Shepway and Dover for example) are evolving all the time.

I hope this is useful. Please let me know if you have any queries.

Kind Regards

Nigel Walkden

Nigel Walkden BA MSc MBA CMILT
Managing Consultant, Transportation

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Thought leadership in a complex world – www.atkinsglobal.com/angles

Epsom Gateway, 2 Ashley Avenue, Epsom, Surrey KT18 5AL

Sent on behalf of Highways England

Also contactable at Highways England, Guildford

Highways England | Bridge House | 1 Walnut Close | Guildford | GU1 4LZ
Web: http://www.highways.gov.uk

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 15 February 2018 17:23
To: WALKDEN, NIGEL
Cc: Nicolas Contentin; Bown, Kevin; Maria Rosa Gallego; Kearney, Rebecca
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Apologies – gravity model spreadsheet now attached.

From: Phillip Longman
Sent: 15 February 2018 17:09
To: 'WALKDEN, NIGEL' <Nigel.Walkden@highwaysengland.co.uk>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>; Maria Rosa Gallego <MariaRosa.Gallego@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Dear Kevin and Nigel

Further to our telephone call towards the end of last year, I provide responses to your comments on our proposed scope and method of assessment.

(1) Section 1.1 refers to KCC and SDC – ***it should also include Highways England (noted this is to be included in the next draft).***

As noted in our response to KCC, this will be updated in the final draft.

---

(2) **The baseline is proposed to be 2017 -** ***this should be reflective of the year of submission e.g. 2018 (noted this has been acknowledged and will be amended).***

Noted. Our baseline year will be 2018. We will use the NTM AF15 dataset and TEMPro v7.2 to growth the 2016 and 2017 traffic surveys to 2018.

---

(3) Future forecast year is proposed to be 2037 to reflect end of local plan period. The 2037 forecast will include the full development scheme. ***We will required information on what phases / proportion of the development will be built by 2037 and what will be after that. If a significant proportion of the development will be post-2037 we may require a further future year forecast.***

Our scoping report proposed to assess future year scenarios for 2027 and 2037. Following our discussions, we propose to assess the following:

1. End of Local Plan year – 2037
2. Year of full occupation after total build-out – year to be confirmed

The Transport Assessment scoping note will be updated to reflect this.

---

(4) **Peak hours are to be assessed (0800-0900 and 1700-1800)** ***– agreed this is sensible however will need to be confirmed on review of traffic survey data.***

As explained in the Traffic Survey Data Analysis report issued on Monday (and attached again here for your reference), we have analysed the traffic survey data and can confirm that the AM and PM peak hours are 0800-0900 and 1700-1800.

(5)* Committed development (TBC) is to be taken into account. *This should include consideration of the overnight parking element of the Lorry Holding Area (500 spaces) and all sites allocated within relevant Local Plan(s). We would also wish to receive your thoughts on how Otterpool will incorporate resilience such that it continues to be able to operate when the likes of Operation Stack (or it's successors) are implemented.

As explained in the Traffic Survey Data Analysis report, we intend to utilise a combination of the SETRM and TEMPro to forecast flows. It is assumed that committed developments will be included in this data.

As per our discussion regarding Operation Stack; the Transport Assessment will provide a narrative describing the likely affect of Operation Stack on the accessibility of Otterpool Park. The narrative will include an outline of measures to reduce any impact that may arise. It is our intention to produce a draft narrative for discussion and agreement with you prior to submitting the Transport Assessment with the application.

---

(6) Trip generation, mode share and distribution have been discussed separately so not included in this note. *We have no record of being consulted on this element of the assessment so are unable to comment.*

Technical notes covering trip generation, mode split and distribution methods have now been provided and have formed the basis of subsequent correspondence with Nigel. The technical notes will be updated once scoping discussions have concluded.

The most recent correspondence from Nigel (email directly below in this chain) provided a TRICS analysis of trips per job for the business park as it was noted that the TRICS trip rates were greater than the rates derived by our method. As we previously noted, we were trying to move away from using TRICS to derive trip rates as it is difficult to find sites within the database that we think would accurately reflect the very site-specific characteristics and conditions that Otterpool Park will offer. However, we understand your concerns and have considered the use of TRICS for the employment land uses proposed for the business park. We have run our own TRICS analysis, which I believe differs from yours in just two ways, as follows:

1. We have used the latest version 7.4.4 of TRICS. This has provided two additional Business Park sites; and
2. We have excluded sites located in neighbourhood centres. This approach is consistent with the method we used to derive the residential trip rates.

I attach the resulting TRICS output file and welcome your comment.

---

(7) The extent of assessment was discussed with HE on the 24th May. It includes (for the SRN):

- **M20 J9 (referred to as # 27)**
- **M20 J10 (# 1)**
- **M20 J11 (# 2)**
- **M20 J11a (# 21)**
- **M20 J12 (# 22) – *note this is a roundabout not junction as quoted***
- **M20 J13 (# 23) – *note this is a roundabout not junction as quoted***
- **A260 Spitfire Way / White Horse Hill / A20 Slip Roads**

All of the above will be assessed using appropriate LinSig, Arcady or Picady software, as well as a VISSIM model being produced to assess the local junctions most likely to be impacted, expect for M20 J9 and A260/A20 which will be considered in terms of percentage increases in flows.

Dependant on traffic flow volumes, there may be a requirement for merge / diverge assessments as per DMRB TD22/06 at relevant junctions.

The assessment of M20 J9 in terms of percentage increases in flows is not agreed – in terms of the percentage impact approach, a small percentage increase in a large volume of traffic could be a large number of additional vehicles. Equally in some places a single additional vehicle could cause safety and/ or operational issues at a junction. Therefore percentage increases in flows are not considered appropriate when assessing impacts/mitigation. While increase in traffic volume is an element which needs to be considered a key concern will be the impact of the development on safety and operation, which relates to changes in queues and delays. We will therefore require evidence that the proposed development will not increase queues and delays to a point where they impact the safety and operation of the SRN.

M20 J9 and the A260/A20 junction will be assessed in LinSig and Arcady respectively. Mitigation will be proposed, if required, to ensure the junction operates without significant detrimental impact on safety and queuing.

Consideration of the impact of the development on M20 J10a should also be included.

The M20 J10a will be included in our assessment. We anticipate that the forecast flows for this junction would be provided from the SERTM.

---

(8) The distribution of development vehicle flows between the site and a number of off-site origins/destinations has been calculated using a gravity model method. This distribution will be input a VISUM model to distribute the development flows on the network and allow us to identify the likely routing. A volume to capacity ratio analysis will then be carried out to identify sections across the network which perform above an 85% ratio and these junctions will then be assessed in a VISSIM model. The development flow distribution will be extracted from the VISUM model and input the VISSIM model statically. The model will be validated against the observed turning counts and journey time captured on site. *This appears to be a sensible approach in principle - we would need to see the gravity model to comment further.*

The gravity model spreadsheet is attached to this email. The model utilises route distances and travel times between the site and off-site destinations as explained in the Trip Distribution Method Note. It is important to note that the gravity models were used to provide an initial indication of the likely split of vehicle trips between the M20 and off-motorway locations. For modelling purposes, this split will be determined by VISUM. The results of the Residential gravity model provides us with the distribution of non-work trips to/from 82 off-site locations (Column N in the Residential gravity model sheet in the attached spreadsheet) and is based on the size of the population at the of-site location and the distance to the location from Otterpool Park. The values for sigma and mu were derived through calibration with NTS trip distance information, as described on page 19 of the Trip Distribution Method Note. In the case of the commuting trips, the gravity model is not used for assessment purposes as the distribution (Column O in the Commuting gravity models) is taken directly from Census.

Please let me know if you have any further queries. I would like to catch up with you soon regarding the attached TRICS analysis before we update and finalise the Transport Assessment scoping note and accompanying technical notes.

Kind regards,

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 06 November 2017 15:53
To: Phillip Longman <Phillip.Longman@arcadis.com>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Phil,

Attached the TRICS output. I'll give you a call tomorrow about the modelling.

Thanks,
Nigel

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 02 November 2017 18:20
To: WALKDEN, NIGEL
Cc: Nicolas Contentin; Bown, Kevin
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel

Thanks for your response. I will change the PM peak trip purpose percentages to match the 5-6pm values in the NTS table as you suggest. This was an oversight on our part.

Could you please send me the TRICS information from which you derived the vehicle trip rates?

We will continue to work through these trip generation issues, but would it be possible to have a discussion relating to the scope of the highway modelling with reference to the initial responses provided by Kevin further down this email chain?

Many thanks

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 02 November 2017 17:45
To: Phillip Longman <Phillip.Longman@arcadis.com>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Phil,

I've looked through everything again now. In terms of the distribution and mode share reports I am generally content with the derivations.

For the external B1 trips you discuss below you say that the vehicle trip rates are 0.07 and 0.06 vehicle trips lower than the rates that I derived from TRICS. While this does not sound like a large number of journeys, when you calculate the actual number of external vehicle trips it presumably adds up to a large number. Admittedly your B1 has a large proportion of external trips but if you look at employment as a whole the containment of 42% is similar as a percentage to that for Shepway commutes of up to 5km as a whole from the 2011 Census, so the proportion of external commuting trips overall looks reasonable, not high.

Therefore I think this needs some more thought. Travel planning measures for example for longer commutes are less effective than for short commutes due to fewer options, so managing down the longer vehicle trips (particularly such a high proportion) would be very challenging.

The only other issue is your use of data from the NTS0502 table on peak hour trip purposes. Your PM peak hour has been derived from 4-5PM proportions whereas it should come from 5-6PM proportions. 5-6PM shows a much higher percentage of commuting trips than you have quoted.

I thought it better to put this on paper before taking further as the numbers and complexity of your calculations makes it difficult to process over the phone. I can however discuss when I'm back in the office next week.

Have a good weekend,

Nigel

Nigel Walkden BA MSc MBA CMILT
Managing Consultant, Transportation

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Sent on behalf of Highways England

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Web: http://www.highways.gov.uk

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 25 October 2017 11:29
To: WALKDEN, NIGEL
Cc: Nicolas Contentin
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel

Many thanks for your comments.

I attach a spreadsheet which hopefully explains how we derived the AM and PM peak trip purposes from NTS data. In summary; The AM and PM peak NTS trip purpose data included 8 trip purposes, while the daily NTS trip purpose data provided the more comprehensive list of 14 trip purposes that were relevant to Otterpool Park. We therefore used the daily NTS trip purpose data to sub-divide the peak hour data.

We regard to B1 vehicle trip rates; Our latest trip generation calculations (updated slightly from the version described in the technical note), assumes all-person trip rates of 0.39 per job in the AM peak and 0.40 in the PM peak. In the mode share technical note we show that the car driver mode share for external work trips is derived to be 80%. This generates an AM peak vehicle trip rate of 0.31 trips per job and a PM peak trip rate of 0.32 trips per job.

These trip rates are 0.07 and 0.06 trips per job lower than the rate you have derived from TRICS. Due to the nature of the site, we were trying to move away from using TRICS to derive trip rates as it is difficult to find sites within the database that we think would accurately reflect the very site-specific characteristics and conditions that Otterpool Park will offer. The mode share technical note explains how the 80% car driver mode share was derived from Census 2011 data adjusted for distance travelled. The Otterpool Park business park will be directly adjacent to Westenhanger Station and, with effective travel planning, I would anticipate that a lower car driver mode share than the 80% suggested by current travel behaviour could be achieved at Otterpool Park.

In addition, the total number of B1 jobs assumed in the calculations to be filled by on-site residents is just 10%. We consider that work trip containment of just 10% is conservative and that our calculations therefore represent a robust assessment of external trips.

Hopefully this information goes some way to answering your questions.

Please let me know when would be a suitable time to arrange a call.

Kind regards,

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 17 October 2017 14:15
To: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Phillip Longman <Phillip.Longman@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nicolas,

It is taking time to sense check everything that has been done. I have been through everything now but will need to go over it all again to make sure I haven't missed anything.

To date the issues that stand out are the business B1 trip rates that for cars are lower than expected for external trips. In your trip generation note para 4.3.2 you are using a peak hour trip rate of 0.35 person trips per job for local trips and assuming the same for longer distance external trips. I would have thought that the vast majority of part time jobs involved local commutes so the peak hour trip rates will be lower than for the external trips. I did a quick assessment using TRICS for business parks excluding London and non-England, town centre and edge of town centre and came up with 0.38 vehicle trips per employee.

Table 5 of the trip generation note gives NTS trip purposes for the AM and PM peaks. Can you show how these have been derived? I got very close re-creating the employment proportions but not some of the other purposes.

Feel free to give me a call to discuss if you need to. In the meantime I'll go through everything again.

Thanks

Nigel

Nigel Walkden BA MSc MBA CMILT
Managing Consultant, Transportation

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Sent on behalf of Highways England

Also contactable at Highways England, Guildford

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Web: http://www.highways.gov.uk

From: Nicolas Contentin [mailto:Nicolas.Contentin@arcadis.com]
Sent: 17 October 2017 10:31
To: Phillip Longman; WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel,

What time should I call you?
I have a meeting between 11:00 and 12:00. I also need to leave at 15:30 today.

Let me know when it is suitable to call you.

Regards,

Nicolas Contentin
Principal Transport Planner

Arcadis consulting UK Ltd,
34 York Way,
Kings Cross
London N1 9AB

☎ Direct : +44 (0) 2030 149 167
✉ Email: Nicolas.Contentin@Arcadis.com
Web: www.arcadis.com

From: Phillip Longman
Sent: 16 October 2017 11:05
To: WALKDEN, NIGEL <Nigel.Walkden@highwaysengland.co.uk>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel

That's no problem. I am not available tomorrow, but my colleague Nico will be.

Kind regards,

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 16 October 2017 10:44
To: Phillip Longman <Phillip.Longman@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Phil,

I'm still going through your reports at the moment, there is a lot to digest. I suggest talking through these tomorrow if you are available.

Nigel

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 13 October 2017 11:08
To: WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Good morning Nigel

That is perfectly understandable. I attach what I believe is the last correspondence we had on this matter.

Would you be available to chat late morning on Monday instead?

Kind regards,

Phil

From: WALKDEN, NIGEL [mailto:Nigel.Walkden@highwaysengland.co.uk]
Sent: 13 October 2017 11:03
To: Phillip Longman <Phillip.Longman@arcadis.com>
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Good Morning Phil,

I will need to go through our last response with regards to the modelling before we talk. Late afternoon would be preferable if you wish to discuss today.

Thanks

Nigel

Nigel Walkden BA MSc MBA CMILT
Managing Consultant, Transportation

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From: WALKDEN, NIGEL
Sent: 10 October 2017 15:57
To: 'Phillip Longman'
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Phil,

Yes I am, after 10.30. If you want to call me the number is 07780 228427.

Nigel

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 10 October 2017 15:25
To: WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hi Nigel

Would you be available on Friday?

Regards

Phil

-----Original Message-----
From: WALKDEN, NIGEL [Nigel.Walkden@highwaysengland.co.uk]
Received: Tuesday, 10 Oct 2017, 15:10
To: Phillip Longman [Phillip.Longman@arcadis.com]
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Hello Phil,

Are you around later in the week?

Thanks,

Nigel

From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 09 October 2017 13:21
To: Bown, Kevin; WALKDEN, NIGEL
Subject: RE: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Dear Kevin, Nigel

I was hoping to give Nigel a call to go through these points you raise, but I do not seem to have Nigel's telephone number. Would you be able to send it to me?

Nigel – I was going to give you a call this afternoon, but if this is not convenient for you, please let me know when you would be available.

Kind regards,

Phil

From: Bown, Kevin [mailto:Kevin.Bown@highwaysengland.co.uk]
Sent: 25 August 2017 12:05
To: Phillip Longman <Phillip.Longman@arcadis.com>; 'Matt.hogben@kent.gov.uk' <Matt.hogben@kent.gov.uk>; 'James Hammond (James.Hammond@shepway.gov.uk)' <James.Hammond@shepway.gov.uk>
Cc: Nicolas Contentin <Nicolas.Contentin@arcadis.com>; Planning SE <planningse@highwaysengland.co.uk>; Fisher, Rachael <Rachael.Fisher@highwaysengland.co.uk>; WALKDEN, NIGEL <Nigel.Walkden@highwaysengland.co.uk>
Subject: HE Correspondence ref 5087 RE: Otterpool Park development Transport scoping report

Dear Phil

Our comments on your scoping report are as follows:

(1) Section 1.1 refers to KCC and SDC – *it should also include Highways England (noted this is to be included in the next draft).*

(2) The baseline is proposed to be 2017 - *this should be reflective of the year of submission e.g. 2018 (noted this has been acknowledged and will be amended).*

(3) Future forecast year is proposed to be 2037 to reflect end of local plan period. The 2037 forecast will include the full development scheme. *We will required information on what phases / proportion of the development will be built by 2037 and what will be after that. If a significant proportion of the development will be post-2037 we may require a further future year forecast.*

(4) Peak hours are to be assessed (0800-0900 and 1700-1800) – *agreed this is sensible however will need to be confirmed on review of traffic survey data.*

(5) Committed development (TBC) is to be taken into account. *This should include consideration of the overnight parking element of the Lorry Holding Area (500 spaces) and all sites allocated within relevant Local Plan(s). We would also wish to receive your thoughts on how Otterpool will incorporate resilience such that it continues to be able to operate when the likes of Operation Stack (or it's successors) are implemented.*

(6) Trip generation, mode share and distribution have been discussed separately so not included in this note. *We have no record of being consulted on this element of the assessment so are unable to comment.*

(7) The extent of assessment was discussed with HE on the 24th May. It includes (for the SRN):

- M20 J9 (referred to as # 27)

- M20 J10 (# 1)
- M20 J11 (# 2)
- M20 J11a (# 21)
- M20 J12 (# 22) – *note this is a roundabout not junction as quoted*
- M20 J13 (# 23) – *note this is a roundabout not junction as quoted*
- A260 Spitfire Way / White Horse Hill / A20 Slip Roads

All of the above will be assessed using appropriate LinSig, Arcady or Picady software, as well as a VISSIM model being produced to assess the local junctions most likely to be impacted, expect for M20 J9 and A260/A20 which will be considered in terms of percentage increases in flows.

Dependant on traffic flow volumes, there may be a requirement for merge / diverge assessments as per DMRB TD22/06 at relevant junctions.

The assessment of M20 J9 in terms of percentage increases in flows is not agreed – in terms of the percentage impact approach, a small percentage increase in a large volume of traffic could be a large number of additional vehicles. Equally in some places a single additional vehicle could cause safety and/ or operational issues at a junction. Therefore percentage increases in flows are not considered appropriate when assessing impacts/mitigation. While increase in traffic volume is an element which needs to be considered a key concern will be the impact of the development on safety and operation, which relates to changes in queues and delays. We will therefore require evidence that the proposed development will not increase queues and delays to a point where they impact the safety and operation of the SRN.

Consideration of the impact of the development on M20 J10a should also be included.

(8) The distribution of development vehicle flows between the site and a number of off-site origins/destinations has been calculated using a gravity model method. This distribution will be input a VISUM model to distribute the development flows on the network and allow us to identify the likely routing. A volume to capacity ratio analysis will then be carried out to identify sections across the network which perform above an 85% ratio and these junctions will then be assessed in a VISSIM model. The development flow distribution will be extracted from the VISUM model and input the VISSIM model statically. The model will be validated against the observed turning counts and journey time captured on site. *This appears to be a sensible approach in principle - we would need to see the gravity model to comment further.*

I hope our comments assist, but if you have any queries, please contact us. Rachael and I are both on leave for different periods over the next 2 weeks, so if you have any immediate queries, please contact Nigel.

Regards

Kevin Bown, Spatial (Town) Planning Manager BSc(Hons) MPhil CMS MRTPI

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From: Bown, Kevin
Sent: 08 August 2017 15:04
To: 'Phillip Longman'; Matt.hogben@kent.gov.uk; James Hammond (James.Hammond@shepway.gov.uk)
Cc: Nicolas Contentin; Planning SE; Fisher, Rachael; WALKDEN, NIGEL
Subject: RE: Otterpool Park development Transport scoping report

Dear Phil

Thanks for the TA Scoping. You should receive our response no later than 29 August, but hopefully sooner.

Team – please register as a pre-app under Otterpool folder and allocate to me.

Rachael/Nigel – I look forward to receiving your comments.

Regards

Kevin Bown, Spatial (Town) Planning Manager BSc(Hons) MPhil CMS MRTPI

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From: Phillip Longman [mailto:Phillip.Longman@arcadis.com]
Sent: 08 August 2017 13:31
To: Matt.hogben@kent.gov.uk; James Hammond (James.Hammond@shepway.gov.uk); Bown, Kevin

Cc: Nicolas Contentin
Subject: Otterpool Park development Transport scoping report

Dear Matt, James and Kevin

I attach our proposed scope for the transport assessment for the Otterpool Park development. This report includes our proposed scope and method for the highway capacity modelling based on our discussion in May. It refers to, but does not include, the technical notes previously issued relating to the methods for trip generation, mode split and distribution. These notes will be updated and re-issued to reflect an agreed position at the appropriate time.

I would greatly appreciate your views on the proposed scope and would be happy to arrange any further meetings necessary to progress this.

Hopefully catch up with you all soon. If you wish to discuss anything in the meantime, please feel welcome to contact me.

Kind regards,

Phil

Phillip Longman
Associate Technical Director
Transport Planning & Urban Design

Phillip.Longman@arcadis.com
Arcadis Consulting (UK Limited)
Bernard Weatherill House, 8 Mint Walk, Croydon CR0 1EA

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APPENDIX B

Locations of Origins/Destinations within Folkstone & Hythe

Figure B.1 Locations of Origins/Destinations within Folkstone & Hythe

OD locations for:

SOA 009D	Sellindge
SOA 009C	Lympne
SOAs 008A, 008C, 010	Hythe
SOA 009B	Palmarsh
SOA 009A	Burmash

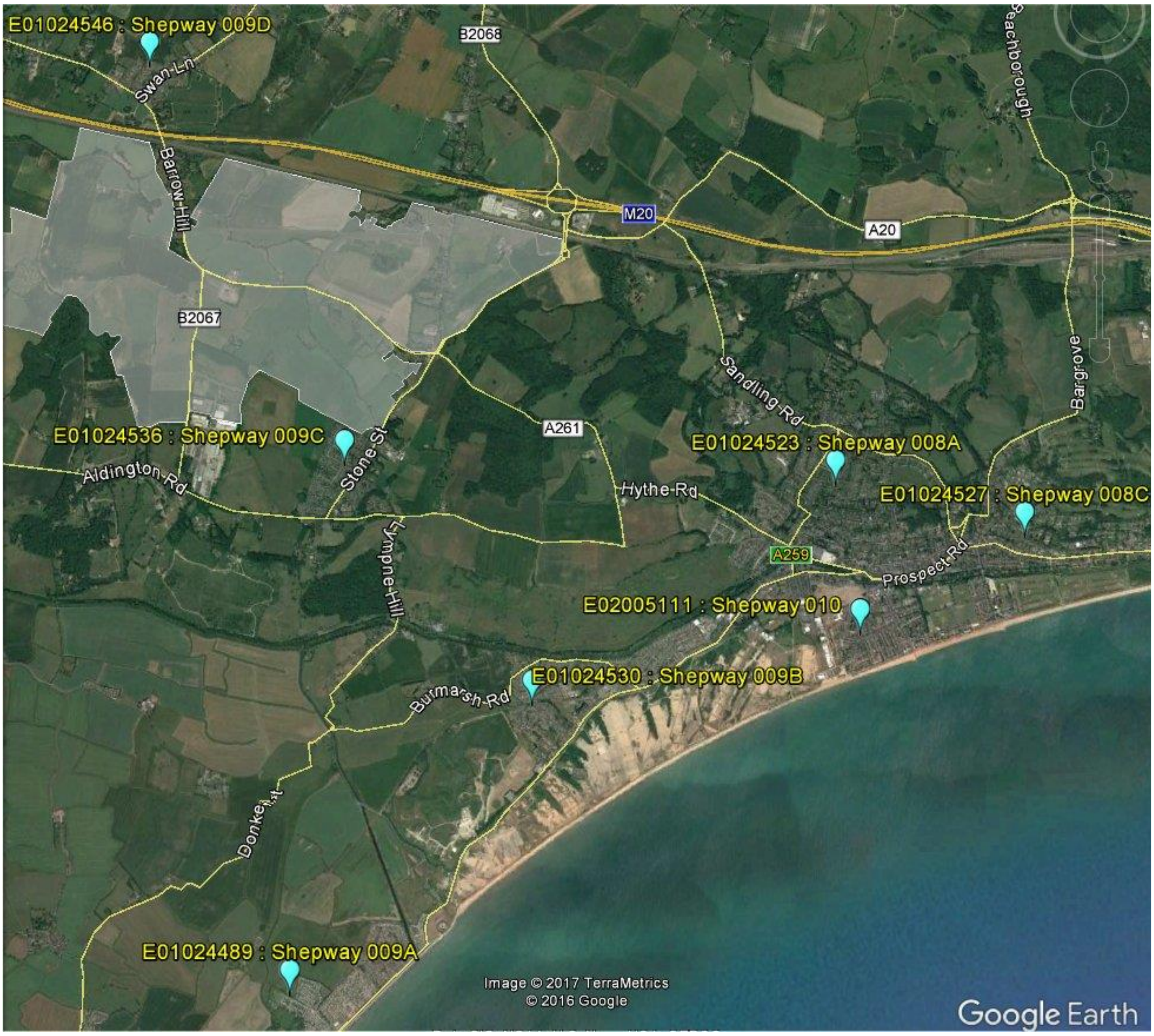


Figure B.2 Locations of Origins/Destinations within Folkstone & Hythe

OD locations for:

SOA 001A	North Folkstone & Hythe
SOA 001C	North East Folkstone & Hythe
SOA 001D	Lyminge
SOA 008B&D	East and North of Otterpool

Figure B.3 Locations of Origins/Destinations within Folkstone & Hythe

OD locations for:

SOAs 002B,C,E,F	Old Hawkinge
SOAs 002A, 003, 004, 005, 006, 014, 015	Folkestone

Figure B.4 Locations of Origins/Destinations within Folkstone & Hythe

OD locations for:

SOA 011A	Dymchurch
SOA 011D	South East Folkstone & Hythe
SOAs 011B, C, E	Central Folkstone & Hythe
SOA 012	New Romney
SOA 013	Lydd

Otterpool Park
Method for the Distribution of External Vehicle Trips

APPENDIX C

Route Assumptions for each OD

Origin/Destination	Route on M20 ?	Dist. (km)	Time (mins)	Access	Route Description
Otterpool / Lympne / Stanford	NL(1)	2.9	4	A-Two	A20 Stone St (N Lympne) > > > > > > > > > > > > > > > >
	NL(2)			A-Three	B2067 Otterpool Ln > B2067 Aldington Rd (C) > A20 Stone St (S Lympne) > > > > > > > > > > > > > >
	NBP	2.9	4	A-One	A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > > >
	NS	5.1	6.1	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > > >
Sellindge	N	2	4	A-Four	A20 Barrow Hill > A20 Ashford Rd (Sellindge) > Swan Lane > > > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	NBP	4.8	9	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (Sellindge) > Swan Lane > > > > > > > > > > > > >
	YBP				> > > > > > > > > > > > > > >
Lyminge	NBP	7.5	11	A-One	A20 Ashford Rd (S r/b) > A20 r/b > Sandling Road > > > > > > > > > > > > >
	YBP	-	-		> > > > > > > > > > > > > > >
	N	9.3	12	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > Sandling Road > > > > > > > > > > > >
	Y				> > > > > > > > > > > > > > >
Hythe 1	NBP	5.1	8	A-One	A20 Ashford Rd (S r/b) > A20 r/b > Sandling Road > > > > > > > > > > > > >
	YBP				> > > > > > > > > > > > > > >
	N	5.7	8	A-Two	A261 Hythe Rd > Barrack Hill > > > > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
Hythe 2	NBP	6.5	11	A-One	A20 Ashford Rd (S r/b) > A20 r/b > Sandling Road > > > > > > > > > > > > >
	YBP				> > > > > > > > > > > > > > >
	N	6.8	10	A-Two	A261 Hythe Rd > A259 Military Rd > A259 Prospect Rd > Station Rd > > > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
Hythe 3	NBP	5.5	9	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (A5-A2) > A261 Hythe Rd > A259 Military Rd > Dymchurch Road (gyratory) > Portland Road > > > > > > > > > >
	YBP				> > > > > > > > > > > > > > >
	N	6	8.3	A-Two	A261 Hythe Rd > A259 Military Rd > Dymchurch Road (gyratory) > Portland Road > > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
Palmarsh (west)	N	7.5	10	A-Two	A261 Hythe Rd > Scanlons Bridge Rd > Dymchurch Road (W) > > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	NBP	7	12	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (A5-A2) > A261 Hythe Rd > Scanlons Bridge Rd > Dymchurch Road (W) > > > > > > > > > >
	YBP				> > > > > > > > > > > > > > >
Folkstone 1	N	12.4	19	A-Two	A261 Hythe Rd > A259 Military Rd > A259 Prospect Rd > A259 Seabrook Rd > A259 Sandgate Esplanade > B2063 Military Rd > B2064 Cheriton HS (W J12) > B2064 Cheriton Approach > B2064 Cheriton HS (E J12) > >
	Y	10.4	13	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > B2064 Cheriton Approach > B2064 Cheriton HS (E J12) > > > > > > > > >
	NBP				> > > > > > > > > > > > > > >
	YBP	8.3	9	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > B2064 Cheriton Approach > B2064 Cheriton HS (E J12) > > > > > > > > > >
Folkstone 2	N	15.8	22	A-Two	A261 Hythe Rd > A259 Military Rd > A259 Prospect Rd > Station Rd > Blackhouse Hill > Bargrove > A20 Ashford Rd (Eurotunnel) > M20 J12 > M20 J13 > A20 Castle Hill Bridge > A259 Churchill Ave > A259 Canterbury Rd
	Y	14	14	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Castle Hill Bridge > A259 Churchill Ave > A259 Canterbury Rd > > > > > > >
	NBP				> > > > > > > > > > > > > > >
	YBP	12.4	13	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Castle Hill Bridge > A259 Churchill Ave > A259 Canterbury Rd > > > > > > > >
Folkstone 3	N	15.4	26.5	A-Two	A261 Hythe Rd > A259 Military Rd > A259 Prospect Rd > A259 Seabrook Rd > A259 Sandgate Esplanade > > > > > > > > > > >
	Y	15.9	17	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Castle Hill Bridge > A259 Churchill Ave > A259 Canterbury Rd > > > > > > >
	NBP				> > > > > > > > > > > > > > >
	YBP	13.3	15	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Castle Hill Bridge > A259 Churchill Ave > A259 Canterbury Rd > > > > > > > >
Folkstone 4	N	12.9	18.5	A-Two	A261 Hythe Rd > A259 Military Rd > A259 Prospect Rd > A259 Seabrook Rd > B2063 Hospital Hill > > > > > > > > > > >
	Y	12.5	14.5	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > B2064 Cheriton Approach > B2064 Cheriton HS (E J12) > > > > > > > > >
	NBP	10.9	19	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (A5-A2) > A261 Hythe Rd > A259 Military Rd > A259 Prospect Rd > A259 Seabrook Rd > B2063 Hospital Hill > > > > > > > >
	YBP	8.9	11	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > B2064 Cheriton Approach > B2064 Cheriton HS (E J12) > > > > > > > > > >
Folkstone 5	N	13.5	22	A-Two	A261 Hythe Rd > A259 Military Rd > A259 Prospect Rd > A259 Seabrook Rd > A259 Sandgate Esplanade > > > > > > > > > > >
	Y	14.5	15	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Castle Hill Bridge > A2034 Cherry Gdn Ave > > > > > > > >
	NBP	10.9	16	A-One	A20 Ashford Rd (S r/b) > A20 r/b > Sandling Road > > > > > > > > > > > > >
	YBP	11.1	12	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Castle Hill Bridge > A2034 Cherry Gdn Ave > > > > > > > > >

Otterpool Park
Method for the Distribution of External Vehicle Trips

Origin/Destination	Route on M20 ?	Dist. (km)	Time (mins)	Access	Route Description
Folkstone 6	N	14.3	23.5	A-Two	A261 Hythe Rd > A259 Military Rd > A259 Prospect Rd > A259 Seabrook Rd > A259 Sandgate Esplanade > A2033 Sandgate Rd > > > > > > > > > >
	Y	16.5	20.5	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Castle Hill Bridge > A2034 Cherry Gdn Ave > > > > > >
	NBP	12.5	19	A-One	A20 Ashford Rd (S r/b) > A20 r/b > Sandling Road > > > > > > > > > > > > >
	YBP	12.7	15	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Castle Hill Bridge > A2034 Cherry Gdn Ave > > > > > > > > >
Folkstone 7	N	13.9	22	A-Two	A261 Hythe Rd > A259 Military Rd > A259 Prospect Rd > A259 Seabrook Rd > A259 Sandgate Esplanade > > > > > > > > > > >
	Y	15.2	16.5	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Castle Hill Bridge > A2034 Cherry Gdn Ave > > > > > >
	NBP	11.5	17	A-One	A20 Ashford Rd (S r/b) > A20 r/b > Sandling Road > > > > > > > > > > > > >
	YBP	11.7	13	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Castle Hill Bridge > A2034 Cherry Gdn Ave > > > > > > > > >
East and north of Otterpool	N	9.1	11	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > Sandling Road > > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	NBP	6.9	10	A-One	A20 Ashford Rd (S r/b) > A20 r/b > Sandling Road > > > > > > > > > > > > >
	YBP				> > > > > > > > > > > > > > >
Old Hawkinge	N	-	-		> > > > > > > > > > > > > > >
	Y	14.5	16	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > >
	NBP				> > > > > > > > > > > > > > >
	YBP	12.3	11	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > > >
Dymchurch	N(1)	11.3	17.5	A-Two	A20 Stone St (N Lympne) > A20 Stone St (S Lympne) > B2067 Aldington Rd (E) > Lympne Hill > W Hythe Rd > > > > > > > > > > >
	N(2)	10.2	15	A-Three	B2067 Otterpool Ln > B2067 Aldington Rd (C) > B2067 Aldington Rd (E) > Lympne Hill > W Hythe Rd > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	NBP	12.4	18	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (A5-A2) > A261 Hythe Rd > Scanlons Bridge Rd > Dymchurch Road (W) > > > > > > > > > > >
Burmarsh	N(1)	10	14	A-Two	A20 Stone St (N Lympne) > A20 Stone St (S Lympne) > B2067 Aldington Rd (E) > Lympne Hill > W Hythe Rd > > > > > > > > > > >
	N(2)	7.8	12	A-Three	B2067 Otterpool Ln > B2067 Aldington Rd (C) > B2067 Aldington Rd (E) > Lympne Hill > W Hythe Rd > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	NBP	9.9	14	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (A5-A2) > A261 Hythe Rd > Scanlons Bridge Rd > Dymchurch Road (W) > > > > > > > > > > >
North of Hawkinge	N	14.8	19.5	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	NBP	12.5	14	A-One	A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > > >
North East Shepway	N	12.8	15	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	NBP	10.6	14	A-One	A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > > >
Central Shepway	N	16.3	22	A-Three	B2067 Otterpool Ln > B2067 Aldington Rd (W) > B2067 Knoll Hill > > > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	NBP	17.1	24	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (A5-A2) > A20 Stone St (N Lympne) > A20 Stone St (S Lympne) > B2067 Aldington Rd (C) > B2067 Aldington Rd (W) > > >
North Shepway	N				> > > > > > > > > > > > > > >
	Y	23.9	28	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > >
	NBP				> > > > > > > > > > > > > > >
	YBP	21.5	21	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > > >
New Romney	N	17.5	26	A-Three	B2067 Otterpool Ln > B2067 Aldington Rd (C) > B2067 Aldington Rd (E) > Lympne Hill > W Hythe Rd > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	NBP	18.7	25	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (A5-A2) > A261 Hythe Rd > Scanlons Bridge Rd > Dymchurch Road (W) > > > > > > > > > > >
South East Shepway	N	27	31	A-Three	B2067 Otterpool Ln > B2067 Aldington Rd (W) > B2067 Knoll Hill > > > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	YBP	36.5	30	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > A251 Trinity Rd > > > > > > > > >
Lydd	N	23.3	34	A-Three	B2067 Otterpool Ln > B2067 Aldington Rd (C) > B2067 Aldington Rd (E) > Lympne Hill > W Hythe Rd > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	NBP	24.5	31	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (A5-A2) > A261 Hythe Rd > Scanlons Bridge Rd > Dymchurch Road (W) > > > > > > > > > > >

Otterpool Park
Method for the Distribution of External Vehicle Trips

Origin/Destination	Route on M20 ?	Dist. (km)	Time (mins)	Access	Route Description
Ashford 1	N	16.2	21.5	A-Four	A20 Barrow Hill > A20 Ashford Rd (Sellindge) > A20 Hythe Rd > A2070 Kennington Rd > A28 Canterbury Rd > > > > > > > > > > > >
	Y	15.5	17.5	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > A251 Trinity Rd > > > > > > > >
	YBP	18.1	15	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > A251 Trinity Rd > > > > > > > > >
Ashford 2	N	16.4	22.5	A-Four	A20 Barrow Hill > A20 Ashford Rd (Sellindge) > A20 Hythe Rd > A2070 Kennington Rd > A28 Canterbury Rd > > > > > > > > > > > >
	Y	15.2	17.5	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > A20 Fougeres Way > A28 Templer Way > > > > > > >
	YBP	17.4	14	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > A20 Fougeres Way > A28 Templer Way > > > > > > > >
Ashford 3	N	13.2	16.5	A-Four	A20 Barrow Hill > A20 Ashford Rd (Sellindge) > A20 Hythe Rd > A2070 Kennington Rd > A28 Canterbury Rd > > > > > > > > > > > >
	Y	18	16.5	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > A2070 Kennington Rd > > > > > > > > >
	YBP	15.6	15	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > A2070 Kennington Rd > > > > > > > > > >
Ashford 4	N	12.6	15.5	A-Four	A20 Barrow Hill > A20 Ashford Rd (Sellindge) > A20 Hythe Rd > Bad Munstereifel Rd > > > > > > > > > > > >
	Y	17.4	15.5	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > Bad Munstereifel Rd > > > > > > > > >
	YBP	15.2	14	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > Bad Munstereifel Rd > > > > > > > > > >
Ashford 5	N	12	15.5	A-Four	A20 Barrow Hill > A20 Ashford Rd (Sellindge) > A20 Hythe Rd > A262 Hythe Rd > > > > > > > > > > > > >
	Y	16.8	15.5	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > A262 Hythe Rd > > > > > > > > >
	YBP	15.7	17	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > A262 Hythe Rd > > > > > > > > > >
Canterbury	N	28	35	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
				A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > A2070 Kennington Rd > > > > > > > > >
	NBP	22.9	23	A-One	A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > > >
Canterbury 01	N	38.3	49	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	94.1	64	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10 > A2070 Kennington Rd > > > > > > > > > >
	NBP	35.3	45	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	55.6	48	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10 > > > > > > > > > > >
Canterbury 02	N	31.5	38	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > St Lawrence Rd > New Dover Rd J4-5 > Lower Chantry Lane
	Y	42	35	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > >
	NBP	29.1	36	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > St Lawrence Rd > New Dover Rd J4-5 > Lower Chantry Lane
	YBP	39.8	40	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > >
Canterbury 03	N	36.4	44	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	50.1	47	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10 > > > > > > > > > > >
	NBP	34.4	40	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	48.1	44	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10 > > > > > > > > > > >
Canterbury 04	N	28.9	32	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > St Lawrence Rd > New Dover Rd J4-5 > Lower Chantry Lane
	Y	38.2	36	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > >
	NBP	24.7	27	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > St Lawrence Rd > New Dover Rd J4-5 > Lower Chantry Lane
	YBP	35.4	32	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > >
Canterbury 05	N	22.4	26	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Bridge Rd > Bridge Hill > > > > > > > > >
	Y	27.3	23	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > >
	NBP	19.8	24	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Bridge Rd > Bridge Hill > > > > > > > > >
	YBP	24.7	21	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > >
Canterbury 06	N	18	18	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y				> > > > > > > > > > > > > > >
	NBP	13.2	14	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP				> > > > > > > > > > > > > > >
Canterbury 07	N	24.4	24	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	33.1	32	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10 > A2070 Kennington Rd > A28 Canterbury Rd > > > > > > > > >
	NBP	21.6	22	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	30	28	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10 > A2070 Kennington Rd > A28 Canterbury Rd > > > > > > > > >

Otterpool Park

Method for the Distribution of External Vehicle Trips

Origin/Destination	Route on M20 ?	Dist. (km)	Time (mins)	Access	Route Description
Canterbury 08	N	26.7	27	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	38.6	35	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
	NBP	23.8	25	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	37	27	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
Canterbury 09	N	28.1	35	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	35.1	47	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10 > > > > > > > > > > >
	NBP	25.1	29	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	39	36	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10 > > > > > > > > > > >
Canterbury 10	N	27.6	33	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > Old Dover Rd J8-9 > Old Dover Rd J9-10 > Old Dover Rd J10-11 > Upper Bridge Street > Broad St > > > >
	Y	38.2	38	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > A2050 New Dover Rd > New Dover Rd J3-4 > New Dover Rd J4-5 > New Dover Rd J5-6 > Lower Bridge St > > >
	NBP	24.9	30	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > Old Dover Rd J8-9 > Old Dover Rd J9-10 > Old Dover Rd J10-11 > Upper Bridge Street > Broad St > > > >
	YBP	35.5	35	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > A2050 New Dover Rd > New Dover Rd J3-4 > New Dover Rd J4-5 > New Dover Rd J5-6 > Lower Bridge St > > >
Canterbury 11	N	25.9	25	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Bridge Rd > Town Hill > > > > > > > > >
	Y	32.2	29	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
	NBP	23.3	22	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Bridge Rd > Town Hill > > > > > > > > >
	YBP	30	27	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
Canterbury 12	N	24.3	24	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > > > > > > > > >
	Y	34.7	33	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
	NBP	21.6	21	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > > > > > > > > >
	YBP	32.3	31	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
Canterbury 13	N	24.6	25	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > St Lawrence Rd > New Dover Rd J3-4 > > > > > > >
	Y	34.6	30	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > A2050 New Dover Rd > New Dover Rd J3-4 > > > > > >
	NBP	22.3	23	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > St Lawrence Rd > New Dover Rd J3-4 > > > > > > >
	YBP	32.4	27	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > A2050 New Dover Rd > New Dover Rd J3-4 > > > > > >
Canterbury 14	N	24.8	26	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > St Lawrence Rd > New Dover Rd J4-5 > Lower Chantry Lane > > > > > >
	Y	35.5	33	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > A2050 New Dover Rd > New Dover Rd J3-4 > New Dover Rd J4-5 > Lower Chantry Lane > > > >
	NBP	22.5	23	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > St Lawrence Rd > New Dover Rd J4-5 > Lower Chantry Lane > > > > > >
	YBP	33.2	29	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > A2050 New Dover Rd > New Dover Rd J3-4 > New Dover Rd J4-5 > Lower Chantry Lane > > > >
Canterbury 15	N	25.3	25	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	39.1	37	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
	NBP	22.5	23	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	36.6	34	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
Canterbury 16	N	23.7	24	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	37.3	31	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
	NBP	21.3	22	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	35.2	29	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
Canterbury 17	N	27	31	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	38.1	38	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10 > > > > > > > > > > >
	NBP	24.9	29	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	36.1	36	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10 > > > > > > > > > > >
Canterbury 18	N	26.7	30	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > Old Dover Rd J8-9 > Old Dover Rd J9-10 > Old Dover Rd J10-11 > Upper Bridge Street > Broad St > > > >
	Y	37	36	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > A2050 New Dover Rd > New Dover Rd J3-4 > New Dover Rd J4-5 > New Dover Rd J5-6 > Lower Bridge St > > >
	NBP	24.8	28	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > Old Dover Rd J8-9 > Old Dover Rd J9-10 > Old Dover Rd J10-11 > Upper Bridge Street > Broad St > > > >
	YBP	35.3	34	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > A2050 New Dover Rd > New Dover Rd J3-4 > New Dover Rd J4-5 > New Dover Rd J5-6 > Lower Bridge St > > >
Canterbury 19	N	25.3	28	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > Old Dover Rd J8-9 > Old Dover Rd J9-10 > Old Dover Rd J10-11 > Watling St > > > > >
	Y	35.9	34	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > A2050 New Dover Rd > New Dover Rd J3-7 > Old Dover Rd J7-8 > Old Dover Rd J8-9 > Old Dover Rd J9-10 > Old Dover Rd J10-11 > Upper Bridge Street > Broad S
	NBP	23.1	26	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > Faussett Hill > Nackington Rd > Old Dover Rd J7-8 > Old Dover Rd J8-9 > Old Dover Rd J9-10 > Old Dover Rd J10-11 > Watling St > > > > >
	YBP	33.9	33	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >

Otterpool Park
Method for the Distribution of External Vehicle Trips

Origin/Destination	Route on M20 ?	Dist. (km)	Time (mins)	Access	Route Description
Canterbury 20	N	26.2	29	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	39.7	35	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
	NBP	23.7	27	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	37.5	33	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
Canterbury 21	N	24.9	27	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	38.3	33	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
	NBP	22.3	24	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	36.1	30	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
Canterbury 22	N	25.6	28	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	39.2	34	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
	NBP	23.1	25	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	36.6	31	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
Canterbury 23	N	27	31	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	Y	40.3	38	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
	NBP	24.5	29	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > B2068 Stone St > > > > > > > > > > > >
	YBP	38.2	35	A-One	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Spitfire Way > > > > > > > >
Dover	N	26	42	A-Two	A261 Hythe Rd > A259 Military Rd > A259 Prospect Rd > A259 Seabrook Rd > A259 Sandgate Esplanade > A259 Earls Ave > > > > > > > > > >
	Y	24	25	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A20 Round Hill Tunnel > B2011 Folkestone Rd > > >
	YBP	23.2	20	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A20 Round Hill Tunnel > B2011 Folkestone Rd > > > > > > > >
Maidstone	N	-	-		> > > > > > > > > > > > > > >
	Y	48.5	38	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > > > > > > >
	YBP	45.9	31	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > > > > > > > >
Rother	N	52.3	62	A-Three	B2067 Otterpool Ln > B2067 Aldington Rd (W) > B2067 Knoll Hill > > > > > > > > > > > > >
	Y	-	-		> > > > > > > > > > > > > > >
	YBP	61.5	60	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > A262 Hythe Rd > > > > > > > > > >
Dartford	N	-	-		> > > > > > > > > > > > > > >
	Y	85	64	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > M20 J5 > M20 J4 > M20 J2A > > >
	YBP	82.9	55	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > M20 J5 > M20 J4 > M20 J2A > M20 J1 > > >
Tonbridge and Malling	N	72.8	95	A-Three	B2067 Otterpool Ln > B2067 Aldington Rd (W) > B2067 Knoll Hill > > > > > > > > > > > > >
	Y	74.7	60	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > M20 J5 > M20 J4 > > > >
	YBP	75.5	52	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > M20 J5 > M20 J4 > > > > >
Medway	N	-	-		> > > > > > > > > > > > > > >
	Y	63	52	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > > > > > >
	YBP	61.1	47	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > > > > > > >
Tunbridge Wells	N	64	73	A-Three	B2067 Otterpool Ln > B2067 Aldington Rd (W) > B2067 Knoll Hill > > > > > > > > > > > > >
	Y	83	71	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > M20 J5 > M20 J4 > > > >
	YBP	80.3	59	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > M20 J5 > M20 J4 > > > > >
Swale	N	43.3	53	A-Four	A20 Barrow Hill > A20 Ashford Rd (Sellindge) > A20 Hythe Rd > A2070 Kennington Rd > > > > > > > > > > > >
	Y	53.9	49	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > > > > > > > >
	YBP	52	42	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > > > > > > > > >
Thanet	N	-	-		> > > > > > > > > > > > > > >
	Y	53	51	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Canterbury Rd > > > > > > > >
	YBP	50.3	47	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (E) > M20 J12 > M20 J13 > A20 Holywell Coombe V > A260 Canterbury Rd > > > > > > > > >
London	N	-	-		> > > > > > > > > > > > > > >
	Y	116	100	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > M20 J5 > M20 J4 > M20 J2A > > >
	YBP	108	82	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > M20 J5 > M20 J4 > M20 J2A > M20 J1 > > >
Other UK	N	-	-		> > > > > > > > > > > > > > >
	Y	388	259	A-Five	A20 Ashford Rd (A1-A5) > A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > M20 J5 > M20 J4 > M20 J2A > > >
	YBP	384	250	A-One	A20 Ashford Rd (S r/b) > A20 r/b > M20 J11 (W) > M20 J10A? > M20 J10 > M20 J9 > M20 J8 > M20 J7 > M20 J6 > M20 J5 > M20 J4 > M20 J2A > M20 J1 > > >

APPENDIX D

Non-Work Trip Gravity Model

Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Population	Attraction Factor	Distribution
Otterpool / Lympne / Stanford	NL(1)	2.9	44	4.00	0.007	2,004	15	0%
	NS	5.1	50	6.10	0.041	2,004	82	0%
Sellindge	N	2	30	4.00	0.001	1,601	2	0%
	Y	-	0	-	0.000	1,601	0	0%
Lyminge	N	9.3	47	12.00	0.072	1,342	97	1%
	Y	0	0	-	0.000	1,342	0	0%
Hythe 1	N	5.7	43	8.00	0.050	1,548	77	0%
	Y	-	0	-	0.000	1,548	0	0%
Hythe 2	N	6.8	41	10.00	0.063	1,466	92	1%
	Y	-	0	-	0.000	1,466	0	0%
Hythe 3	N	6	43	8.30	0.054	7,260	391	2%
	Y	-	0	-	0.000	7,260	0	0%
Palmarsh (west)	N	7.5	45	10.00	0.068	1,464	100	1%
	Y	-	0	-	0.000	1,464	0	0%
Folkstone 1	N	12.4	39	19.00	0.060	1,522	92	1%
	Y	10.4	48	13.00	0.070	1,522	106	1%
Folkstone 2	N	15.8	43	22.00	0.041	8,348	346	2%
	Y	14	60	14.00	0.051	8,348	428	3%
Folkstone 3	N	15.4	35	26.50	0.044	7,745	337	2%
	Y	15.9	56	17.00	0.041	7,745	317	2%
Folkstone 4	N	12.9	42	18.50	0.058	9,093	523	3%
	Y	12.5	52	14.50	0.060	9,093	544	3%
Folkstone 5	N	13.5	37	22.00	0.054	12,263	664	4%
	Y	14.5	58	15.00	0.048	12,263	594	4%
Folkstone 6	N	14.3	37	23.50	0.050	6,698	332	2%
	Y	16.5	48	20.50	0.038	6,698	254	2%
Folkstone 7	N	13.9	38	22.00	0.052	6,920	359	2%
	Y	15.2	55	16.50	0.045	6,920	309	2%
East and north of Otterpool	N	9.1	50	11.00	0.072	3,548	256	2%
	Y	-	0	-	0.000	3,548	0	0%
Old Hawkinge	N	-	0	-	0.000	8,002	0	0%
	Y	14.5	54	16.00	0.048	8,002	388	2%
Dymchurch	N(1)	11.3	39	17.50	0.066	2,022	133	1%
	N(2)	10.2	41	15.00	0.070	2,022	142	1%
	Y	-	0	-	0.000	2,022	0	0%
Burmarsh	N(1)	10	43	14.00	0.071	1,703	121	1%
	N(2)	7.8	39	12.00	0.070	1,703	119	1%
	Y	-	0	-	0.000	1,703	0	0%
North of Hawkinge	N	14.8	46	19.50	0.047	1,399	65	0%
	Y	-	0	-	0.000	1,399	0	0%
North East Folkstone & Hythe	N	12.8	51	15.00	0.058	1,447	84	1%
	Y	-	0	-	0.000	1,447	0	0%
Central Folkstone & Hythe	N	16.3	44	22.00	0.039	3,679	143	1%
	Y	-	0	-	0.000	3,679	0	0%
North Folkstone & Hythe	N	0	0	-	0.000	2,087	0	0%
	Y	23.9	51	28.00	0.013	2,087	28	0%
New Romney	N	17.5	40	26.00	0.033	6,996	232	1%
	Y	-	0	-	0.000	6,996	0	0%
South East Folkstone & Hythe	N	27	52	31.00	0.009	1,245	11	0%
	Y	-	0	-	0.000	1,245	0	0%
Lydd	N	23.3	41	34.00	0.015	6,567	96	1%
	Y	-	0	-	0.000	6,567	0	0%
Ashford 1	N	16.2	45	21.50	0.039	5,607	221	1%
	Y	15.5	53	17.50	0.043	5,607	241	1%
Ashford 2	N	16.4	44	22.50	0.038	17,470	670	4%
	Y	15.2	52	17.50	0.045	17,470	779	5%
Ashford 3	N	13.2	48	16.50	0.056	9,610	537	3%
	Y	18	65	16.50	0.031	9,610	298	2%
Ashford 4	N	12.6	49	15.50	0.059	33,148	1964	12%
	Y	17.4	67	15.50	0.034	33,148	1115	7%
Ashford 5	N	12	46	15.50	0.063	8,369	523	3%
	Y	16.8	65	15.50	0.036	8,369	305	2%

Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Population	Attraction Factor	Distribution
Canterbury	N							
Canterbury 01	N	38.3	47	49.00	0.002	38,563	69	0%
	Y	94.1	88	64.00	0.000	38,563	0	0%
Canterbury 02	N	31.5	50	38.00	0.005	7,676	35	0%
	Y	42	72	35.00	0.001	7,676	8	0%
Canterbury 03	N	36.4	50	44.00	0.002	32,893	76	0%
	Y	50.1	64	47.00	0.000	32,893	13	0%
Canterbury 04	N	28.9	54	32.00	0.007	2,718	18	0%
	Y	38.2	64	36.00	0.002	2,718	5	0%
Canterbury 05	N	22.4	52	26.00	0.017	3,950	66	0%
	Y	27.3	71	23.00	0.008	3,950	33	0%
Canterbury 06	N	18	60	18.00	0.031	1,798	56	0%
	Y	0	0	-	0.000	1,798	0	0%
Canterbury 07	N	24.4	61	24.00	0.013	4,080	51	0%
	Y	33.1	62	32.00	0.004	4,080	15	0%
Canterbury 08	N	26.7	59	27.00	0.009	1,132	10	0%
	Y	38.6	66	35.00	0.002	1,132	2	0%
Canterbury 09	N	28.1	48	35.00	0.007	6,176	45	0%
	Y	35.1	45	47.00	0.003	6,176	17	0%
Canterbury 10	N	27.6	50	33.00	0.008	4,338	34	0%
	Y	38.2	60	38.00	0.002	4,338	8	0%
Canterbury 11	N	25.9	62	25.00	0.010	1,565	16	0%
	Y	32.2	67	29.00	0.004	1,565	6	0%
Canterbury 12	N	24.3	61	24.00	0.013	1,894	24	0%
	Y	34.7	63	33.00	0.003	1,894	6	0%
Canterbury 13	N	24.6	59	25.00	0.012	1,584	19	0%
	Y	34.6	69	30.00	0.003	1,584	5	0%
Canterbury 14	N	24.8	57	26.00	0.012	5,756	68	0%
	Y	35.5	65	33.00	0.003	5,756	15	0%
Canterbury 15	N	25.3	61	25.00	0.011	1,598	18	0%
	Y	39.1	63	37.00	0.002	1,598	3	0%
Canterbury 16	N	23.7	59	24.00	0.014	7,493	104	1%
	Y	37.3	72	31.00	0.002	7,493	15	0%
Canterbury 17	N	27	52	31.00	0.009	8,317	72	0%
	Y	38.1	60	38.00	0.002	8,317	15	0%
Canterbury 18	N	26.7	53	30.00	0.009	5,571	50	0%
	Y	37	62	36.00	0.002	5,571	12	0%
Canterbury 19	N	25.3	54	28.00	0.011	3,035	33	0%
	Y	35.9	63	34.00	0.002	3,035	8	0%
Canterbury 20	N	26.2	54	29.00	0.010	3,511	34	0%
	Y	39.7	68	35.00	0.001	3,511	5	0%
Canterbury 21	N	24.9	55	27.00	0.012	1,417	17	0%
	Y	38.3	70	33.00	0.002	1,417	3	0%
Canterbury 22	N	25.6	55	28.00	0.011	2,910	31	0%
	Y	39.2	69	34.00	0.002	2,910	5	0%
Canterbury 23	N	27	52	31.00	0.009	3,170	27	0%
	Y	40.3	64	38.00	0.001	3,170	4	0%
Dover	N	26	37	42.00	0.010	31,022	309	2%
	Y	24	58	25.00	0.013	31,022	412	2%
Maidstone	N	-	0	-	0.000	113,137	0	0%
	Y	48.5	77	38.00	0.000	113,137	55	0%
Rother	N	52.3	51	62.00	0.000	92,900	28	0%
	Y	-	0	-	0.000	92,900	0	0%
Dartford	N	-	0	-	0.000	97,365	0	0%
	Y	85	80	64.00	0.000	97,365	1	0%
Tonbridge and Malling	N	72.8	46	95.00	0.000	120,805	4	0%
	Y	74.7	75	60.00	0.000	120,805	3	0%
Medway	N	-	0	-	0.000	274,015	0	0%
	Y	63	73	52.00	0.000	274,015	25	0%
Tunbridge Wells	N	64	53	73.00	0.000	64,783	5	0%
	Y	83	70	71.00	0.000	64,783	1	0%
Swale	N	43.3	49	53.00	0.001	142,400	132	1%
	Y	53.9	66	49.00	0.000	142,400	36	0%
Thanet	N	-	0	-	0.000	139,800	0	0%
	Y	53	62	51.00	0.000	139,800	39	0%
London	N	-	0	-	0.000	8,665,000	0	0%
	Y	116	70	100.00	0.000	8,665,000	6	0%
Other UK	N	-	0	-	0.000	54,789,697	0	0%
	Y	388	90	259.00	0.000	54,789,697	0	0%

APPENDIX E

Work Trip Gravity Models

Table E.1 Gravity Model for external commuter trips made by Otterpool Park residents

Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Commuters	Attraction Factor	Proportions	Commute %	Distribution
Otterpool / Lympne / Stanford	NL(1)	2.9	44	4.00	0.022	251	5.632	29%	1%	0%
	NS	5.1	50	6.10	0.055	251	13.821	71%		1%
							19.453			
Sellindge	N	2	30	4.00	0.022	200	4.499	100%	1%	1%
	Y	-	0	-	0.000	200	0.000	0%		0%
							4.499			
Lyminge	N	9.3	47	12.00	0.063	88	5.481	100%	0%	0%
	Y	0	0	-	0.000	88	0.000	0%		0%
							5.481			
Hythe 1	N	5.7	43	8.00	0.070	278	19.570	100%	1%	1%
	Y	-	0	-	0.000	278	0.000	0%		0%
							19.570			
Hythe 2	N	6.8	41	10.00	0.071	263	18.651	100%	1%	1%
	Y	-	0	-	0.000	263	0.000	0%		0%
							18.651			
Hythe 3	N	6	43	8.30	0.071	1,073	76.565	100%	4%	4%
	Y	-	0	-	0.000	1,073	0.000	0%		0%
							76.565			
Palmarsh (west)	N	7.5	45	10.00	0.071	183	12.977	100%	1%	1%
	Y	-	0	-	0.000	183	0.000	0%		0%
							12.977			
Folkstone 1	N	12.4	39	19.00	0.027	48	1.301	32%	0%	0%
	Y	10.4	48	13.00	0.057	48	2.742	68%		0%
							4.043			
Folkstone 2	N	15.8	43	22.00	0.018	495	8.758	26%	2%	1%
	Y	14	60	14.00	0.051	495	25.389	74%		1%
							34.148			
Folkstone 3	N	15.4	35	26.50	0.009	274	2.536	21%	1%	0%
	Y	15.9	56	17.00	0.035	274	9.720	79%		1%
							12.256			
Folkstone 4	N	12.9	42	18.50	0.029	660	19.127	37%	3%	1%
	Y	12.5	52	14.50	0.048	660	31.984	63%		2%
							51.110			
Folkstone 5	N	13.5	37	22.00	0.018	2,913	51.542	28%	11%	3%
	Y	14.5	58	15.00	0.046	2,913	133.080	72%		8%
							184.623			
Folkstone 6	N	14.3	37	23.50	0.014	1,883	26.853	39%	7%	3%
	Y	16.5	48	20.50	0.022	1,883	41.264	61%		5%
							68.117			
Folkstone 7	N	13.9	38	22.00	0.018	1,379	24.400	32%	5%	2%
	Y	15.2	55	16.50	0.038	1,379	52.224	68%		4%
							76.624			
East and north of Otterpool	N	9.1	50	11.00	0.067	637	42.896	100%	3%	3%
	Y	-	0	-	0.000	637	0.000	0%		0%
							42.896			
Old Hawkinge	N	-	0	-	0.000	253	0.000	0%	1%	0%
	Y	14.5	54	16.00	0.040	253	10.211	100%		1%
							10.211			
Dymchurch	N(1)	11.3	39	17.50	0.033	142	4.715	42%	1%	0%
	N(2)	10.2	41	15.00	0.046	142	6.490	58%		0%
	Y	-	0	-	0.000	142	0.000	0%		0%
							11.205			
Burmarsh	N(1)	10	43	14.00	0.051	213	10.925	45%	1%	0%
	N(2)	7.8	39	12.00	0.063	213	13.315	55%		0%
	Y	-	0	-	0.000	213	0.000	0%		0%
							24.240			
North of Hawkinge	N	14.8	46	19.50	0.025	91	2.306	100%	0%	0%
	Y	-	0	-	0.000	91	0.000	0%		0%
							2.306			
North East Shepway	N	12.8	51	15.00	0.046	95	4.319	100%	0%	0%
	Y	-	0	-	0.000	95	0.000	0%		0%
							4.319			
Central Shepway	N	16.3	44	22.00	0.018	258	4.573	100%	1%	1%
	Y	-	0	-	0.000	258	0.000	0%		0%
							4.573			

Otterpool Park
Method for the Distribution of External Vehicle Trips

Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Commuters	Attraction Factor	Proportions	Commute %	Distribution
North Shepway	N	0	0	-	0.000	136	0.000	0%	1%	0%
	Y	23.9	51	28.00	0.007	136	1.018	100%		1%
							1.018			
New Romney	N	17.5	40	26.00	0.010	829	8.244	100%	3%	3%
	Y	-	0	-	0.000	829	0.000	0%		0%
							8.244			
South East Shepway	N	27	52	31.00	0.005	87	0.426	100%	0%	0%
	Y	-	0	-	0.000	87	0.000	0%		0%
							0.426			
Lydd	N	23.3	41	34.00	0.003	1,176	3.772	100%	5%	5%
	Y	-	0	-	0.000	1,176	0.000	0%		0%
							3.772			
Ashford 1	N	16.2	45	21.50	0.019	307	5.828	36%	1%	0%
	Y	15.5	53	17.50	0.033	307	10.178	64%		1%
							16.006			
Ashford 2	N	16.4	44	22.50	0.016	955	15.734	33%	4%	1%
	Y	15.2	52	17.50	0.033	955	31.712	67%		3%
							47.446			
Ashford 3	N	13.2	48	16.50	0.038	526	19.903	50%	2%	1%
	Y	18	65	16.50	0.038	526	19.903	50%		1%
							39.806			
Ashford 4	N	12.6	49	15.50	0.043	1,813	77.922	50%	7%	4%
	Y	17.4	67	15.50	0.043	1,813	77.922	50%		4%
							155.845			
Ashford 5	N	12	46	15.50	0.043	458	19.673	50%	2%	1%
	Y	16.8	65	15.50	0.043	458	19.673	50%		1%
							39.347			
Canterbury 01	N	38.3	47	49.00	0.000	40	0.018	85%	0%	0%
	Y	94.1	88	64.00	0.000	40	0.003	15%		0%
							0.022			
Canterbury 02	N	31.5	50	38.00	0.002	42	0.078	40%	0%	0%
	Y	42	72	35.00	0.003	42	0.117	60%		0%
							0.195			
Canterbury 03	N	36.4	50	44.00	0.001	111	0.094	59%	0%	0%
	Y	50.1	64	47.00	0.001	111	0.064	41%		0%
							0.158			
Canterbury 04	N	28.9	54	32.00	0.004	11	0.048	63%	0%	0%
	Y	38.2	64	36.00	0.002	11	0.028	37%		0%
							0.075			
Canterbury 05	N	22.4	52	26.00	0.010	67	0.670	39%	0%	0%
	Y	27.3	71	23.00	0.015	67	1.032	61%		0%
							1.701			
Canterbury 06	N	18	60	18.00	0.031	18	0.571	100%	0%	0%
	Y	0	0	-	0.000	18	0.000	0%		0%
							0.571			
Canterbury 07	N	24.4	61	24.00	0.013	42	0.554	76%	0%	0%
	Y	33.1	62	32.00	0.004	42	0.177	24%		0%
							0.730			
Canterbury 08	N	26.7	59	27.00	0.009	8	0.072	75%	0%	0%
	Y	38.6	66	35.00	0.003	8	0.023	25%		0%
							0.095			
Canterbury 09	N	28.1	48	35.00	0.003	45	0.127	83%	0%	0%
	Y	35.1	45	47.00	0.001	45	0.026	17%		0%
							0.153			
Canterbury 10	N	27.6	50	33.00	0.004	49	0.179	66%	0%	0%
	Y	38.2	60	38.00	0.002	49	0.091	34%		0%
							0.270			
Canterbury 11	N	25.9	62	25.00	0.011	27	0.306	64%	0%	0%
	Y	32.2	67	29.00	0.006	27	0.173	36%		0%
							0.479			
Canterbury 12	N	24.3	61	24.00	0.013	110	1.461	78%	0%	0%
	Y	34.7	63	33.00	0.004	110	0.406	22%		0%
							1.866			
Canterbury 13	N	24.6	59	25.00	0.011	92	1.058	67%	0%	0%
	Y	34.6	69	30.00	0.006	92	0.517	33%		0%
							1.574			
Canterbury 14	N	24.8	57	26.00	0.010	264	2.629	73%	1%	1%
	Y	35.5	65	33.00	0.004	264	0.974	27%		0%
							3.603			
Canterbury 15	N	25.3	61	25.00	0.011	93	1.067	84%	0%	0%
	Y	39.1	63	37.00	0.002	93	0.198	16%		0%
							1.265			

Otterpool Park
Method for the Distribution of External Vehicle Trips

Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Commuters	Attraction Factor	Proportions	Commute %	Distribution
Canterbury 16	N	23.7	59	24.00	0.013	129	1.710	73%	1%	0%
	Y	37.3	72	31.00	0.005	129	0.628	27%		0%
							2.338			
Canterbury 17	N	27	52	31.00	0.005	41	0.200	72%	0%	0%
	Y	38.1	60	38.00	0.002	41	0.076	28%		0%
							0.276			
Canterbury 18	N	26.7	53	30.00	0.006	109	0.610	70%	0%	0%
	Y	37	62	36.00	0.002	109	0.265	30%		0%
							0.875			
Canterbury 19	N	25.3	54	28.00	0.007	73	0.542	70%	0%	0%
	Y	35.9	63	34.00	0.003	73	0.233	30%		0%
							0.774			
Canterbury 20	N	26.2	54	29.00	0.006	84	0.543	70%	0%	0%
	Y	39.7	68	35.00	0.003	84	0.235	30%		0%
							0.778			
Canterbury 21	N	24.9	55	27.00	0.009	34	0.292	70%	0%	0%
	Y	38.3	70	33.00	0.004	34	0.125	30%		0%
							0.417			
Canterbury 22	N	25.6	55	28.00	0.007	70	0.519	70%	0%	0%
	Y	39.2	69	34.00	0.003	70	0.223	30%		0%
							0.742			
Canterbury 23	N	27	52	31.00	0.005	23	0.114	72%	0%	0%
	Y	40.3	64	38.00	0.002	23	0.043	28%		0%
							0.157			
Dover	N	26	37	42.00	0.001	2,172	2.388	9%	9%	1%
	Y	24	58	25.00	0.011	2,172	24.949	91%		8%
							27.337			
Maidstone	N	-	0	-	0.000	714	0.000	0%	3%	0%
	Y	48.5	77	38.00	0.002	714	1.329	100%		3%
							1.329			
Rother	N	52.3	51	62.00	0.000	165	0.017	100%	1%	1%
	Y	-	0	-	0.000	165	0.000	0%		0%
							0.017			
Dartford	N	-	0	-	0.000	93	0.000	0%	0%	0%
	Y	85	80	64.00	0.000	93	0.008	100%		0%
							0.008			
Tonbridge and Malling	N	72.8	46	95.00	0.000	326	0.001	3%	1%	0%
	Y	74.7	75	60.00	0.000	326	0.041	97%		1%
							0.042			
Medway	N	-	0	-	0.000	186	0.000	0%	1%	0%
	Y	63	73	52.00	0.000	186	0.059	100%		1%
							0.059			
Tunbridge Wells	N	64	53	73.00	0.000	111	0.004	45%	0%	0%
	Y	83	70	71.00	0.000	111	0.004	55%		0%
							0.008			
Swale	N	43.3	49	53.00	0.000	235	0.066	38%	1%	0%
	Y	53.9	66	49.00	0.000	235	0.107	62%		1%
							0.173			
Thanet	N	-	0	-	0.000	254	0.000	0%	1%	0%
	Y	53	62	51.00	0.000	254	0.091	100%		1%
							0.091			
London	N	-	0	-	0.000	625	0.000	0%	2%	0%
	Y	116	70	100.00	0.000	625	0.002	100%		2%
							0.002			
Other UK	N	-	0	-	0.000	915	0.000	0%	4%	0%
	Y	388	90	259.00	0.000	915	0.000	100%		4%
							0.000			

Table E.2 Gravity Model for external incoming commuter trips to Otterpool Park Business Park

Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Commuters	Attraction Factor	Proportions	Commute %	Distribution
Otterpool / Lympne / Stanford						279	0.000	0%	1%	0%
	NBP	2.9	44	4.00	0.022	279	6.277	100%		1%
							6.277			
Sellindge	NBP	4.8	32	9.00	0.072	223	16.119	100%	1%	1%
	YBP	0	0	-	0.000	223	0.000	0%		0%
							16.119			
Lyminge	NBP	7.5	41	11.00	0.067	155	10.443	100%	1%	1%
	YBP	-	0	-	0.000	155	0.000	0%		0%
							10.443			
Hythe 1	NBP	5.1	38	8.00	0.070	194	13.639	100%	1%	1%
	YBP	0	0	-	0.000	194	0.000	0%		0%
							13.639			
Hythe 2	NBP	6.5	35	11.00	0.067	183	12.353	100%	1%	1%
	YBP	0	0	-	0.000	183	0.000	0%		0%
							12.353			
Hythe 3	NBP	5.5	37	9.00	0.072	835	60.308	100%	4%	4%
	YBP	0	0	-	0.000	835	0.000	0%		0%
							60.308			
Palmarsh (west)	NBP	7	35	12.00	0.063	204	12.757	100%	1%	1%
	YBP	0	0	-	0.000	204	0.000	0%		0%
							12.757			
Folkstone 1	NBP					248	0.000	0%	1%	0%
	YBP	8.3	55	9.00	0.072	248	17.890	100%		1%
							17.890			
Folkstone 2	NBP					1,111	0.000	0%	5%	0%
	YBP	12.4	57	13.00	0.057	1,111	63.330	100%		5%
							63.330			
Folkstone 3	NBP					845	0.000	0%	4%	0%
	YBP	13.3	53	15.00	0.046	845	38.604	100%		4%
							38.604			
Folkstone 4	NBP	10.9	34	19.00	0.027	1,413	38.217	29%	6%	2%
	YBP	8.9	49	11.00	0.067	1,413	95.164	71%		4%
							133.381			
Folkstone 5	NBP	10.9	41	16.00	0.040	1,759	71.023	39%	8%	3%
	YBP	11.1	56	12.00	0.063	1,759	109.955	61%		5%
							180.978			
Folkstone 6	NBP	12.5	39	19.00	0.027	425	11.495	37%	2%	1%
	YBP	12.7	51	15.00	0.046	425	19.416	63%		1%
							30.911			
Folkstone 7	NBP	11.5	41	17.00	0.035	636	22.562	38%	3%	1%
	YBP	11.7	54	13.00	0.057	636	36.254	62%		2%
							58.816			
East and north of Otterpool	NBP	6.9	41	10.00	0.071	444	31.459	100%	2%	2%
	YBP	0	0	-	0.000	444	0.000	0%		0%
							31.459			
Old Hawkinge	NBP	0	0	-	0.000	1,302	0.000	0%	6%	0%
	YBP	12.3	67	11.00	0.067	1,302	87.708	100%		6%
							87.708			
Dymchurch	NBP	12.4	41	18.00	0.031	263	8.174	100%	1%	1%
						263	0.000	0%		0%
							8.174			
Burmarsh	NBP	9.9	42	14.00	0.051	237	12.176	100%	1%	1%
						237	0.000	0%		0%
							12.176			
North of Hawkinge	NBP	12.5	54	14.00	0.051	162	8.291	100%	1%	1%
						162	0.000	0%		0%
							8.291			
North East Shepway	NBP	10.6	45	14.00	0.051	167	8.575	100%	1%	1%
						167	0.000	0%		0%
							8.575			
Central Shepway	NBP	17.1	43	24.00	0.013	479	6.360	100%	2%	2%
						479	0.000	0%		0%
							6.360			
North Shepway	NBP	0	0	-	0.000	241	0.000	0%	1%	0%
	YBP	21.5	61	21.00	0.020	241	4.922	100%		1%
							4.922			
New Romney	NBP	18.7	45	25.00	0.011	991	11.383	100%	4%	4%
						991	0.000	0%		0%
							11.383			

Otterpool Park
Method for the Distribution of External Vehicle Trips

Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Commuters	Attraction Factor	Proportions	Commute %	Distribution
South East Shepway						162	0.000	0%	1%	0%
	YBP	36.5	73	30.00	0.006	162	0.910	100%		1%
							0.910			
Lydd	NBP	24.5	47	31.00	0.005	946	4.610	100%	4%	4%
						946	0.000	0%		0%
							4.610			
Ashford						177	0.000	0%	1%	0%
	YBP	18.1	72	15.00	0.046	177	8.071	100%		1%
							8.071			
Ashford						550	0.000	0%	2%	0%
	YBP	17.4	75	14.00	0.051	550	28.233	100%		2%
							28.233			
Ashford						303	0.000	0%	1%	0%
	YBP	15.6	62	15.00	0.046	303	13.833	100%		1%
							13.833			
Ashford						1,044	0.000	0%	5%	0%
	YBP	15.2	65	14.00	0.051	1,044	53.569	100%		5%
							53.569			
Ashford						264	0.000	0%	1%	0%
	YBP	15.7	55	17.00	0.035	264	9.354	100%		1%
							9.354			
Canterbury 01	N	38.3	47	49.00	0.000	130	0.059	25%	1%	0%
	Y	94.1	88	64.00	0.000	130	0.011	5%		0%
	NBP	35.3	47	45.00	0.001	130	0.097	42%		0%
	YBP	55.6	70	48.00	0.001	130	0.067	29%		0%
							0.234			
Canterbury 02	N	31.5	50	38.00	0.002	55	0.102	22%	0%	0%
	Y	42	72	35.00	0.003	55	0.153	33%		0%
	NBP	29.1	49	36.00	0.002	55	0.133	29%		0%
	YBP	39.8	60	40.00	0.001	55	0.078	17%		0%
							0.467			
Canterbury 03	N	36.4	50	44.00	0.001	132	0.112	23%	1%	0%
	Y	50.1	64	47.00	0.001	132	0.077	16%		0%
	NBP	34.4	52	40.00	0.001	132	0.188	38%		0%
	YBP	48.1	66	44.00	0.001	132	0.112	23%		0%
							0.490			
Canterbury 04	N	28.9	54	32.00	0.004	20	0.086	22%	0%	0%
	Y	38.2	64	36.00	0.002	20	0.050	12%		0%
	NBP	24.7	55	27.00	0.009	20	0.175	44%		0%
	YBP	35.4	66	32.00	0.004	20	0.086	22%		0%
							0.397			
Canterbury 05	N	22.4	52	26.00	0.010	73	0.727	17%	0%	0%
	Y	27.3	71	23.00	0.015	73	1.120	26%		0%
	NBP	19.8	50	24.00	0.013	73	0.969	23%		0%
	YBP	24.7	71	21.00	0.020	73	1.491	35%		0%
							4.307			
Canterbury 06	N	18	60	18.00	0.031	31	0.976	38%	0%	0%
	Y	0	0	-	0.000	31	0.000	0%		0%
	NBP	13.2	57	14.00	0.051	31	1.614	62%		0%
	YBP	0	0	-	0.000	31	0.000	0%		0%
							2.590			
Canterbury 07	N	24.4	61	24.00	0.013	71	0.947	31%	0%	0%
	Y	33.1	62	32.00	0.004	71	0.302	10%		0%
	NBP	21.6	59	22.00	0.018	71	1.263	41%		0%
	YBP	30	64	28.00	0.007	71	0.533	17%		0%
							3.045			
Canterbury 08	N	26.7	59	27.00	0.009	5	0.039	27%	0%	0%
	Y	38.6	66	35.00	0.003	5	0.013	9%		0%
	NBP	23.8	57	25.00	0.011	5	0.052	36%		0%
	YBP	37	82	27.00	0.009	5	0.039	27%		0%
							0.143			
Canterbury 09	N	28.1	48	35.00	0.003	25	0.069	23%	0%	0%
	Y	35.1	45	47.00	0.001	25	0.014	5%		0%
	NBP	25.1	52	29.00	0.006	25	0.160	53%		0%
	YBP	39	65	36.00	0.002	25	0.060	20%		0%
							0.304			
Canterbury 10	N	27.6	50	33.00	0.004	32	0.117	26%	0%	0%
	Y	38.2	60	38.00	0.002	32	0.059	13%		0%
	NBP	24.9	50	30.00	0.006	32	0.179	40%		0%
	YBP	35.5	61	35.00	0.003	32	0.089	20%		0%
							0.444			
Canterbury 11	N	25.9	62	25.00	0.011	29	0.332	26%	0%	0%
	Y	32.2	67	29.00	0.006	29	0.187	15%		0%
	NBP	23.3	64	22.00	0.018	29	0.512	40%		0%
	YBP	30	67	27.00	0.009	29	0.249	19%		0%
							1.281			

Otterpool Park
Method for the Distribution of External Vehicle Trips

Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Commuters	Attraction Factor	Proportions	Commute %	Distribution
Canterbury 12	N	24.3	61	24.00	0.013	16	0.212	31%	0%	0%
	Y	34.7	63	33.00	0.004	16	0.059	9%		0%
	NBP	21.6	62	21.00	0.020	16	0.326	48%		0%
	YBP	32.3	63	31.00	0.005	16	0.078	12%		0%
							0.674			
Canterbury 13	N	24.6	59	25.00	0.011	13	0.153	28%	0%	0%
	Y	34.6	69	30.00	0.006	13	0.075	14%		0%
	NBP	22.3	58	23.00	0.015	13	0.205	37%		0%
	YBP	32.4	72	27.00	0.009	13	0.115	21%		0%
							0.548			
Canterbury 14	N	24.8	57	26.00	0.010	48	0.477	28%	0%	0%
	Y	35.5	65	33.00	0.004	48	0.177	10%		0%
	NBP	22.5	59	23.00	0.015	48	0.736	43%		0%
	YBP	33.2	69	29.00	0.006	48	0.310	18%		0%
							1.700			
Canterbury 15	N	25.3	61	25.00	0.011	13	0.155	36%	0%	0%
	Y	39.1	63	37.00	0.002	13	0.029	7%		0%
	NBP	22.5	59	23.00	0.015	13	0.206	48%		0%
	YBP	36.6	65	34.00	0.003	13	0.043	10%		0%
							0.433			
Canterbury 16	N	23.7	59	24.00	0.013	90	1.196	31%	0%	0%
	Y	37.3	72	31.00	0.005	90	0.439	12%		0%
	NBP	21.3	58	22.00	0.018	90	1.595	42%		0%
	YBP	35.2	73	29.00	0.006	90	0.583	15%		0%
							3.814			
Canterbury 17	N	27	52	31.00	0.005	29	0.141	31%	0%	0%
	Y	38.1	60	38.00	0.002	29	0.054	12%		0%
	NBP	24.9	52	29.00	0.006	29	0.188	41%		0%
	YBP	36.1	60	36.00	0.002	29	0.071	16%		0%
							0.454			
Canterbury 18	N	26.7	53	30.00	0.006	45	0.254	30%	0%	0%
	Y	37	62	36.00	0.002	45	0.111	13%		0%
	NBP	24.8	53	28.00	0.007	45	0.338	40%		0%
	YBP	35.3	62	34.00	0.003	45	0.145	17%		0%
							0.849			
Canterbury 19	N	25.3	54	28.00	0.007	16	0.117	31%	0%	0%
	Y	35.9	63	34.00	0.003	16	0.050	13%		0%
	NBP	23.1	53	26.00	0.010	16	0.155	41%		0%
	YBP	33.9	62	33.00	0.004	16	0.058	15%		0%
							0.380			
Canterbury 20	N	26.2	54	29.00	0.006	18	0.117	30%	0%	0%
	Y	39.7	68	35.00	0.003	18	0.051	13%		0%
	NBP	23.7	53	27.00	0.009	18	0.156	40%		0%
	YBP	37.5	68	33.00	0.004	18	0.067	17%		0%
							0.390			
Canterbury 21	N	24.9	55	27.00	0.009	7	0.063	28%	0%	0%
	Y	38.3	70	33.00	0.004	7	0.027	12%		0%
	NBP	22.3	56	24.00	0.013	7	0.097	43%		0%
	YBP	36.1	72	30.00	0.006	7	0.041	18%		0%
							0.228			
Canterbury 22	N	25.6	55	28.00	0.007	15	0.112	28%	0%	0%
	Y	39.2	69	34.00	0.003	15	0.048	12%		0%
	NBP	23.1	55	25.00	0.011	15	0.172	42%		0%
	YBP	36.6	71	31.00	0.005	15	0.073	18%		0%
							0.405			
Canterbury 23	N	27	52	31.00	0.005	13	0.062	30%	0%	0%
	Y	40.3	64	38.00	0.002	13	0.024	12%		0%
	NBP	24.5	51	29.00	0.006	13	0.082	40%		0%
	YBP	38.2	65	35.00	0.003	13	0.036	17%		0%
							0.203			

Otterpool Park
Method for the Distribution of External Vehicle Trips

Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Commuters	Attraction Factor	Proportions	Commute %	Distribution
Dover						3,764	0.000	0%	16%	0%
	YBP	23.2	70	20.00	0.024	3,764	88.520	100%		16%
							88.520			
Maidstone						231	0.000	0%	1%	0%
	YBP	45.9	89	31.00	0.005	231	1.126	100%		1%
							1.126			
Rother						176	0.000	0%	1%	0%
	YBP	61.5	62	60.00	0.000	176	0.022	100%		1%
							0.022			
Dartford						14	0.000	0%	0%	0%
	YBP	82.9	90	55.00	0.000	14	0.003	100%		0%
							0.003			
Tonbridge and Malling						78	0.000	0%	0%	0%
	YBP	75.5	87	52.00	0.000	78	0.025	100%		0%
							0.025			
Medway						160	0.000	0%	1%	0%
	YBP	61.1	78	47.00	0.001	160	0.093	100%		1%
							0.093			
Tunbridge Wells						55	0.000	0%	0%	0%
	YBP	80.3	82	59.00	0.000	55	0.008	100%		0%
							0.008			
Swale						206	0.000	0%	1%	0%
	YBP	52	74	42.00	0.001	206	0.226	100%		1%
							0.226			
Thanet						473	0.000	0%	2%	0%
	YBP	50.3	64	47.00	0.001	473	0.276	100%		2%
							0.276			
London						113	0.000	0%	0%	0%
	YBP	108	79	82.00	0.000	113	0.001	100%		0%
							0.001			
Other UK						512	0.000	0%	2%	0%
	YBP	384	92	250.00	0.000	512	0.000	100%		2%
							0.000			

Table E.3 Gravity Model for external incoming commuter trips to Otterpool Park Business Hubs

Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Commuters	Attraction Factor	Proportions	Commute %	Distribution
Otterpool / Lympne / Stanford	NL(1)	2.9	44	4.00	0.022	279	6.277	29%	1%	0%
	NS	5.1	50	6.10	0.055	279	15.404	71%		1%
							21.680			
Sellindge	N	2	30	4.00	0.022	223	5.014	100%	1%	1%
	Y	-	0	-	0.000	223	0.000	0%		0%
							5.014			
Lyminge	N	9.3	47	12.00	0.063	155	9.692	100%	1%	1%
	Y	0	0	-	0.000	155	0.000	0%		0%
							9.692			
Hythe 1	N	5.7	43	8.00	0.070	194	13.639	100%	1%	1%
	Y	-	0	-	0.000	194	0.000	0%		0%
							13.639			
Hythe 2	N	6.8	41	10.00	0.071	183	12.999	100%	1%	1%
	Y	-	0	-	0.000	183	0.000	0%		0%
							12.999			
Hythe 3	N	6	43	8.30	0.071	835	59.582	100%	4%	4%
	Y	-	0	-	0.000	835	0.000	0%		0%
							59.582			
Palmarsh (west)	N	7.5	45	10.00	0.071	204	14.463	100%	1%	1%
	Y	-	0	-	0.000	204	0.000	0%		0%
							14.463			
Folkstone 1	N	12.4	39	19.00	0.027	248	6.700	32%	1%	0%
	Y	10.4	48	13.00	0.057	248	14.120	68%		1%
							20.819			
Folkstone 2	N	15.8	43	22.00	0.018	1,111	19.658	26%	5%	1%
	Y	14	60	14.00	0.051	1,111	56.984	74%		4%
							76.642			
Folkstone 3	N	15.4	35	26.50	0.009	845	7.820	21%	4%	1%
	Y	15.9	56	17.00	0.035	845	29.976	79%		3%
							37.796			
Folkstone 4	N	12.9	42	18.50	0.029	1,413	40.948	37%	6%	2%
	Y	12.5	52	14.50	0.048	1,413	68.475	63%		4%
							109.423			
Folkstone 5	N	13.5	37	22.00	0.018	1,759	31.124	28%	8%	2%
	Y	14.5	58	15.00	0.046	1,759	80.360	72%		6%
							111.483			
Folkstone 6	N	14.3	37	23.50	0.014	425	6.061	39%	2%	1%
	Y	16.5	48	20.50	0.022	425	9.313	61%		1%
							15.374			
Folkstone 7	N	13.9	38	22.00	0.018	636	11.253	32%	3%	1%
	Y	15.2	55	16.50	0.038	636	24.086	68%		2%
							35.339			
East and north of Otterpool	N	9.1	50	11.00	0.067	444	29.896	100%	2%	2%
	Y	-	0	-	0.000	444	0.000	0%		0%
							29.896			
Old Hawkinge	N	-	0	-	0.000	1,302	0.000	0%	6%	0%
	Y	14.5	54	16.00	0.040	1,302	52.583	100%		6%
							52.583			
Dymchurch	N(1)	11.3	39	17.50	0.033	263	8.745	42%	1%	0%
	N(2)	10.2	41	15.00	0.046	263	12.036	58%		1%
	Y	-	0	-	0.000	263	0.000	0%		0%
							20.780			
Burmarsh	N(1)	10	43	14.00	0.051	237	12.176	45%	1%	0%
	N(2)	7.8	39	12.00	0.063	237	14.839	55%		1%
	Y	-	0	-	0.000	237	0.000	0%		0%
							27.016			
North of Hawkinge	N	14.8	46	19.50	0.025	162	4.078	100%	1%	1%
	Y	-	0	-	0.000	162	0.000	0%		0%
							4.078			
North East Shepway	N	12.8	51	15.00	0.046	167	7.638	100%	1%	1%
	Y	-	0	-	0.000	167	0.000	0%		0%
							7.638			
Central Shepway	N	16.3	44	22.00	0.018	479	8.481	100%	2%	2%
	Y	-	0	-	0.000	479	0.000	0%		0%
							8.481			
North Shepway	N	0	0	-	0.000	241	0.000	0%	1%	0%
	Y	23.9	51	28.00	0.007	241	1.799	100%		1%
							1.799			
New Romney	N	17.5	40	26.00	0.010	991	9.855	100%	4%	4%
	Y	-	0	-	0.000	991	0.000	0%		0%
							9.855			

Otterpool Park
Method for the Distribution of External Vehicle Trips

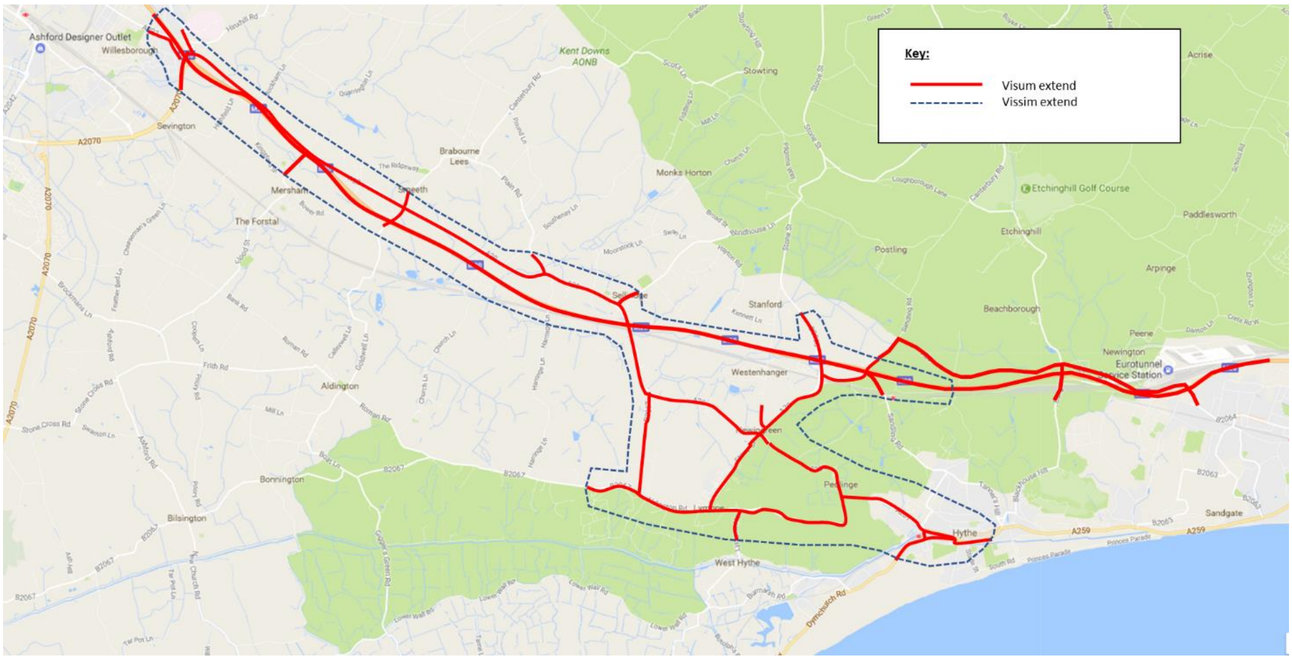
Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Commuters	Attraction Factor	Proportions	Commute %	Distribution
South East Shepway	N	27	52	31.00	0.005	162	0.791	100%	1%	1%
	Y	-	0	-	0.000	162	0.000	0%		0%
							0.791			
Lydd	N	23.3	41	34.00	0.003	946	3.034	100%	4%	4%
	Y	-	0	-	0.000	946	0.000	0%		0%
							3.034			
Ashford 1	N	16.2	45	21.50	0.019	177	3.358	36%	1%	0%
	Y	15.5	53	17.50	0.033	177	5.864	64%		0%
							9.222			
Ashford 2	N	16.4	44	22.50	0.016	550	9.065	33%	2%	1%
	Y	15.2	52	17.50	0.033	550	18.271	67%		2%
							27.336			
Ashford 3	N	13.2	48	16.50	0.038	303	11.467	50%	1%	1%
	Y	18	65	16.50	0.038	303	11.467	50%		1%
							22.934			
Ashford 4	N	12.6	49	15.50	0.043	1,044	44.895	50%	5%	2%
	Y	17.4	67	15.50	0.043	1,044	44.895	50%		2%
							89.789			
Ashford 5	N	12	46	15.50	0.043	264	11.335	50%	1%	1%
	Y	16.8	65	15.50	0.043	264	11.335	50%		1%
							22.669			
Canterbury 01	N	38.3	47	49.00	0.000	130	0.059	85%	1%	0%
	Y	94.1	88	64.00	0.000	130	0.011	15%		0%
							0.070			
Canterbury 02	N	31.5	50	38.00	0.002	55	0.102	40%	0%	0%
	Y	42	72	35.00	0.003	55	0.153	60%		0%
							0.255			
Canterbury 03	N	36.4	50	44.00	0.001	132	0.112	59%	1%	0%
	Y	50.1	64	47.00	0.001	132	0.077	41%		0%
							0.189			
Canterbury 04	N	28.9	54	32.00	0.004	20	0.086	63%	0%	0%
	Y	38.2	64	36.00	0.002	20	0.050	37%		0%
							0.136			
Canterbury 05	N	22.4	52	26.00	0.010	73	0.727	39%	0%	0%
	Y	27.3	71	23.00	0.015	73	1.120	61%		0%
							1.846			
Canterbury 06	N	18	60	18.00	0.031	31	0.976	100%	0%	0%
	Y	0	0	-	0.000	31	0.000	0%		0%
							0.976			
Canterbury 07	N	24.4	61	24.00	0.013	71	0.947	76%	0%	0%
	Y	33.1	62	32.00	0.004	71	0.302	24%		0%
							1.250			
Canterbury 08	N	26.7	59	27.00	0.009	5	0.039	75%	0%	0%
	Y	38.6	66	35.00	0.003	5	0.013	25%		0%
							0.052			
Canterbury 09	N	28.1	48	35.00	0.003	25	0.069	83%	0%	0%
	Y	35.1	45	47.00	0.001	25	0.014	17%		0%
							0.084			
Canterbury 10	N	27.6	50	33.00	0.004	32	0.117	66%	0%	0%
	Y	38.2	60	38.00	0.002	32	0.059	34%		0%
							0.176			
Canterbury 11	N	25.9	62	25.00	0.011	29	0.332	64%	0%	0%
	Y	32.2	67	29.00	0.006	29	0.187	36%		0%
							0.520			
Canterbury 12	N	24.3	61	24.00	0.013	16	0.212	78%	0%	0%
	Y	34.7	63	33.00	0.004	16	0.059	22%		0%
							0.271			
Canterbury 13	N	24.6	59	25.00	0.011	13	0.153	67%	0%	0%
	Y	34.6	69	30.00	0.006	13	0.075	33%		0%
							0.228			
Canterbury 14	N	24.8	57	26.00	0.010	48	0.477	73%	0%	0%
	Y	35.5	65	33.00	0.004	48	0.177	27%		0%
							0.654			
Canterbury 15	N	25.3	61	25.00	0.011	13	0.155	84%	0%	0%
	Y	39.1	63	37.00	0.002	13	0.029	16%		0%
							0.183			
Canterbury 16	N	23.7	59	24.00	0.013	90	1.196	73%	0%	0%
	Y	37.3	72	31.00	0.005	90	0.439	27%		0%
							1.636			
Canterbury 17	N	27	52	31.00	0.005	29	0.141	72%	0%	0%
	Y	38.1	60	38.00	0.002	29	0.054	28%		0%
							0.195			

Otterpool Park
Method for the Distribution of External Vehicle Trips

Origin/Destination	M20 Route?	Distance (km)	Average Speed	Time (mins)	Log Normal func value	Commuters	Attraction Factor	Proportions	Commute %	Distribution
Canterbury 18	N	26.7	53	30.00	0.006	45	0.254	70%	0%	0%
	Y	37	62	36.00	0.002	45	0.111	30%		0%
							0.365			
Canterbury 19	N	25.3	54	28.00	0.007	16	0.117	70%	0%	0%
	Y	35.9	63	34.00	0.003	16	0.050	30%		0%
							0.167			
Canterbury 20	N	26.2	54	29.00	0.006	18	0.117	70%	0%	0%
	Y	39.7	68	35.00	0.003	18	0.051	30%		0%
							0.168			
Canterbury 21	N	24.9	55	27.00	0.009	7	0.063	70%	0%	0%
	Y	38.3	70	33.00	0.004	7	0.027	30%		0%
							0.090			
Canterbury 22	N	25.6	55	28.00	0.007	15	0.112	70%	0%	0%
	Y	39.2	69	34.00	0.003	15	0.048	30%		0%
							0.160			
Canterbury 23	N	27	52	31.00	0.005	13	0.062	72%	0%	0%
	Y	40.3	64	38.00	0.002	13	0.024	28%		0%
							0.086			
Dover	N	26	37	42.00	0.001	3,764	4.138	9%	16%	1%
	Y	24	58	25.00	0.011	3,764	43.236	91%		15%
							47.374			
Maidstone	N	-	0	-	0.000	231	0.000	0%	1%	0%
	Y	48.5	77	38.00	0.002	231	0.430	100%		1%
							0.430			
Rother	N	52.3	51	62.00	0.000	176	0.018	100%	1%	1%
	Y	-	0	-	0.000	176	0.000	0%		0%
							0.018			
Dartford	N	-	0	-	0.000	14	0.000	0%	0%	0%
	Y	85	80	64.00	0.000	14	0.001	100%		0%
							0.001			
Tonbridge and Malling	N	72.8	46	95.00	0.000	78	0.000	3%	0%	0%
	Y	74.7	75	60.00	0.000	78	0.010	97%		0%
							0.010			
Medway	N	-	0	-	0.000	160	0.000	0%	1%	0%
	Y	63	73	52.00	0.000	160	0.051	100%		1%
							0.051			
Tunbridge Wells	N	64	53	73.00	0.000	55	0.002	45%	0%	0%
	Y	83	70	71.00	0.000	55	0.002	55%		0%
							0.004			
Swale	N	43.3	49	53.00	0.000	206	0.058	38%	1%	0%
	Y	53.9	66	49.00	0.000	206	0.094	62%		1%
							0.152			
Thanet	N	-	0	-	0.000	473	0.000	0%	2%	0%
	Y	53	62	51.00	0.000	473	0.169	100%		2%
							0.169			
London	N	-	0	-	0.000	113	0.000	0%	0%	0%
	Y	116	70	100.00	0.000	113	0.000	100%		0%
							0.000			
Other UK	N	-	0	-	0.000	512	0.000	0%	2%	0%
	Y	388	90	259.00	0.000	512	0.000	100%		2%
							0.000			

APPENDIX F

Extent of VISUM model



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APPENDIX R Modelling Output Files

J1 – M20 Junction 10

LinSig Modelling Results

Otterpool_Report_Output

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2037 DS AM	2037 DS AM	Network Control Plan	08:00 - 09:00	96	23.6	14.03
2	2037 DS PM	2037 DS PM	Network Control Plan	16:45 - 17:45	96	-2.7	16.14
3	2044 8.5k DS AM	2044 8.5k DS AM	Network Control Plan	08:00 - 09:00	120	1.9	38.12
4	2044 8.5k DS PM	2044 8.5k DS PM	Network Control Plan	16:45 - 17:45	96	-2.6	35.21
5	2044 10k DS AM	2044 10k DS AM	Network Control Plan	08:00 - 09:00	120	1.0	37.42
6	2044 10k DS PM	2044 10k DS PM	Network Control Plan	16:45 - 17:45	96	-10.4	43.36

Scenario 1: '2037 DS AM' (FG1: '2037 DS AM', Plan 1: 'Network Control Plan')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**72.8%**	-	-
J36 A20 Ashford Rd/P2C	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**72.8%**	-	-
1/1+1/2	A20 Ashford Rd North Ahead	U	1	N/A	A		1	77	6	83	-	-	1442	1980:1980	1980	1039+941	72.8 : 72.8%	1442	1442
1/3	A20 Ashford Rd North Right	U	1	N/A	B		1	10	73	83	-	-	151	1899	1899	218	69.4%	151	151
2/2+2/1	A20 Ashford Rd South Ahead Left	U	1	N/A	C		1	54	13	67	-	-	1307	2120:1980	2120	1018+1029	63.8 : 63.8%	1307	1307
2/3	A20 Ashford Rd South Ahead	U	1	N/A	C		1	54	13	67	-	-	651	1980	1980	1134	57.4%	651	651
3/1	Access to zone P2C Left	U	1	N/A	D		1	20	76	0	-	-	8	1805	1805	395	2.0%	8	8
3/2	Access to zone P2C Right	U	1	N/A	G		1	7	89	0	-	-	11	1860	1860	155	7.1%	11	11
4/1	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	605	Inf	Inf	Inf	0.0%	605	605
4/2	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	653	Inf	Inf	Inf	0.0%	653	653
4/3	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	654	Inf	Inf	Inf	0.0%	654	654
5/1	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	768	Inf	Inf	Inf	0.0%	768	768
5/2	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	685	Inf	Inf	Inf	0.0%	685	685
6/1	Access to zone P2C Exit	U	N/A	N/A	-		-	-	-	-	-	-	205	Inf	Inf	Inf	0.0%	205	205
Ped Link: P1	Unnamed Ped Link	-	1	-	F		1	6	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	1	-	E		1	62	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P3	Unnamed Ped Link	-	1	-	I		0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P4	Unnamed Ped Link	-	1	-	H		1	24	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network	**0**	**0**	**0**	**10.0**	**4.0**	**0.0**	**14.0**	**-**	**1813.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**72.8%**	**17.4**	**-**
J36 A20 Ashford Rd/P2C	**0**	**0**	**0**	**10.0**	**4.0**	**0.0**	**14.0**	**-**	**1813.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**72.8%**	**17.4**	**-**
1/1+1/2	-	-	-	1.1	1.3	-	2.4 (1.3+1.1)	6.0 (6.1:5.9)	421.3	0.3	3.4	6.1	1.3	7.4	-	0.00	72.8 : 72.8%	3.2	-
1/3	-	-	-	1.7	1.1	-	2.8	67.1	144.7	1.0	3.5	3.9	1.1	5.0	-	0.00	69.4%	3.1	-
2/2+2/1	-	-	-	4.7	0.9	-	5.6 (2.7+2.8)	15.3 (15.1:15.5)	816.9	0.6	7.1	11.1	0.9	12.0	-	0.00	63.8 : 63.8%	7.0	-
2/3	-	-	-	2.4	0.7	-	3.0	16.8	413.7	0.6	7.1	11.0	0.7	11.7	-	0.00	57.4%	3.8	-
3/1	-	-	-	0.1	0.0	-	0.1	34.3	6.2	0.8	0.2	0.2	0.0	0.2	-	0.00	2.0%	0.1	-
3/2	-	-	-	0.1	0.0	-	0.2	53.3	10.1	0.9	0.3	0.3	0.0	0.3	-	0.00	7.1%	0.2	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P3	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 23.6 Total Delay for Signalled Lanes (pcuHr): 14.03 Cycle Time (s): 96
PRC Over All Lanes (%): 23.6 Total Delay Over All Lanes(pcuHr): 14.03

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	1442	151	1593
	B	1904	0	54	1958
	C	8	11	0	19
	Tot.	1912	1453	205	3570

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 2: '2037 DS PM' (FG2: '2037 DS PM', Plan 1: 'Network Control Plan')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**92.5%**	-	-
J36 A20 Ashford Rd/P2C	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**92.5%**	-	-
1/1+1/2	A20 Ashford Rd North Ahead	U	1	N/A	A		1	77	6	83	-	-	1831	1980:1980	1980	988+992	92.5 : 92.5%	1831	1831
1/3	A20 Ashford Rd North Right	U	1	N/A	B		1	8	75	83	-	-	10	1899	1899	178	5.6%	10	10
2/2+2/1	A20 Ashford Rd South Ahead Left	U	1	N/A	C		1	56	13	69	-	-	1089	2120:1980	2120	1050+999	53.1 : 53.1%	1089	1089
2/3	A20 Ashford Rd South Ahead	U	1	N/A	C		1	56	13	69	-	-	558	1980	1980	1176	47.5%	558	558
3/1	Access to zone P2C Left	U	1	N/A	D		1	18	78	0	-	-	155	1805	1805	357	43.4%	155	155
3/2	Access to zone P2C Right	U	1	N/A	G		1	7	89	0	-	-	53	1860	1860	155	34.2%	53	53
4/1	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	571	Inf	Inf	Inf	0.0%	571	571
4/2	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	610	Inf	Inf	Inf	0.0%	610	610
4/3	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	610	Inf	Inf	Inf	0.0%	610	610
5/1	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	967	Inf	Inf	Inf	0.0%	967	967
5/2	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	917	Inf	Inf	Inf	0.0%	917	917
6/1	Access to zone P2C Exit	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
Ped Link: P1	Unnamed Ped Link	-	1	-	F		1	6	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	1	-	E		1	64	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P3	Unnamed Ped Link	-	1	-	I		0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P4	Unnamed Ped Link	-	1	-	H		1	22	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network	**0**	**0**	**0**	**8.7**	**7.4**	**0.0**	**16.1**	**-**	**1733.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**92.5%**	**19.3**	**-**
J36 A20 Ashford Rd/P2C	**0**	**0**	**0**	**8.7**	**7.4**	**0.0**	**16.1**	**-**	**1733.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**92.5%**	**19.3**	**-**
1/1+1/2	-	-	-	1.6	5.7	-	7.3 (3.6+3.7)	14.4 (14.4:14.4)	629.4	0.3	4.1	8.4	5.7	14.1	-	0.00	92.5 : 92.5%	8.5	-
1/3	-	-	-	0.1	0.0	-	0.1	50.6	9.1	0.9	0.2	0.2	0.0	0.3	-	0.00	5.6%	0.2	-
2/2+2/1	-	-	-	3.3	0.6	-	3.8 (2.0+1.9)	12.7 (12.6:12.7)	595.4	0.5	5.7	8.1	0.6	8.6	-	0.00	53.1 : 53.1%	4.9	-
2/3	-	-	-	1.7	0.5	-	2.2	13.9	313.9	0.6	5.7	8.4	0.5	8.8	-	0.00	47.5%	2.7	-
3/1	-	-	-	1.5	0.4	-	1.8	42.7	135.6	0.9	3.2	3.6	0.4	4.0	-	0.00	43.4%	2.1	-
3/2	-	-	-	0.6	0.3	-	0.9	59.1	49.7	0.9	1.3	1.3	0.3	1.6	-	0.00	34.2%	1.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P3	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): -2.7 Total Delay for Signalled Lanes (pcuHr): 16.14 Cycle Time (s): 96
PRC Over All Lanes (%): -2.7 Total Delay Over All Lanes(pcuHr): 16.14

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	1831	10	1841
	B	1636	0	11	1647
	C	155	53	0	208
	Tot.	1791	1884	21	3696

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 3: '2044 8.5k DS AM' (FG3: '2044 8.5k DS AM', Plan 1: 'Network Control Plan')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**88.3%**	-	-
J36 A20 Ashford Rd/P2C	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**88.3%**	-	-
1/1+1/2	A20 Ashford Rd North Ahead	U	1	N/A	A		1	101	6	107	-	-	1486	1980:1980	1980	1683+0	88.3 : 0.0%	1486	1486
1/3	A20 Ashford Rd North Right	U	1	N/A	B		1	40	67	107	-	-	572	1899	1899	649	88.2%	572	572
2/2+2/1	A20 Ashford Rd South Ahead Left	U	1	N/A	C		1	48	13	61	-	-	1251	2120:1980	2120	736+808	81.0 : 81.0%	1251	1251
2/3	A20 Ashford Rd South Ahead	U	1	N/A	C		1	48	13	61	-	-	596	1980	1980	808	73.7%	596	596
3/1	Access to zone P2C Left	U	1	N/A	D		1	50	70	0	-	-	426	1805	1805	767	55.5%	426	426
3/2	Access to zone P2C Right	U	1	N/A	G		1	7	113	0	-	-	11	1860	1860	124	8.9%	11	11
4/1	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	684	Inf	Inf	Inf	0.0%	684	684
4/2	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	738	Inf	Inf	Inf	0.0%	738	738
4/3	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	738	Inf	Inf	Inf	0.0%	738	738
5/1	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	1497	Inf	Inf	Inf	0.0%	1497	1497
5/2	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	0	Inf	Inf	Inf	0.0%	0	0
6/1	Access to zone P2C Exit	U	N/A	N/A	-		-	-	-	-	-	-	685	Inf	Inf	Inf	0.0%	685	685
Ped Link: P1	Unnamed Ped Link	-	1	-	F		1	6	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	1	-	E		1	56	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P3	Unnamed Ped Link	-	1	-	I		0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P4	Unnamed Ped Link	-	1	-	H		1	54	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network	**0**	**0**	**0**	**26.9**	**11.2**	**0.0**	**38.1**	**-**	**3785.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**88.3%**	**45.0**	**-**
J36 A20 Ashford Rd/P2C	**0**	**0**	**0**	**26.9**	**11.2**	**0.0**	**38.1**	**-**	**3785.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**88.3%**	**45.0**	**-**
1/1+1/2	-	-	-	2.2	3.6	-	5.9 (5.9+0.0)	14.2 (14.2:0.0)	1349.8	0.9	6.6	29.7	3.6	33.4	-	0.00	88.3 : 0.0%	8.3	-
1/3	-	-	-	5.9	3.4	-	9.3	58.7	538.6	0.9	12.2	18.0	3.4	21.4	-	0.00	88.2%	10.3	-
2/2+2/1	-	-	-	10.5	2.1	-	12.7 (5.8+6.8)	36.4 (35.3:37.4)	1065.3	0.9	12.6	19.3	2.1	21.4	-	0.00	81.0 : 81.0%	14.6	-
2/3	-	-	-	5.0	1.4	-	6.4	38.4	501.6	0.8	11.4	16.7	1.4	18.1	-	0.00	73.7%	7.3	-
3/1	-	-	-	3.1	0.6	-	3.7	31.2	319.5	0.8	7.9	10.6	0.6	11.3	-	0.00	55.5%	4.3	-
3/2	-	-	-	0.2	0.0	-	0.2	68.6	10.3	0.9	0.3	0.3	0.0	0.4	-	0.00	8.9%	0.2	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P3	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 1.9 Total Delay for Signalled Lanes (pcuHr): 38.12 Cycle Time (s): 120
PRC Over All Lanes (%): 1.9 Total Delay Over All Lanes(pcuHr): 38.12

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	1486	572	2058
	B	1734	0	113	1847
	C	426	11	0	437
	Tot.	2160	1497	685	4342

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 4: '2044 8.5k DS PM' (FG4: '2044 8.5k DS PM', Plan 1: 'Network Control Plan')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**92.3%**	-	-
J36 A20 Ashford Rd/P2C	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**92.3%**	-	-
1/1+1/2	A20 Ashford Rd North Ahead	U	1	N/A	A		1	73	6	79	-	-	1828	1980:1980	1980	1005+975	92.3 : 92.3%	1828	1828
1/3	A20 Ashford Rd North Right	U	1	N/A	B		1	29	50	79	-	-	135	1899	1899	593	22.7%	135	135
2/2+2/1	A20 Ashford Rd South Ahead Left	U	1	N/A	C		1	31	13	44	-	-	994	2120:1980	2120	707+660	75.1 : 70.2%	994	994
2/3	A20 Ashford Rd South Ahead	U	1	N/A	C		1	31	13	44	-	-	531	1980	1980	660	80.5%	531	531
3/1	Access to zone P2C Left	U	1	N/A	D		1	43	53	0	-	-	725	1805	1805	827	87.6%	725	725
3/2	Access to zone P2C Right	U	1	N/A	G		1	11	85	0	-	-	155	1860	1860	232	66.7%	155	155
4/1	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	701	Inf	Inf	Inf	0.0%	701	701
4/2	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	773	Inf	Inf	Inf	0.0%	773	773
4/3	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	773	Inf	Inf	Inf	0.0%	773	773
5/1	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	1083	Inf	Inf	Inf	0.0%	1083	1083
5/2	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	900	Inf	Inf	Inf	0.0%	900	900
6/1	Access to zone P2C Exit	U	N/A	N/A	-		-	-	-	-	-	-	138	Inf	Inf	Inf	0.0%	138	138
Ped Link: P1	Unnamed Ped Link	-	1	-	F		1	10	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	1	-	E		1	39	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P3	Unnamed Ped Link	-	1	-	I		0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P4	Unnamed Ped Link	-	1	-	H		1	47	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network	**0**	**0**	**0**	**21.8**	**13.4**	**0.0**	**35.2**	**-**	**3019.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**92.3%**	**40.7**	**-**
J36 A20 Ashford Rd/P2C	**0**	**0**	**0**	**21.8**	**13.4**	**0.0**	**35.2**	**-**	**3019.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**92.3%**	**40.7**	**-**
1/1+1/2	-	-	-	2.4	5.6	-	8.0 (4.1+3.9)	15.7 (15.8:15.7)	771.3	0.4	5.2	10.6	5.6	16.2	-	0.00	92.3 : 92.3%	9.4	-
1/3	-	-	-	0.9	0.1	-	1.1	28.4	99.8	0.7	2.4	2.7	0.1	2.8	-	0.00	22.7%	1.2	-
2/2+2/1	-	-	-	7.8	1.3	-	9.1 (4.9+4.2)	33.0 (33.3:32.6)	870.5	0.9	9.1	12.5	1.3	13.9	-	0.00	75.1 : 70.2%	10.7	-
2/3	-	-	-	4.3	2.0	-	6.3	42.7	481.2	0.9	9.1	12.8	2.0	14.8	-	0.00	80.5%	7.2	-
3/1	-	-	-	4.7	3.3	-	8.1	40.1	649.5	0.9	10.1	17.3	3.3	20.6	-	0.00	87.6%	9.3	-
3/2	-	-	-	1.7	1.0	-	2.7	62.8	146.9	0.9	3.5	3.9	1.0	4.9	-	0.00	66.7%	3.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P3	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): -2.6 Total Delay for Signalled Lanes (pcuHr): 35.21 Cycle Time (s): 96
PRC Over All Lanes (%): -2.6 Total Delay Over All Lanes(pcuHr): 35.21

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	1828	135	1963
	B	1522	0	3	1525
	C	725	155	0	880
	Tot.	2247	1983	138	4368

Traffic Flows, Difference

Difference :

	Destination				
Origin		A	B	C	Tot.
	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 5: '2044 10k DS AM' (FG5: '2044 10k DS AM', Plan 1: 'Network Control Plan')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**89.1%**	-	-
J36 A20 Ashford Rd/P2C	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**89.1%**	-	-
1/1+1/2	A20 Ashford Rd North Ahead	U	1	N/A	A		1	101	6	107	-	-	1469	1980:1980	1980	991+989	74.2 : 74.2%	1469	1469
1/3	A20 Ashford Rd North Right	U	1	N/A	B		1	35	72	107	-	-	503	1899	1899	570	88.3%	503	503
2/2+2/1	A20 Ashford Rd South Ahead Left	U	1	N/A	C		1	53	13	66	-	-	1519	2120:1980	2120	881+823	89.1 : 89.1%	1519	1519
2/3	A20 Ashford Rd South Ahead	U	1	N/A	C		1	53	13	66	-	-	760	1980	1980	891	85.3%	760	760
3/1	Access to zone P2C Left	U	1	N/A	D		1	45	75	0	-	-	33	1805	1805	692	4.8%	33	33
3/2	Access to zone P2C Right	U	1	N/A	G		1	7	113	0	-	-	37	1860	1860	124	29.8%	37	37
4/1	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	565	Inf	Inf	Inf	0.0%	565	565
4/2	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	796	Inf	Inf	Inf	0.0%	796	796
4/3	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	771	Inf	Inf	Inf	0.0%	771	771
5/1	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	772	Inf	Inf	Inf	0.0%	772	772
5/2	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	734	Inf	Inf	Inf	0.0%	734	734
6/1	Access to zone P2C Exit	U	N/A	N/A	-		-	-	-	-	-	-	683	Inf	Inf	Inf	0.0%	683	683
Ped Link: P1	Unnamed Ped Link	-	1	-	F		1	6	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	1	-	E		1	61	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P3	Unnamed Ped Link	-	1	-	I		0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P4	Unnamed Ped Link	-	1	-	H		1	49	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network	**0**	**0**	**0**	**25.6**	**11.8**	**0.0**	**37.4**	**-**	**2870.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**89.1%**	**42.7**	**-**
J36 A20 Ashford Rd/P2C	**0**	**0**	**0**	**25.6**	**11.8**	**0.0**	**37.4**	**-**	**2870.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**89.1%**	**42.7**	**-**
1/1+1/2	-	-	-	0.9	1.4	-	2.3 (1.2+1.2)	5.7 (5.7:5.6)	342.8	0.2	3.3	5.7	1.4	7.1	-	0.00	74.2 : 74.2%	2.9	-
1/3	-	-	-	5.6	3.4	-	9.0	64.5	477.8	1.0	11.5	15.9	3.4	19.3	-	0.00	88.3%	9.9	-
2/2+2/1	-	-	-	12.2	3.9	-	16.1 (8.3+7.8)	38.2 (38.2:38.2)	1316.5	0.9	14.0	22.7	3.9	26.6	-	0.00	89.1 : 89.1%	18.5	-
2/3	-	-	-	6.2	2.8	-	9.0	42.6	677.7	0.9	13.5	22.6	2.8	25.4	-	0.00	85.3%	10.2	-
3/1	-	-	-	0.2	0.0	-	0.2	26.0	20.6	0.6	0.7	0.7	0.0	0.7	-	0.00	4.8%	0.3	-
3/2	-	-	-	0.5	0.2	-	0.8	74.0	35.2	1.0	1.1	1.2	0.2	1.4	-	0.00	29.8%	0.8	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P3	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 1.0 Total Delay for Signalled Lanes (pcuHr): 37.42 Cycle Time (s): 120
PRC Over All Lanes (%): 1.0 Total Delay Over All Lanes(pcuHr): 37.42

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	1469	503	1972
	B	2099	0	180	2279
	C	33	37	0	70
	Tot.	2132	1506	683	4321

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 6: '2044 10k DS PM' (FG6: '2044 10k DS PM', Plan 1: 'Network Control Plan')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**99.4%**	**-**	**-**
J36 A20 Ashford Rd/P2C	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**99.4%**	**-**	**-**
1/1+1/2	A20 Ashford Rd North Ahead	U	1	N/A	A		1	72	6	78	-	-	1968	1980:1980	1980	993+987	99.4 : 99.4%	1968	1968
1/3	A20 Ashford Rd North Right	U	1	N/A	B		1	17	61	78	-	-	37	1899	1899	356	10.4%	37	37
2/2+2/1	A20 Ashford Rd South Ahead Left	U	1	N/A	C		1	42	13	55	-	-	1132	2120:1980	2120	950+887	61.1 : 62.2%	1132	1132
2/3	A20 Ashford Rd South Ahead	U	1	N/A	C		1	42	13	55	-	-	579	1980	1980	887	65.3%	579	579
3/1	Access to zone P2C Left	U	1	N/A	D		1	32	64	0	-	-	507	1805	1805	620	81.7%	507	507
3/2	Access to zone P2C Right	U	1	N/A	G		1	12	84	0	-	-	173	1860	1860	252	68.7%	173	173
4/1	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	684	Inf	Inf	Inf	0.0%	684	684
4/2	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	749	Inf	Inf	Inf	0.0%	749	749
4/3	A20 Ashford Rd North Exit	U	N/A	N/A	-		-	-	-	-	-	-	748	Inf	Inf	Inf	0.0%	748	748
5/1	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	1160	Inf	Inf	Inf	0.0%	1160	1160
5/2	A20 Ashford Rd South Exit	U	N/A	N/A	-		-	-	-	-	-	-	981	Inf	Inf	Inf	0.0%	981	981
6/1	Access to zone P2C Exit	U	N/A	N/A	-		-	-	-	-	-	-	74	Inf	Inf	Inf	0.0%	74	74
Ped Link: P1	Unnamed Ped Link	-	1	-	F		1	11	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	1	-	E		1	50	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P3	Unnamed Ped Link	-	1	-	I		0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P4	Unnamed Ped Link	-	1	-	H		1	36	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network	**0**	**0**	**0**	**19.0**	**24.4**	**0.0**	**43.4**	**-**	**2877.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**99.4%**	**48.6**	**-**
J36 A20 Ashford Rd/P2C	**0**	**0**	**0**	**19.0**	**24.4**	**0.0**	**43.4**	**-**	**2877.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**99.4%**	**48.6**	**-**
1/1+1/2	-	-	-	3.0	19.4	-	22.4 (11.2+11.2)	40.9 (41.0:40.9)	922.5	0.5	5.8	12.3	19.4	31.7	-	0.00	99.4 : 99.4%	24.1	-
1/3	-	-	-	0.3	0.1	-	0.4	38.0	30.4	0.8	0.8	0.8	0.1	0.9	-	0.00	10.4%	0.4	-
2/2+2/1	-	-	-	6.4	0.8	-	7.2 (3.7+3.5)	22.8 (22.7:22.8)	854.7	0.8	8.2	11.6	0.8	12.4	-	0.00	61.1 : 62.2%	8.7	-
2/3	-	-	-	3.3	0.9	-	4.3	26.5	446.3	0.8	8.2	11.9	0.9	12.8	-	0.00	65.3%	5.1	-
3/1	-	-	-	4.0	2.2	-	6.2	44.0	459.5	0.9	8.6	12.3	2.2	14.4	-	0.00	81.7%	7.0	-
3/2	-	-	-	1.9	1.1	-	3.0	61.8	164.0	0.9	3.9	4.4	1.1	5.4	-	0.00	68.7%	3.3	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P3	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): -10.4 Total Delay for Signalled Lanes (pcuHr): 43.36 Cycle Time (s): 96
PRC Over All Lanes (%): -10.4 Total Delay Over All Lanes(pcuHr): 43.36

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	1968	37	2005
	B	1674	0	37	1711
	C	507	173	0	680
	Tot.	2181	2141	74	4396

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Junctions 9

ARCADY 9 - Roundabout Module

Filename: J2_M20-J11-B2048-A20 V2.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J2 M20-J11-A20
Report generation date: 11/11/2021 15:52:54

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Arm A	D1	0.5	3.02	0.36	A	D2	0.5	3.62	0.35	A
Arm B		0.8	2.63	0.44	A		0.6	2.25	0.36	A
Arm C		0.2	4.02	0.15	A		0.2	3.40	0.13	A
Arm D		0.4	3.64	0.29	A		0.9	4.57	0.47	A
Arm E		0.3	3.36	0.25	A		0.5	4.29	0.32	A
	2037 DM									
Arm A	D3	1.4	5.75	0.58	A	D4	1.4	6.52	0.59	A
Arm B		1.4	3.66	0.59	A		1.0	3.03	0.51	A
Arm C		0.2	5.02	0.19	A		0.2	4.19	0.16	A
Arm D		1.6	7.67	0.61	A		2.7	10.69	0.74	B
Arm E		0.7	5.38	0.42	A		1.3	8.45	0.57	A
	2037 DS									
Arm A	D5	6.4	19.82	0.88	C	D6	15.1	46.36	0.96	E
Arm B		12.6	20.64	0.94	C		5.1	9.07	0.84	A
Arm C		0.5	10.10	0.31	B		0.3	7.14	0.24	A
Arm D		11.5	52.51	0.95	F		86.8	244.90	1.17	F
Arm E		1.7	12.42	0.63	B		5.0	32.26	0.85	D
	2044 8.5k DM									
Arm A	D7	1.5	6.20	0.60	A	D8	1.6	7.24	0.62	A
Arm B		1.7	4.08	0.63	A		1.1	3.22	0.53	A
Arm C		0.3	5.38	0.20	A		0.2	4.36	0.17	A
Arm D		1.7	8.40	0.64	A		3.4	12.68	0.78	B

Arm E		0.8	5.70	0.44	A		1.5	9.39	0.60	A
	2044 8.5k DS									
Arm A	D9	70.8	146.96	1.08	F	D10	19.1	50.48	0.98	F
Arm B		59.8	76.21	1.03	F		33.1	47.98	1.00	E
Arm C		0.6	12.48	0.37	B		0.5	10.57	0.33	B
Arm D		65.8	231.89	1.16	F		193.4	698.91	1.51	F
Arm E		2.7	18.85	0.74	C		11.5	71.90	0.96	F
	2044 10k DM									
Arm A	D11	1.5	6.09	0.59	A	D12	1.5	6.79	0.60	A
Arm B		1.6	3.99	0.62	A		1.1	3.16	0.53	A
Arm C		0.2	5.31	0.19	A		0.2	4.32	0.16	A
Arm D		1.7	8.27	0.63	A		3.0	11.61	0.76	B
Arm E		0.8	5.61	0.43	A		1.4	8.89	0.58	A
	2044 10k DS									
Arm A	D13	69.4	142.69	1.08	F	D14	28.2	68.78	1.00	F
Arm B		76.0	92.69	1.05	F		41.3	56.96	1.01	F
Arm C		0.6	12.68	0.37	B		0.5	10.78	0.33	B
Arm D		76.3	294.35	1.19	F		202.1	732.77	1.52	F
Arm E		2.7	19.51	0.74	C		12.2	76.52	0.96	F

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

File summary

File Description

Title	J2 Otterpool Park_Base Model AM PEAK
Location	M20 J11, B2068-A20
Site number	
Date	27/06/2017
Version	
Status	Base Model
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	ONE HOUR	16:30	18:00	15	✓
D3	2037 DM	AM	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	ONE HOUR	16:30	18:00	15	✓
D5	2037 DS	AM	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	ONE HOUR	16:30	18:00	15	✓
D7	2044 8.5k DM	AM	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	ONE HOUR	16:30	18:00	15	✓
D9	2044 8.5k DS	AM	ONE HOUR	07:45	09:15	15	✓

D10	2044 8.5k DS	PM	ONE HOUR	16:30	18:00	15	✓
D11	2044 10k DM	AM	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	ONE HOUR	16:30	18:00	15	✓
D13	2044 10k DS	AM	ONE HOUR	07:45	09:15	15	✓
D14	2044 10k DS	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		A, B, C, D, E	3.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	M20 OffSlip Westbound	
B	A20 Ashford Road	
C	Services	
D	M20 OffSlip Eastbound	
E	B2068	

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
A	5.38	7.20	28.0	64.6	226.8	21.0	
B	7.30	7.30	0.0	41.6	223.0	23.0	
C	3.98	7.14	27.1	28.9	223.0	41.0	
D	5.53	6.09	25.5	49.2	226.0	18.0	
E	3.08	6.63	25.5	41.4	223.0	31.0	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.881	2573
B	1.078	2993
C	0.523	2043
D	0.746	2212
E	0.625	2033

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	2018	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	596	100.000
B		ONE HOUR	✓	983	100.000
C		ONE HOUR	✓	144	100.000
D		ONE HOUR	✓	373	100.000
E		ONE HOUR	✓	326	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	5	434	49	1	107
	B	305	55	37	403	183
	C	47	17	0	72	8
	D	1	266	26	1	79
	E	132	109	7	78	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	5	31	0	7
	B	12	9	3	6	2
	C	26	0	0	36	13
	D	100	9	42	0	9
	E	2	4	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.36	3.02	0.5	A	547	820
B	0.44	2.63	0.8	A	902	1353
C	0.15	4.02	0.2	A	132	198
D	0.29	3.64	0.4	A	342	513
E	0.25	3.36	0.3	A	299	449

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	449	112	420	2022	0.222	448	368	0.0	0.3	2.286	A
B	740	185	206	2558	0.289	738	661	0.0	0.4	1.977	A
C	108	27	855	1230	0.088	108	89	0.0	0.1	3.209	A
D	281	70	546	1585	0.177	280	417	0.0	0.2	2.756	A
E	245	61	543	1601	0.153	245	283	0.0	0.2	2.652	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	536	134	502	1948	0.275	535	440	0.3	0.4	2.548	A
B	884	221	246	2512	0.352	883	791	0.4	0.5	2.210	A
C	129	32	1022	1156	0.112	129	107	0.1	0.1	3.505	A
D	335	84	653	1507	0.222	335	499	0.2	0.3	3.071	A
E	293	73	649	1529	0.192	293	339	0.2	0.2	2.912	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	656	164	615	1848	0.355	656	539	0.4	0.5	3.017	A
B	1082	271	301	2449	0.442	1081	969	0.5	0.8	2.632	A
C	159	40	1252	1055	0.150	158	131	0.1	0.2	4.012	A
D	411	103	800	1400	0.293	410	610	0.3	0.4	3.633	A
E	359	90	795	1430	0.251	359	415	0.2	0.3	3.361	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	656	164	615	1848	0.355	656	539	0.5	0.5	3.021	A
B	1082	271	302	2448	0.442	1082	970	0.8	0.8	2.634	A
C	159	40	1253	1055	0.150	159	131	0.2	0.2	4.016	A
D	411	103	800	1400	0.293	411	611	0.4	0.4	3.638	A
E	359	90	796	1429	0.251	359	415	0.3	0.3	3.363	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	536	134	503	1947	0.275	536	441	0.5	0.4	2.552	A
B	884	221	247	2511	0.352	885	793	0.8	0.5	2.216	A
C	129	32	1024	1155	0.112	130	107	0.2	0.1	3.509	A
D	335	84	654	1506	0.223	336	500	0.4	0.3	3.078	A
E	293	73	651	1528	0.192	293	339	0.3	0.2	2.918	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	449	112	421	2020	0.222	449	369	0.4	0.3	2.293	A
B	740	185	206	2557	0.289	741	664	0.5	0.4	1.982	A
C	108	27	857	1229	0.088	109	90	0.1	0.1	3.213	A
D	281	70	548	1584	0.177	281	418	0.3	0.2	2.765	A
E	245	61	545	1600	0.153	246	284	0.2	0.2	2.657	A

2018, 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	Large Roundabout		A, B, C, D, E	3.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

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	2018	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	482	100.000
B		ONE HOUR	✓	807	100.000
C		ONE HOUR	✓	145	100.000
D		ONE HOUR	✓	636	100.000
E		ONE HOUR	✓	363	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	5	325	57	0	95
	B	353	63	38	237	116
	C	48	27	0	57	13
	D	1	475	52	9	99
	E	110	159	10	84	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	20	7	40	0	0
	B	3	0	8	4	0
	C	33	7	0	21	8
	D	0	3	52	0	5
	E	3	1	20	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.35	3.62	0.5	A	442	663
B	0.36	2.25	0.6	A	741	1111
C	0.13	3.40	0.2	A	133	200
D	0.47	4.57	0.9	A	584	875
E	0.32	4.29	0.5	A	333	500

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	363	91	660	1786	0.203	362	388	0.0	0.3	2.526	A
B	608	152	234	2620	0.232	606	787	0.0	0.3	1.788	A
C	109	27	723	1366	0.080	109	118	0.0	0.1	2.864	A
D	479	120	541	1670	0.287	477	291	0.0	0.4	3.013	A
E	273	68	776	1473	0.186	272	243	0.0	0.2	2.997	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	433	108	789	1676	0.259	433	464	0.3	0.3	2.895	A
B	725	181	280	2563	0.283	725	942	0.3	0.4	1.959	A
C	130	33	864	1303	0.100	130	141	0.1	0.1	3.068	A
D	572	143	647	1593	0.359	571	348	0.4	0.6	3.519	A
E	326	82	928	1374	0.237	326	290	0.2	0.3	3.434	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	531	133	966	1526	0.348	530	569	0.3	0.5	3.613	A
B	889	222	343	2485	0.358	888	1153	0.4	0.6	2.252	A
C	160	40	1058	1217	0.131	159	173	0.1	0.2	3.402	A
D	700	175	792	1488	0.471	699	426	0.6	0.9	4.553	A
E	400	100	1136	1239	0.323	399	355	0.3	0.5	4.285	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	531	133	968	1525	0.348	531	569	0.5	0.5	3.621	A
B	889	222	344	2485	0.358	889	1155	0.6	0.6	2.255	A
C	160	40	1059	1217	0.131	160	173	0.2	0.2	3.403	A
D	700	175	793	1488	0.471	700	426	0.9	0.9	4.570	A
E	400	100	1137	1238	0.323	400	356	0.5	0.5	4.293	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	433	108	792	1674	0.259	434	465	0.5	0.4	2.904	A
B	725	181	281	2562	0.283	726	945	0.6	0.4	1.962	A
C	130	33	866	1303	0.100	131	141	0.2	0.1	3.071	A
D	572	143	648	1593	0.359	573	348	0.9	0.6	3.534	A
E	326	82	930	1373	0.238	327	291	0.5	0.3	3.446	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	363	91	663	1784	0.203	363	390	0.4	0.3	2.536	A
B	608	152	235	2619	0.232	608	791	0.4	0.3	1.792	A
C	109	27	725	1365	0.080	109	118	0.1	0.1	2.866	A
D	479	120	542	1669	0.287	479	292	0.6	0.4	3.029	A
E	273	68	778	1471	0.186	274	243	0.3	0.2	3.008	A

2037 DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		A, B, C, D, E	5.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2037 DM	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	781	100.000
B		ONE HOUR	✓	1292	100.000
C		ONE HOUR	✓	148	100.000
D		ONE HOUR	✓	668	100.000
E		ONE HOUR	✓	433	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	623	35	0	123
	B	458	67	39	471	257
	C	39	26	0	77	6
	D	0	497	40	0	131
	E	128	184	8	113	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	5	26	0	5
	B	5	1	5	13	0
	C	26	12	0	36	17
	D	0	13	45	0	9
	E	2	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.58	5.75	1.4	A	717	1075
B	0.59	3.66	1.4	A	1186	1778
C	0.19	5.02	0.2	A	136	204
D	0.61	7.67	1.6	A	613	919
E	0.42	5.38	0.7	A	397	596

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	588	147	701	1787	0.329	586	469	0.0	0.5	2.993	A
B	973	243	239	2532	0.384	970	1048	0.0	0.6	2.300	A
C	111	28	1118	1106	0.101	111	92	0.0	0.1	3.615	A
D	503	126	733	1438	0.350	501	496	0.0	0.5	3.833	A
E	326	81	846	1412	0.231	325	388	0.0	0.3	3.310	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	702	176	839	1660	0.423	701	561	0.5	0.7	3.751	A
B	1161	290	286	2479	0.469	1160	1254	0.6	0.9	2.731	A
C	133	33	1337	1011	0.132	133	110	0.1	0.2	4.100	A
D	601	150	877	1340	0.448	599	594	0.5	0.8	4.856	A
E	389	97	1012	1300	0.300	389	464	0.3	0.4	3.951	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	860	215	1026	1489	0.578	857	687	0.7	1.3	5.679	A
B	1423	356	350	2406	0.591	1420	1533	0.9	1.4	3.644	A
C	163	41	1637	881	0.185	163	134	0.2	0.2	5.007	A
D	735	184	1073	1206	0.610	733	727	0.8	1.5	7.561	A
E	477	119	1237	1148	0.415	476	568	0.4	0.7	5.349	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	860	215	1029	1486	0.579	860	688	1.3	1.4	5.751	A
B	1423	356	351	2405	0.591	1422	1538	1.4	1.4	3.662	A
C	163	41	1639	880	0.185	163	134	0.2	0.2	5.020	A
D	735	184	1075	1204	0.611	735	728	1.5	1.6	7.671	A
E	477	119	1241	1145	0.416	477	569	0.7	0.7	5.384	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	702	176	844	1656	0.424	705	563	1.4	0.7	3.796	A
B	1161	290	288	2477	0.469	1164	1261	1.4	0.9	2.744	A
C	133	33	1341	1009	0.132	133	110	0.2	0.2	4.112	A
D	601	150	879	1338	0.449	603	595	1.6	0.8	4.922	A
E	389	97	1017	1296	0.300	390	466	0.7	0.4	3.978	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	588	147	705	1783	0.330	589	471	0.7	0.5	3.019	A
B	973	243	241	2531	0.384	974	1054	0.9	0.6	2.314	A
C	111	28	1122	1104	0.101	112	92	0.2	0.1	3.626	A
D	503	126	736	1436	0.350	504	498	0.8	0.5	3.869	A
E	326	81	850	1409	0.231	327	390	0.4	0.3	3.327	A

2037 DM, 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	Large Roundabout		A, B, C, D, E	6.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2037 DM	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	721	100.000
B		ONE HOUR	✓	1106	100.000
C		ONE HOUR	✓	146	100.000
D		ONE HOUR	✓	852	100.000
E		ONE HOUR	✓	513	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	545	47	0	129
	B	577	39	36	286	168
	C	36	24	0	73	13
	D	0	661	60	0	131
	E	160	219	10	124	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	2	32	0	0
	B	2	0	3	8	0
	C	22	4	0	33	8
	D	0	5	60	0	4
	E	1	0	20	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.59	6.52	1.4	A	662	992
B	0.51	3.03	1.0	A	1015	1522
C	0.16	4.19	0.2	A	134	201
D	0.74	10.69	2.7	B	782	1173
E	0.57	8.45	1.3	A	471	706

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	543	136	852	1709	0.318	541	580	0.0	0.5	3.076	A
B	833	208	277	2563	0.325	831	1116	0.0	0.5	2.076	A
C	110	27	993	1223	0.090	110	115	0.0	0.1	3.234	A
D	641	160	740	1516	0.423	639	363	0.0	0.7	4.091	A
E	386	97	1048	1311	0.295	385	331	0.0	0.4	3.880	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	648	162	1020	1557	0.416	647	694	0.5	0.7	3.954	A
B	994	249	332	2497	0.398	994	1335	0.5	0.7	2.392	A
C	131	33	1188	1138	0.115	131	137	0.1	0.1	3.576	A
D	766	191	886	1414	0.542	764	434	0.7	1.2	5.526	A
E	461	115	1254	1176	0.392	460	396	0.4	0.6	5.022	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	794	198	1245	1352	0.587	791	849	0.7	1.4	6.384	A
B	1218	304	406	2408	0.506	1216	1630	0.7	1.0	3.015	A
C	161	40	1454	1021	0.157	161	168	0.1	0.2	4.180	A
D	938	235	1084	1275	0.736	932	531	1.2	2.7	10.320	B
E	565	141	1532	995	0.568	562	484	0.6	1.3	8.277	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	794	198	1252	1346	0.590	794	851	1.4	1.4	6.516	A
B	1218	304	407	2406	0.506	1218	1638	1.0	1.0	3.028	A
C	161	40	1457	1020	0.158	161	168	0.2	0.2	4.187	A
D	938	235	1086	1274	0.736	938	532	2.7	2.7	10.691	B
E	565	141	1538	991	0.570	565	485	1.3	1.3	8.445	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	648	162	1029	1548	0.419	651	697	1.4	0.7	4.024	A
B	994	249	334	2494	0.399	996	1346	1.0	0.7	2.403	A
C	131	33	1192	1136	0.116	131	138	0.2	0.1	3.583	A
D	766	191	888	1412	0.542	772	435	2.7	1.2	5.676	A
E	461	115	1262	1171	0.394	464	398	1.3	0.7	5.109	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	543	136	858	1704	0.319	544	583	0.7	0.5	3.108	A
B	833	208	279	2561	0.325	833	1123	0.7	0.5	2.085	A
C	110	27	997	1221	0.090	110	115	0.1	0.1	3.239	A
D	641	160	743	1514	0.424	643	364	1.2	0.7	4.143	A
E	386	97	1054	1307	0.296	387	333	0.7	0.4	3.918	A

2037 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		A, B, C, D, E	24.74	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 DS	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1120	100.000
B		ONE HOUR	✓	2130	100.000
C		ONE HOUR	✓	148	100.000
D		ONE HOUR	✓	760	100.000
E		ONE HOUR	✓	451	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	962	35	0	123
	B	908	92	38	817	275
	C	39	25	0	78	6
	D	0	585	40	0	135
	E	128	200	8	115	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	4	26	0	5
	B	3	1	3	3	0
	C	26	12	0	36	17
	D	0	8	45	0	9
	E	2	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.88	19.82	6.4	C	1028	1542
B	0.94	20.64	12.6	C	1955	2932
C	0.31	10.10	0.5	B	136	204
D	0.95	52.51	11.5	F	697	1046
E	0.63	12.42	1.7	B	414	621

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	843	211	797	1736	0.486	839	806	0.0	0.9	3.998	A
B	1604	401	241	2635	0.609	1597	1396	0.0	1.5	3.452	A
C	111	28	1747	859	0.130	111	91	0.0	0.1	4.806	A
D	572	143	1101	1239	0.462	569	757	0.0	0.8	5.347	A
E	340	85	1266	1162	0.292	338	404	0.0	0.4	4.358	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1007	252	954	1595	0.631	1004	964	0.9	1.7	6.059	A
B	1915	479	288	2579	0.743	1910	1670	1.5	2.8	5.339	A
C	133	33	2089	716	0.186	133	108	0.1	0.2	6.171	A
D	683	171	1316	1088	0.628	680	906	0.8	1.6	8.753	A
E	405	101	1513	1002	0.405	404	483	0.4	0.7	6.013	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1233	308	1145	1423	0.867	1217	1168	1.7	5.7	16.354	C
B	2345	586	349	2507	0.935	2312	2013	2.8	11.2	16.240	C
C	163	41	2530	532	0.307	162	131	0.2	0.4	9.720	A
D	837	209	1594	894	0.936	808	1098	1.6	8.8	34.518	D
E	497	124	1820	803	0.618	493	582	0.7	1.6	11.469	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1233	308	1163	1406	0.877	1230	1181	5.7	6.4	19.819	C
B	2345	586	352	2502	0.937	2339	2041	11.2	12.6	20.636	C
C	163	41	2559	519	0.314	163	132	0.4	0.5	10.097	B
D	837	209	1612	881	0.950	826	1110	8.8	11.5	52.512	F
E	497	124	1848	785	0.632	496	590	1.6	1.7	12.420	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1007	252	994	1558	0.646	1025	984	6.4	1.9	6.978	A
B	1915	479	294	2570	0.745	1953	1725	12.6	3.0	6.189	A
C	133	33	2136	696	0.191	134	112	0.5	0.2	6.410	A
D	683	171	1345	1068	0.640	722	924	11.5	1.8	11.547	B
E	405	101	1569	965	0.420	409	498	1.7	0.7	6.517	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	843	211	806	1728	0.488	847	812	1.9	1.0	4.100	A
B	1604	401	243	2632	0.609	1609	1410	3.0	1.6	3.541	A
C	111	28	1760	853	0.131	112	92	0.2	0.2	4.857	A
D	572	143	1109	1233	0.464	576	763	1.8	0.9	5.512	A
E	340	85	1278	1155	0.294	341	408	0.7	0.4	4.432	A

2037 DS, 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	Large Roundabout		A, B, C, D, E	73.30	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 DS	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1122	100.000
B		ONE HOUR	✓	1875	100.000
C		ONE HOUR	✓	147	100.000
D		ONE HOUR	✓	1037	100.000
E		ONE HOUR	✓	534	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	946	47	0	129
	B	955	64	36	633	187
	C	36	24	0	74	13
	D	0	846	60	0	131
	E	160	239	10	125	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	2	32	0	0
	B	2	0	3	2	0
	C	22	4	0	32	8
	D	0	2	60	0	4
	E	1	0	20	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.96	46.36	15.1	E	1030	1544
B	0.84	9.07	5.1	A	1721	2581
C	0.24	7.14	0.3	A	135	202
D	1.17	244.90	86.8	F	952	1427
E	0.85	32.26	5.0	D	490	735

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	845	211	1023	1583	0.534	840	863	0.0	1.1	4.819	A
B	1412	353	278	2600	0.543	1407	1586	0.0	1.2	3.003	A
C	111	28	1570	983	0.113	110	115	0.0	0.1	4.124	A
D	781	195	1056	1333	0.585	775	624	0.0	1.4	6.387	A
E	402	101	1487	1046	0.384	400	345	0.0	0.6	5.547	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1009	252	1221	1406	0.717	1003	1032	1.1	2.5	8.820	A
B	1686	421	332	2534	0.665	1682	1892	1.2	2.0	4.213	A
C	132	33	1877	850	0.156	132	137	0.1	0.2	5.015	A
D	932	233	1263	1184	0.787	924	746	1.4	3.5	13.413	B
E	480	120	1775	862	0.557	478	412	0.6	1.2	9.313	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1235	309	1349	1293	0.955	1199	1257	2.5	11.6	30.550	D
B	2064	516	390	2466	0.837	2053	2158	2.0	4.9	8.480	A
C	162	40	2286	673	0.241	161	157	0.2	0.3	7.032	A
D	1142	285	1538	986	1.158	972	909	3.5	45.8	103.345	F
E	588	147	2031	700	0.840	575	480	1.2	4.4	26.560	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1235	309	1361	1282	0.964	1221	1266	11.6	15.1	46.364	E
B	2064	516	396	2459	0.840	2064	2186	4.9	5.1	9.071	A
C	162	40	2302	666	0.243	162	158	0.3	0.3	7.141	A
D	1142	285	1548	979	1.166	978	915	45.8	86.8	244.897	F
E	588	147	2042	693	0.848	586	484	4.4	5.0	32.258	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1009	252	1438	1210	0.834	1047	1044	15.1	5.6	25.530	D
B	1686	421	356	2499	0.675	1697	2129	5.1	2.1	4.557	A
C	132	33	1900	840	0.157	133	153	0.3	0.2	5.095	A
D	932	233	1278	1174	0.794	1160	755	86.8	29.8	183.555	F
E	480	120	1990	722	0.665	492	448	5.0	2.1	16.306	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	845	211	1133	1484	0.569	862	870	5.6	1.3	5.943	A
B	1412	353	290	2582	0.547	1415	1705	2.1	1.2	3.095	A
C	111	28	1582	977	0.113	111	123	0.2	0.1	4.156	A
D	781	195	1064	1328	0.588	894	629	29.8	1.5	10.828	B
E	402	101	1596	976	0.412	407	363	2.1	0.7	6.395	A

2044 8.5k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		A, B, C, D, E	5.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2044 8.5k DM	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	796	100.000
B		ONE HOUR	✓	1372	100.000
C		ONE HOUR	✓	153	100.000
D		ONE HOUR	✓	684	100.000
E		ONE HOUR	✓	445	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	634	36	0	126
	B	467	68	40	536	261
	C	40	26	0	81	6
	D	0	509	40	0	135
	E	131	186	8	120	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	5	25	0	6
	B	5	1	5	12	0
	C	25	12	0	36	17
	D	0	14	45	0	10
	E	2	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.60	6.20	1.5	A	730	1096
B	0.63	4.08	1.7	A	1259	1888
C	0.20	5.38	0.3	A	140	211
D	0.64	8.40	1.7	A	628	941
E	0.44	5.70	0.8	A	408	613

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	599	150	718	1766	0.339	597	479	0.0	0.5	3.075	A
B	1033	258	248	2525	0.409	1030	1067	0.0	0.7	2.404	A
C	115	29	1185	1078	0.107	115	93	0.0	0.1	3.736	A
D	515	129	746	1417	0.363	513	553	0.0	0.6	3.971	A
E	335	84	863	1394	0.240	334	396	0.0	0.3	3.391	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	716	179	859	1636	0.438	715	573	0.5	0.8	3.905	A
B	1233	308	296	2469	0.500	1232	1277	0.7	1.0	2.907	A
C	138	34	1417	977	0.141	137	111	0.1	0.2	4.288	A
D	615	154	893	1318	0.467	614	662	0.6	0.9	5.104	A
E	400	100	1032	1279	0.313	399	474	0.3	0.5	4.088	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	876	219	1050	1460	0.600	874	701	0.8	1.5	6.112	A
B	1511	378	362	2394	0.631	1508	1561	1.0	1.7	4.050	A
C	168	42	1734	839	0.201	168	136	0.2	0.2	5.362	A
D	753	188	1092	1183	0.637	750	810	0.9	1.7	8.252	A
E	490	122	1262	1124	0.436	489	580	0.5	0.8	5.651	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	876	219	1054	1456	0.602	876	702	1.5	1.5	6.204	A
B	1511	378	363	2393	0.631	1511	1567	1.7	1.7	4.081	A
C	168	42	1737	838	0.201	168	137	0.2	0.3	5.379	A
D	753	188	1094	1181	0.638	753	811	1.7	1.7	8.404	A
E	490	122	1266	1122	0.437	490	581	0.8	0.8	5.697	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	716	179	864	1631	0.439	718	575	1.5	0.8	3.958	A
B	1233	308	298	2467	0.500	1236	1285	1.7	1.0	2.929	A
C	138	34	1422	975	0.141	138	112	0.3	0.2	4.304	A
D	615	154	896	1316	0.467	618	664	1.7	0.9	5.186	A
E	400	100	1038	1276	0.314	401	476	0.8	0.5	4.122	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	599	150	722	1762	0.340	600	481	0.8	0.5	3.102	A
B	1033	258	249	2523	0.409	1034	1073	1.0	0.7	2.419	A
C	115	29	1190	1076	0.107	115	94	0.2	0.1	3.749	A
D	515	129	749	1415	0.364	516	556	0.9	0.6	4.010	A
E	335	84	867	1391	0.241	336	398	0.5	0.3	3.416	A

2044 8.5k DM, 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	Large Roundabout		A, B, C, D, E	7.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2044 8.5k DM	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	733	100.000
B		ONE HOUR	✓	1162	100.000
C		ONE HOUR	✓	151	100.000
D		ONE HOUR	✓	887	100.000
E		ONE HOUR	✓	524	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	554	47	0	132
	B	585	44	37	326	170
	C	36	25	0	76	14
	D	0	688	62	0	137
	E	163	223	10	128	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	2	32	0	0
	B	2	0	3	7	0
	C	22	4	0	33	7
	D	0	5	60	0	4
	E	1	0	20	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.62	7.24	1.6	A	673	1009
B	0.53	3.22	1.1	A	1066	1599
C	0.17	4.36	0.2	A	139	208
D	0.78	12.68	3.4	B	814	1221
E	0.60	9.39	1.5	A	481	721

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	552	138	884	1681	0.328	550	589	0.0	0.5	3.178	A
B	875	219	284	2559	0.342	873	1150	0.0	0.5	2.132	A
C	114	28	1040	1204	0.094	113	117	0.0	0.1	3.300	A
D	668	167	755	1506	0.443	665	398	0.0	0.8	4.263	A
E	394	99	1080	1290	0.306	393	340	0.0	0.4	4.007	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	659	165	1058	1522	0.433	658	704	0.5	0.8	4.159	A
B	1045	261	340	2491	0.419	1044	1376	0.5	0.7	2.486	A
C	136	34	1244	1115	0.122	136	140	0.1	0.1	3.675	A
D	797	199	904	1402	0.569	795	476	0.8	1.3	5.914	A
E	471	118	1292	1151	0.409	470	407	0.4	0.7	5.279	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	807	202	1290	1311	0.615	804	861	0.8	1.6	7.047	A
B	1279	320	415	2400	0.533	1278	1679	0.7	1.1	3.203	A
C	166	42	1522	994	0.167	166	171	0.1	0.2	4.349	A
D	977	244	1106	1260	0.775	969	582	1.3	3.3	12.038	B
E	577	144	1578	965	0.598	574	497	0.7	1.5	9.138	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	807	202	1299	1304	0.619	807	863	1.6	1.6	7.241	A
B	1279	320	417	2398	0.534	1279	1688	1.1	1.1	3.218	A
C	166	42	1525	992	0.168	166	172	0.2	0.2	4.357	A
D	977	244	1108	1259	0.776	976	583	3.3	3.4	12.680	B
E	577	144	1585	960	0.601	577	499	1.5	1.5	9.389	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	659	165	1070	1512	0.436	662	707	1.6	0.8	4.253	A
B	1045	261	343	2488	0.420	1046	1389	1.1	0.7	2.500	A
C	136	34	1248	1113	0.122	136	141	0.2	0.1	3.683	A
D	797	199	906	1400	0.570	805	478	3.4	1.3	6.134	A
E	471	118	1302	1144	0.412	474	409	1.5	0.7	5.395	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	552	138	891	1675	0.330	553	591	0.8	0.5	3.214	A
B	875	219	286	2557	0.342	876	1158	0.7	0.5	2.143	A
C	114	28	1044	1202	0.095	114	118	0.1	0.1	3.309	A
D	668	167	758	1504	0.444	670	400	1.3	0.8	4.329	A
E	394	99	1086	1285	0.307	396	342	0.7	0.4	4.051	A

2044 8.5k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		A, B, C, D, E	113.53	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 8.5k DS	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1415	100.000
B		ONE HOUR	✓	2347	100.000
C		ONE HOUR	✓	153	100.000
D		ONE HOUR	✓	841	100.000
E		ONE HOUR	✓	478	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	1253	36	0	126
	B	1088	99	39	840	281
	C	40	25	0	82	6
	D	0	658	42	0	141
	E	131	213	8	126	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	2	25	0	6
	B	2	1	5	4	0
	C	25	12	0	35	17
	D	0	5	43	0	9
	E	2	0	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	1.08	146.96	70.8	F	1298	1948
B	1.03	76.21	59.8	F	2154	3230
C	0.37	12.48	0.6	B	140	211
D	1.16	231.89	65.8	F	772	1158
E	0.74	18.85	2.7	C	439	658

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1065	266	876	1710	0.623	1059	943	0.0	1.6	5.475	A
B	1767	442	253	2621	0.674	1759	1682	0.0	2.0	4.137	A
C	115	29	1918	791	0.146	115	94	0.0	0.2	5.313	A
D	633	158	1248	1169	0.542	628	785	0.0	1.2	6.608	A
E	360	90	1461	1056	0.341	358	415	0.0	0.5	5.141	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1272	318	1045	1557	0.817	1262	1127	1.6	4.2	11.793	B
B	2110	527	302	2563	0.823	2100	2005	2.0	4.4	7.622	A
C	138	34	2291	635	0.217	137	112	0.2	0.3	7.225	A
D	756	189	1490	996	0.759	749	938	1.2	3.0	14.154	B
E	430	107	1744	876	0.491	428	495	0.5	0.9	8.012	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1558	389	1176	1441	1.081	1416	1325	4.2	39.7	66.383	F
B	2584	646	348	2510	1.030	2456	2244	4.4	36.4	38.051	E
C	168	42	2678	472	0.357	167	126	0.3	0.5	11.772	B
D	926	231	1740	818	1.132	802	1106	3.0	34.1	97.443	F
E	526	132	1980	725	0.726	520	561	0.9	2.5	17.080	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1558	389	1179	1438	1.083	1434	1343	39.7	70.8	146.964	F
B	2584	646	351	2506	1.031	2491	2261	36.4	59.8	76.207	F
C	168	42	2716	457	0.369	168	127	0.5	0.6	12.484	B
D	926	231	1764	801	1.156	799	1120	34.1	65.8	231.890	F
E	526	132	1996	715	0.736	526	566	2.5	2.7	18.848	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1272	318	1162	1451	0.877	1431	1234	70.8	31.2	130.858	F
B	2110	527	329	2529	0.834	2327	2263	59.8	5.5	31.912	D
C	138	34	2530	534	0.257	138	126	0.6	0.4	9.111	A
D	756	189	1647	885	0.854	872	1022	65.8	36.8	210.938	F
E	430	107	1961	737	0.583	435	558	2.7	1.4	12.105	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1065	266	1003	1593	0.669	1182	955	31.2	2.1	11.550	B
B	1767	442	276	2592	0.682	1780	1909	5.5	2.2	4.506	A
C	115	29	1952	777	0.148	116	104	0.4	0.2	5.449	A
D	633	158	1273	1151	0.550	775	795	36.8	1.3	14.312	B
E	360	90	1595	969	0.372	363	453	1.4	0.6	5.980	A

2044 8.5k DS, 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	Large Roundabout		A, B, C, D, E	179.10	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2044 8.5k DS	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1297	100.000
B		ONE HOUR	✓	2245	100.000
C		ONE HOUR	✓	150	100.000
D		ONE HOUR	✓	1017	100.000
E		ONE HOUR	✓	552	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	1118	47	0	132
	B	1257	84	35	674	195
	C	36	23	0	77	14
	D	0	811	64	0	142
	E	163	243	10	136	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	1	32	0	0
	B	1	0	3	2	0
	C	22	4	0	32	7
	D	0	2	58	0	4
	E	1	0	20	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.98	50.48	19.1	F	1190	1785
B	1.00	47.98	33.1	E	2060	3090
C	0.33	10.57	0.5	B	138	206
D	1.51	698.91	193.4	F	933	1400
E	0.96	71.90	11.5	F	507	760

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	976	244	1023	1599	0.611	970	1091	0.0	1.5	5.671	A
B	1690	423	291	2600	0.650	1683	1703	0.0	1.8	3.894	A
C	113	28	1857	862	0.131	112	117	0.0	0.1	4.798	A
D	766	191	1305	1159	0.660	758	664	0.0	1.9	8.814	A
E	416	104	1702	919	0.452	412	361	0.0	0.8	7.060	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1166	291	1204	1435	0.812	1156	1303	1.5	4.0	12.463	B
B	2018	505	345	2534	0.797	2010	2015	1.8	3.8	6.781	A
C	135	34	2218	707	0.191	135	138	0.1	0.2	6.287	A
D	914	229	1559	978	0.935	886	794	1.9	8.9	32.374	D
E	496	124	2016	719	0.690	491	429	0.8	2.1	15.426	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1428	357	1180	1461	0.977	1383	1551	4.0	15.2	34.394	D
B	2472	618	392	2484	0.995	2394	2171	3.8	23.2	28.007	D
C	165	41	2640	525	0.315	164	146	0.2	0.5	9.963	A
D	1120	280	1859	764	1.466	762	946	8.9	98.4	266.753	F
E	608	152	2150	639	0.952	581	470	2.1	8.9	48.260	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1428	357	1176	1465	0.975	1412	1578	15.2	19.1	50.480	F
B	2472	618	400	2477	0.998	2432	2189	23.2	33.1	47.976	E
C	165	41	2685	506	0.327	165	147	0.5	0.5	10.570	B
D	1120	280	1888	743	1.507	743	962	98.4	192.6	652.000	F
E	608	152	2157	635	0.957	597	474	8.9	11.5	71.902	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1166	291	1257	1388	0.840	1219	1383	19.1	5.9	25.679	D
B	2018	505	365	2510	0.804	2133	2111	33.1	4.3	12.491	B
C	135	34	2355	648	0.208	136	144	0.5	0.3	7.043	A
D	914	229	1650	913	1.001	911	840	192.6	193.4	698.911	F
E	496	124	2112	659	0.753	529	449	11.5	3.4	32.489	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	976	244	1363	1288	0.758	987	1104	5.9	3.3	12.349	B
B	1690	423	320	2554	0.662	1699	2030	4.3	2.0	4.259	A
C	113	28	1878	853	0.132	113	142	0.3	0.2	4.871	A
D	766	191	1318	1150	0.666	1144	673	193.4	98.8	461.294	F
E	416	104	2044	696	0.597	423	418	3.4	1.5	13.506	B

2044 10k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		A, B, C, D, E	5.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2044 10k DM	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	788	100.000
B		ONE HOUR	✓	1357	100.000
C		ONE HOUR	✓	149	100.000
D		ONE HOUR	✓	687	100.000
E		ONE HOUR	✓	440	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	628	35	0	125
	B	462	67	39	532	257
	C	39	25	0	80	5
	D	0	511	40	0	136
	E	129	184	8	119	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	5	26	0	6
	B	5	1	5	12	0
	C	26	12	0	36	20
	D	0	14	45	0	10
	E	2	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.59	6.09	1.5	A	723	1085
B	0.62	3.99	1.6	A	1245	1868
C	0.19	5.31	0.2	A	137	205
D	0.63	8.27	1.7	A	630	946
E	0.43	5.61	0.8	A	404	606

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	593	148	715	1767	0.336	591	473	0.0	0.5	3.056	A
B	1022	255	245	2527	0.404	1019	1061	0.0	0.7	2.383	A
C	112	28	1173	1078	0.104	112	92	0.0	0.1	3.721	A
D	517	129	736	1424	0.363	515	549	0.0	0.6	3.950	A
E	331	83	858	1396	0.237	330	392	0.0	0.3	3.373	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	708	177	856	1637	0.433	707	566	0.5	0.8	3.867	A
B	1220	305	294	2472	0.494	1219	1270	0.7	1.0	2.870	A
C	134	33	1403	979	0.137	134	110	0.1	0.2	4.258	A
D	618	154	880	1326	0.466	616	656	0.6	0.9	5.063	A
E	396	99	1027	1283	0.308	395	470	0.3	0.4	4.053	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	868	217	1047	1462	0.593	865	692	0.8	1.4	6.001	A
B	1494	374	359	2397	0.623	1491	1553	1.0	1.6	3.964	A
C	164	41	1716	843	0.195	164	134	0.2	0.2	5.295	A
D	756	189	1077	1193	0.634	753	803	0.9	1.7	8.126	A
E	484	121	1256	1128	0.429	483	574	0.4	0.7	5.571	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	868	217	1050	1459	0.595	868	694	1.4	1.5	6.088	A
B	1494	374	360	2396	0.624	1494	1558	1.6	1.6	3.992	A
C	164	41	1720	842	0.195	164	134	0.2	0.2	5.311	A
D	756	189	1079	1191	0.635	756	805	1.7	1.7	8.269	A
E	484	121	1259	1126	0.430	484	576	0.7	0.8	5.613	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	708	177	861	1633	0.434	711	568	1.5	0.8	3.919	A
B	1220	305	295	2470	0.494	1223	1277	1.6	1.0	2.891	A
C	134	33	1408	977	0.137	134	110	0.2	0.2	4.275	A
D	618	154	883	1324	0.466	621	659	1.7	0.9	5.142	A
E	396	99	1032	1279	0.309	397	472	0.8	0.5	4.086	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	593	148	720	1763	0.337	594	475	0.8	0.5	3.084	A
B	1022	255	247	2525	0.405	1023	1067	1.0	0.7	2.397	A
C	112	28	1177	1076	0.104	112	92	0.2	0.1	3.737	A
D	517	129	739	1422	0.364	518	551	0.9	0.6	3.990	A
E	331	83	863	1393	0.238	332	394	0.5	0.3	3.395	A

2044 10k DM, 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	Large Roundabout		A, B, C, D, E	7.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 10k DM	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	721	100.000
B		ONE HOUR	✓	1147	100.000
C		ONE HOUR	✓	149	100.000
D		ONE HOUR	✓	874	100.000
E		ONE HOUR	✓	518	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	545	47	0	129
	B	580	39	36	324	168
	C	36	24	0	76	13
	D	0	677	62	0	135
	E	161	219	10	128	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	2	32	0	0
	B	2	0	3	7	0
	C	22	4	0	33	8
	D	0	5	60	0	4
	E	1	0	20	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.60	6.79	1.5	A	662	992
B	0.53	3.16	1.1	A	1053	1579
C	0.16	4.32	0.2	A	137	205
D	0.76	11.61	3.0	B	802	1203
E	0.58	8.89	1.4	A	475	713

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	543	136	869	1694	0.320	541	583	0.0	0.5	3.117	A
B	864	216	282	2561	0.337	861	1128	0.0	0.5	2.115	A
C	112	28	1027	1206	0.093	112	116	0.0	0.1	3.289	A
D	658	164	743	1514	0.435	655	396	0.0	0.8	4.179	A
E	390	97	1064	1300	0.300	388	334	0.0	0.4	3.943	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	648	162	1040	1538	0.421	647	698	0.5	0.7	4.036	A
B	1031	258	337	2494	0.414	1030	1349	0.5	0.7	2.459	A
C	134	33	1229	1119	0.120	134	139	0.1	0.1	3.654	A
D	786	196	888	1412	0.557	784	474	0.8	1.2	5.715	A
E	466	116	1273	1163	0.400	465	399	0.4	0.7	5.147	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	794	198	1268	1330	0.597	791	854	0.7	1.5	6.639	A
B	1263	316	412	2403	0.526	1261	1647	0.7	1.1	3.149	A
C	164	41	1503	999	0.164	164	170	0.1	0.2	4.309	A
D	962	241	1087	1272	0.756	955	580	1.2	3.0	11.120	B
E	570	143	1554	979	0.582	568	488	0.7	1.4	8.681	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	794	198	1276	1323	0.600	794	855	1.5	1.5	6.794	A
B	1263	316	414	2401	0.526	1263	1656	1.1	1.1	3.163	A
C	164	41	1506	998	0.164	164	171	0.2	0.2	4.317	A
D	962	241	1089	1271	0.757	962	581	3.0	3.0	11.607	B
E	570	143	1561	975	0.585	570	490	1.4	1.4	8.887	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	648	162	1050	1529	0.424	651	700	1.5	0.7	4.116	A
B	1031	258	340	2490	0.414	1033	1361	1.1	0.7	2.474	A
C	134	33	1233	1117	0.120	134	140	0.2	0.1	3.665	A
D	786	196	891	1410	0.557	793	476	3.0	1.3	5.895	A
E	466	116	1282	1157	0.402	469	402	1.4	0.7	5.249	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	543	136	875	1688	0.322	544	586	0.7	0.5	3.151	A
B	864	216	284	2559	0.337	864	1135	0.7	0.5	2.125	A
C	112	28	1031	1205	0.093	112	117	0.1	0.1	3.295	A
D	658	164	745	1512	0.435	660	398	1.3	0.8	4.236	A
E	390	97	1070	1296	0.301	391	336	0.7	0.4	3.984	A

2044 10k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		A, B, C, D, E	130.02	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2044 10k DS	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1427	100.000
B		ONE HOUR	✓	2389	100.000
C		ONE HOUR	✓	150	100.000
D		ONE HOUR	✓	842	100.000
E		ONE HOUR	✓	473	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	1267	35	0	125
	B	1137	102	38	834	278
	C	39	25	0	81	5
	D	0	658	42	0	142
	E	129	212	8	124	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	2	26	0	6
	B	2	1	5	4	0
	C	26	12	0	36	20
	D	0	5	43	0	9
	E	2	0	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	1.08	142.69	69.4	F	1309	1964
B	1.05	92.69	76.0	F	2192	3288
C	0.37	12.68	0.6	B	138	206
D	1.19	294.35	76.3	F	773	1159
E	0.74	19.51	2.7	C	434	651

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1074	269	876	1710	0.628	1068	978	0.0	1.7	5.546	A
B	1799	450	250	2625	0.685	1790	1693	0.0	2.1	4.271	A
C	113	28	1948	773	0.146	112	92	0.0	0.2	5.440	A
D	634	158	1282	1144	0.554	629	778	0.0	1.2	6.922	A
E	356	89	1499	1033	0.345	354	412	0.0	0.5	5.290	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1283	321	1044	1559	0.823	1272	1167	1.7	4.3	12.137	B
B	2148	537	298	2568	0.836	2137	2018	2.1	4.9	8.158	A
C	135	34	2325	616	0.219	134	110	0.2	0.3	7.468	A
D	757	189	1530	968	0.782	749	930	1.2	3.3	15.858	C
E	425	106	1788	848	0.501	423	491	0.5	1.0	8.438	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1571	393	1158	1457	1.078	1432	1360	4.3	39.2	65.318	F
B	2630	658	343	2516	1.045	2473	2246	4.9	44.1	43.609	E
C	165	41	2694	462	0.357	164	122	0.3	0.5	12.034	B
D	927	232	1771	796	1.165	783	1087	3.3	39.4	112.457	F
E	521	130	2004	711	0.732	515	551	1.0	2.5	17.768	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1571	393	1161	1455	1.080	1450	1376	39.2	69.4	142.691	F
B	2630	658	347	2512	1.047	2503	2264	44.1	76.0	92.692	F
C	165	41	2726	449	0.368	165	123	0.5	0.6	12.675	B
D	927	232	1792	781	1.187	780	1099	39.4	76.3	274.687	F
E	521	130	2016	703	0.741	520	555	2.5	2.7	19.512	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1283	321	1116	1493	0.859	1472	1307	69.4	22.1	115.703	F
B	2148	537	326	2534	0.847	2425	2262	76.0	6.5	52.770	F
C	135	34	2629	490	0.275	136	123	0.6	0.4	10.184	B
D	757	189	1731	825	0.917	815	1033	76.3	61.9	294.350	F
E	425	106	1993	718	0.592	430	553	2.7	1.5	12.696	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1074	269	1086	1517	0.708	1153	992	22.1	2.5	12.063	B
B	1799	450	273	2593	0.694	1816	1966	6.5	2.3	4.727	A
C	113	28	1982	759	0.149	114	107	0.4	0.2	5.585	A
D	634	158	1306	1127	0.563	876	789	61.9	1.3	39.942	E
E	356	89	1718	889	0.401	359	464	1.5	0.7	6.837	A

2044 10k DS, 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	Large Roundabout		A, B, C, D, E	192.41	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1258	105.00
B	398	49.60
C	2638	33.90
D	1670	108.00
E	1976	42.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2044 10k DS	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1339	100.000
B		ONE HOUR	✓	2279	100.000
C		ONE HOUR	✓	149	100.000
D		ONE HOUR	✓	1013	100.000
E		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A	B	C	D	E
From	A	0	1163	47	0	129
	B	1282	85	35	683	194
	C	36	23	0	77	13
	D	0	810	63	0	140
	E	161	242	10	136	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	E
From	A	0	1	32	0	0
	B	1	0	3	2	0
	C	22	4	0	32	8
	D	0	2	59	0	4
	E	1	0	20	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	1.00	68.78	28.2	F	1229	1843
B	1.01	56.96	41.3	F	2091	3137
C	0.33	10.78	0.5	B	137	205
D	1.52	732.77	202.1	F	930	1394
E	0.96	76.52	12.2	F	504	756

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1008	252	1021	1601	0.630	1001	1108	0.0	1.7	5.942	A
B	1716	429	288	2603	0.659	1708	1735	0.0	1.9	3.989	A
C	112	28	1880	851	0.132	112	116	0.0	0.2	4.866	A
D	763	191	1320	1148	0.664	755	671	0.0	1.9	8.991	A
E	413	103	1719	908	0.455	410	356	0.0	0.8	7.184	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1204	301	1200	1440	0.836	1192	1323	1.7	4.7	13.904	B
B	2049	512	341	2538	0.807	2040	2051	1.9	4.0	7.114	A
C	134	33	2245	694	0.193	134	137	0.2	0.2	6.420	A
D	911	228	1577	965	0.944	880	801	1.9	9.5	34.387	D
E	494	123	2035	708	0.697	488	422	0.8	2.2	16.019	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1474	369	1172	1468	1.004	1412	1568	4.7	20.2	41.976	E
B	2509	627	386	2492	1.007	2416	2199	4.0	27.3	31.259	D
C	164	41	2658	516	0.318	163	144	0.2	0.5	10.165	B
D	1115	279	1870	756	1.476	754	951	9.5	99.9	274.754	F
E	604	151	2164	630	0.959	576	460	2.2	9.3	50.494	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1474	369	1169	1471	1.002	1442	1593	20.2	28.2	68.784	F
B	2509	627	393	2484	1.010	2453	2219	27.3	41.3	56.964	F
C	164	41	2701	498	0.330	164	145	0.5	0.5	10.785	B
D	1115	279	1899	735	1.517	735	967	99.9	195.0	673.168	F
E	604	151	2170	627	0.964	593	464	9.3	12.2	76.524	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1204	301	1236	1408	0.855	1289	1422	28.2	6.9	38.900	E
B	2049	512	365	2511	0.816	2195	2160	41.3	4.7	16.605	C
C	134	33	2416	620	0.216	135	143	0.5	0.3	7.427	A
D	911	228	1693	883	1.032	882	858	195.0	202.1	732.768	F
E	494	123	2130	649	0.761	528	445	12.2	3.5	35.736	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	1008	252	1355	1295	0.778	1021	1122	6.9	3.7	13.667	B
B	1716	429	317	2557	0.671	1726	2059	4.7	2.1	4.385	A
C	112	28	1902	841	0.133	113	140	0.3	0.2	4.947	A
D	763	191	1335	1137	0.670	1132	680	202.1	109.8	497.329	F
E	413	103	2056	689	0.600	421	412	3.5	1.6	13.826	B

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

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Filename: J3-A20 Ashford Rd - Swan Ln - UPDATED GEOMETRY.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J3 A20 Ashford Rd - Swan Ln
Report generation date: 10/11/2021 16:08:38

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Stream B-CD	D1	0.0	6.67	0.01	A	D2	0.0	0.00	0.00	A
Stream B-AD		0.0	11.77	0.01	B		0.0	0.00	0.00	A
Stream A-BCD		0.1	5.12	0.06	A		0.2	6.02	0.14	A
Stream D-AB		0.1	9.08	0.10	A		0.1	8.09	0.08	A
Stream D-BC		0.4	13.42	0.30	B		0.3	12.30	0.21	B
Stream C-ABD		0.0	6.52	0.00	A		0.0	6.39	0.01	A
	2037 DM									
Stream B-CD	D3	0.0	0.00	0.00	A	D4	0.0	0.00	0.00	A
Stream B-AD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream A-BCD		0.4	4.43	0.14	A		0.7	5.40	0.25	A
Stream D-AB		0.2	10.59	0.15	B		0.1	9.86	0.13	A
Stream D-BC		0.7	21.27	0.43	C		0.6	20.23	0.36	C
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2037 DS									
Stream B-CD	D5	0.0	0.00	0.00	A	D6	0.0	0.00	0.00	A
Stream B-AD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream A-BCD		0.4	4.98	0.16	A		0.6	6.46	0.25	A
Stream D-AB		0.2	11.61	0.18	B		0.2	10.50	0.15	B
Stream D-BC		0.8	24.07	0.46	C		0.6	21.20	0.37	C
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2044 8.5k DM									
Stream B-CD		0.0	0.00	0.00	A		0.0	0.00	0.00	A

Stream B-AD	D7	0.0	0.00	0.00	A	D8	0.0	0.00	0.00	A
Stream A-BCD		0.4	4.47	0.14	A		0.7	5.54	0.25	A
Stream D-AB		0.2	10.95	0.16	B		0.2	10.12	0.13	B
Stream D-BC		0.8	22.07	0.45	C		0.6	20.77	0.37	C
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2044 8.5k DS									
Stream B-CD	D9	0.0	0.00	0.00	A	D10	0.0	0.00	0.00	A
Stream B-AD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream A-BCD		0.6	4.77	0.19	A		1.0	6.74	0.32	A
Stream D-AB		0.3	13.47	0.21	B		0.2	12.95	0.19	B
Stream D-BC		1.1	31.24	0.54	D		0.9	31.57	0.47	D
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2044 10k DM									
Stream B-CD	D11	0.0	0.00	0.00	A	D12	0.0	0.00	0.00	A
Stream B-AD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream A-BCD		0.3	4.50	0.13	A		0.7	5.49	0.24	A
Stream D-AB		0.2	10.76	0.15	B		0.1	10.03	0.13	B
Stream D-BC		0.8	21.33	0.44	C		0.6	20.46	0.37	C
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2044 10k DS									
Stream B-CD	D13	0.0	0.00	0.00	A	D14	0.0	0.00	0.00	A
Stream B-AD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream A-BCD		0.6	4.72	0.19	A		1.0	6.70	0.33	A
Stream D-AB		0.3	13.68	0.22	B		0.2	13.29	0.19	B
Stream D-BC		1.1	32.54	0.54	D		0.9	33.29	0.48	D
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	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.

File summary

File Description

Title	J3 Otterpool Park_Base Model
Location	A20 Ashford Road - Swan Ln
Site number	
Date	27/06/2017
Version	
Status	Draft 1
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J3 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓

D2	2018	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D3	2037 DM	AM	J3 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D5	2037 DS	AM	J3 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D7	2044 8.5k DM	AM	J3 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D9	2044 8.5k DS	AM	J3 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D11	2044 10k DM	AM	J3 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D13	2044 10k DS	AM	J3 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D14	2044 10k DS	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A20 Ashford Road Westbound		Major
B	Private Access		Minor
C	A20 Ashford Road Eastbound		Major
D	Swan Ln		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.90			120.0	✓	0.00
C	6.90			120.0	✓	1.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	5.10	2.45	2.45	2.45	2.35	✓	1.00	35	35
D	One lane plus flare	6.74	3.00	2.78	2.70	2.51	✓	1.00	23	43

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	643	-	-	-	-	-	-	0.240	0.342	0.240	-	-	-
B-A	428	0.075	0.189	0.189	-	-	-	0.119	0.270	-	0.189	0.189	0.095
B-C	625	0.092	0.233	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	489	0.086	0.216	0.216	-	-	-	0.136	0.309	0.136	-	-	-
B-D, offside lane	428	0.075	0.189	0.189	-	-	-	0.119	0.270	0.119	-	-	-

C-B	643	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
D-A	588	-	-	-	-	-	-	0.219	-	0.087	-	-	-
D-B, nearside lane	457	0.127	0.127	0.289	-	-	-	0.202	0.202	0.080	-	-	-
D-B, offside lane	513	0.143	0.143	0.324	-	-	-	0.227	0.227	0.090	-	-	-
D-C	513	-	0.143	0.324	0.114	0.227	0.227	0.227	0.227	0.090	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J3 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	314	100.000
B		ONE HOUR	✓	7	100.000
C		ONE HOUR	✓	290	100.000
D		ONE HOUR	✓	144	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	**B**	**C**	**D**
From	**A**	0	0	290	24
	B	2	0	5	0
	C	214	2	0	74
	D	42	0	102	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	**B**	**C**	**D**
From	**A**	0	0	6	0
	B	0	0	0	0
	C	7	0	0	3
	D	7	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	6.67	0.0	A	5	7
B-AD	0.01	11.77	0.0	B	2	3
A-BCD	0.06	5.12	0.1	A	35	52
A-B					0	0

A-C					253	380
D-AB	0.10	9.08	0.1	A	39	58
D-BC	0.30	13.42	0.4	B	94	140
C-ABD	0.00	6.52	0.0	A	2	3
C-D					68	102
C-A					196	295

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	4	0.94	570	0.007	4	0.0	0.0	6.355	A
B-AD	2	0.38	346	0.004	1	0.0	0.0	10.450	B
A-BCD	26	6	731	0.035	26	0.0	0.0	5.104	A
A-B	0	0			0				
A-C	211	53			211				
D-AB	32	8	483	0.065	31	0.0	0.1	7.959	A
D-BC	77	19	420	0.183	76	0.0	0.2	10.440	B
C-ABD	2	0.38	582	0.003	1	0.0	0.0	6.196	A
C-D	56	14			56				
C-A	161	40			161				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	4	1	559	0.008	4	0.0	0.0	6.486	A
B-AD	2	0.45	330	0.005	2	0.0	0.0	10.967	B
A-BCD	33	8	749	0.044	33	0.0	0.1	5.022	A
A-B	0	0			0				
A-C	249	62			249				
D-AB	38	9	467	0.081	38	0.1	0.1	8.378	A
D-BC	92	23	403	0.227	91	0.2	0.3	11.525	B
C-ABD	2	0.45	571	0.003	2	0.0	0.0	6.328	A
C-D	67	17			67				
C-A	192	48			192				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	6	1	545	0.010	5	0.0	0.0	6.674	A
B-AD	2	0.55	308	0.007	2	0.0	0.0	11.772	B
A-BCD	45	11	776	0.058	45	0.1	0.1	4.919	A
A-B	0	0			0				
A-C	301	75			301				
D-AB	46	12	443	0.104	46	0.1	0.1	9.071	A
D-BC	112	28	381	0.295	112	0.3	0.4	13.369	B
C-ABD	2	0.55	555	0.004	2	0.0	0.0	6.517	A
C-D	81	20			81				
C-A	236	59			236				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	6	1	545	0.010	6	0.0	0.0	6.675	A
B-AD	2	0.55	308	0.007	2	0.0	0.0	11.774	B

A-BCD	45	11	776	0.058	45	0.1	0.1	4.927	A
A-B	0	0			0				
A-C	301	75			301				
D-AB	46	12	442	0.105	46	0.1	0.1	9.085	A
D-BC	112	28	381	0.295	112	0.4	0.4	13.415	B
C-ABD	2	0.55	554	0.004	2	0.0	0.0	6.517	A
C-D	81	20			81				
C-A	236	59			236				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	4	1	559	0.008	5	0.0	0.0	6.489	A
B-AD	2	0.45	330	0.005	2	0.0	0.0	10.968	B
A-BCD	33	8	749	0.044	33	0.1	0.1	5.043	A
A-B	0	0			0				
A-C	249	62			249				
D-AB	38	9	467	0.081	38	0.1	0.1	8.398	A
D-BC	92	23	403	0.227	92	0.4	0.3	11.583	B
C-ABD	2	0.45	571	0.003	2	0.0	0.0	6.331	A
C-D	67	17			67				
C-A	192	48			192				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	4	0.94	570	0.007	4	0.0	0.0	6.357	A
B-AD	2	0.38	346	0.004	2	0.0	0.0	10.452	B
A-BCD	26	6	731	0.035	26	0.1	0.0	5.119	A
A-B	0	0			0				
A-C	211	53			211				
D-AB	32	8	483	0.066	32	0.1	0.1	7.986	A
D-BC	77	19	420	0.183	77	0.3	0.2	10.513	B
C-ABD	2	0.38	582	0.003	2	0.0	0.0	6.197	A
C-D	56	14			56				
C-A	161	40			161				

2018, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	271	100.000
B		ONE HOUR	✓	2	100.000
C		ONE HOUR	✓	412	100.000
D		ONE HOUR	✓	105	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	2	211	58
	B	1	0	1	0
	C	278	3	0	131
	D	34	0	71	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D

From	A	0	0	2	0
	B	0	0	100	0
	C	4	0	0	1
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.14	6.02	0.2	A	76	113
A-B					2	2
A-C					172	257
D-AB	0.08	8.09	0.1	A	31	47
D-BC	0.21	12.30	0.3	B	65	98
C-ABD	0.01	6.39	0.0	A	3	4
C-D					120	180
C-A					255	383

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	314	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	393	0.000	0	0.0	0.0	0.000	A
A-BCD	57	14	676	0.085	57	0.0	0.1	5.814	A
A-B	1	0.34			1				
A-C	145	36			145				
D-AB	26	6	522	0.049	25	0.0	0.1	7.243	A
D-BC	53	13	416	0.129	53	0.0	0.1	9.906	A
C-ABD	2	0.57	591	0.004	2	0.0	0.0	6.119	A
C-D	99	25			99				
C-A	209	52			209				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	304	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	376	0.000	0	0.0	0.0	0.000	A
A-BCD	73	18	683	0.106	72	0.1	0.2	5.890	A
A-B	2	0.40			2				
A-C	169	42			169				
D-AB	31	8	506	0.060	31	0.1	0.1	7.573	A
D-BC	64	16	397	0.161	64	0.1	0.2	10.798	B
C-ABD	3	0.68	580	0.005	3	0.0	0.0	6.231	A
C-D	118	29			118				
C-A	250	62			250				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	290	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	353	0.000	0	0.0	0.0	0.000	A
A-BCD	97	24	695	0.139	96	0.2	0.2	6.010	A
A-B	2	0.47			2				
A-C	200	50			200				
D-AB	37	9	482	0.078	37	0.1	0.1	8.088	A
D-BC	78	20	371	0.211	78	0.2	0.3	12.274	B
C-ABD	3	0.83	567	0.006	3	0.0	0.0	6.388	A
C-D	144	36			144				
C-A	306	77			306				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	290	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	353	0.000	0	0.0	0.0	0.000	A
A-BCD	97	24	695	0.139	97	0.2	0.2	6.021	A
A-B	2	0.47			2				
A-C	200	50			200				
D-AB	37	9	482	0.078	37	0.1	0.1	8.095	A
D-BC	78	20	371	0.211	78	0.3	0.3	12.300	B
C-ABD	3	0.83	567	0.006	3	0.0	0.0	6.389	A
C-D	144	36			144				
C-A	306	77			306				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	304	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	376	0.000	0	0.0	0.0	0.000	A
A-BCD	73	18	684	0.106	73	0.2	0.2	5.908	A
A-B	2	0.40			2				
A-C	169	42			169				
D-AB	31	8	505	0.060	31	0.1	0.1	7.586	A
D-BC	64	16	397	0.161	64	0.3	0.2	10.832	B
C-ABD	3	0.68	580	0.005	3	0.0	0.0	6.235	A
C-D	118	29			118				
C-A	250	62			250				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	314	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	393	0.000	0	0.0	0.0	0.000	A
A-BCD	57	14	676	0.085	58	0.2	0.1	5.831	A
A-B	1	0.34			1				
A-C	145	36			145				
D-AB	26	6	521	0.049	26	0.1	0.1	7.260	A
D-BC	53	13	416	0.129	54	0.2	0.1	9.953	A
C-ABD	2	0.57	590	0.004	2	0.0	0.0	6.121	A
C-D	99	25			99				
C-A	209	52			209				

2037 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2037 DM	AM	J3 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	650	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	424	100.000
D		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	609	41
	B	0	0	0	0
	C	328	0	0	96
	D	55	0	116	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D

From	A	0	0	1	0
	B	0	0	0	0
	C	1	0	0	2
	D	4	0	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.14	4.43	0.4	A	97	146
A-B					0	0
A-C					499	748
D-AB	0.15	10.59	0.2	B	50	76
D-BC	0.43	21.27	0.7	C	106	160
C-ABD	0.00	0.00	0.0	A	0	0
C-D					88	132
C-A					301	451

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	404	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	326	0.000	0	0.0	0.0	0.000	A
A-BCD	65	16	879	0.073	64	0.0	0.1	4.419	A
A-B	0	0			0				
A-C	425	106			425				
D-AB	41	10	478	0.087	41	0.0	0.1	8.239	A
D-BC	87	22	361	0.242	86	0.0	0.3	13.026	B
C-ABD	0	0	1044	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	247	62			247				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	376	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	297	0.000	0	0.0	0.0	0.000	A
A-BCD	90	23	929	0.097	90	0.1	0.2	4.290	A
A-B	0	0			0				
A-C	494	124			494				
D-AB	49	12	450	0.110	49	0.1	0.1	8.978	A
D-BC	104	26	334	0.312	104	0.3	0.4	15.570	C
C-ABD	0	0	996	0.000	0	0.0	0.0	0.000	A
C-D	86	22			86				
C-A	295	74			295				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	337	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	256	0.000	0	0.0	0.0	0.000	A
A-BCD	137	34	1002	0.137	137	0.2	0.3	4.165	A
A-B	0	0			0				
A-C	578	145			578				
D-AB	61	15	402	0.151	60	0.1	0.2	10.525	B
D-BC	128	32	297	0.430	127	0.4	0.7	20.994	C
C-ABD	0	0	931	0.000	0	0.0	0.0	0.000	A
C-D	106	26			106				
C-A	361	90			361				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	337	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	255	0.000	0	0.0	0.0	0.000	A
A-BCD	138	34	1002	0.137	138	0.3	0.4	4.174	A
A-B	0	0			0				
A-C	578	145			578				
D-AB	61	15	401	0.151	61	0.2	0.2	10.588	B
D-BC	128	32	297	0.430	128	0.7	0.7	21.266	C
C-ABD	0	0	931	0.000	0	0.0	0.0	0.000	A
C-D	106	26			106				
C-A	361	90			361				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	376	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	296	0.000	0	0.0	0.0	0.000	A
A-BCD	90	23	930	0.097	91	0.4	0.2	4.302	A
A-B	0	0			0				
A-C	494	123			494				
D-AB	49	12	448	0.110	50	0.2	0.1	9.037	A
D-BC	104	26	334	0.312	105	0.7	0.5	15.801	C
C-ABD	0	0	996	0.000	0	0.0	0.0	0.000	A
C-D	86	22			86				
C-A	295	74			295				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	404	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	326	0.000	0	0.0	0.0	0.000	A
A-BCD	65	16	879	0.074	65	0.2	0.1	4.427	A
A-B	0	0			0				
A-C	424	106			424				
D-AB	41	10	476	0.087	42	0.1	0.1	8.290	A
D-BC	87	22	361	0.242	88	0.5	0.3	13.204	B
C-ABD	0	0	1043	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	247	62			247				

2037 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2037 DM	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	576	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	583	100.000
D		ONE HOUR	✓	141	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	500	76
	B	0	0	0	0
	C	436	0	0	147
	D	49	0	92	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D

From	A	0	0	0	0
	B	0	0	0	0
	C	1	0	0	1
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.25	5.40	0.7	A	159	239
A-B					0	0
A-C					369	554
D-AB	0.13	9.86	0.1	A	45	67
D-BC	0.36	20.23	0.6	C	84	127
C-ABD	0.00	0.00	0.0	A	0	0
C-D					135	202
C-A					400	600

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	408	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	327	0.000	0	0.0	0.0	0.000	A
A-BCD	108	27	801	0.135	107	0.0	0.3	5.182	A
A-B	0	0			0				
A-C	326	81			326				
D-AB	37	9	494	0.075	37	0.0	0.1	7.862	A
D-BC	69	17	353	0.196	68	0.0	0.2	12.601	B
C-ABD	0	0	1067	0.000	0	0.0	0.0	0.000	A
C-D	111	28			111				
C-A	328	82			328				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	380	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	298	0.000	0	0.0	0.0	0.000	A
A-BCD	148	37	838	0.177	148	0.3	0.4	5.228	A
A-B	0	0			0				
A-C	370	92			370				
D-AB	44	11	466	0.095	44	0.1	0.1	8.525	A
D-BC	83	21	322	0.257	82	0.2	0.3	14.984	B
C-ABD	0	0	1024	0.000	0	0.0	0.0	0.000	A
C-D	132	33			132				
C-A	392	98			392				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	340	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	257	0.000	0	0.0	0.0	0.000	A
A-BCD	221	55	890	0.248	220	0.4	0.7	5.385	A
A-B	0	0			0				
A-C	413	103			413				
D-AB	54	13	420	0.128	54	0.1	0.1	9.821	A
D-BC	101	25	279	0.363	100	0.3	0.6	20.033	C
C-ABD	0	0	965	0.000	0	0.0	0.0	0.000	A
C-D	162	40			162				
C-A	480	120			480				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	340	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	257	0.000	0	0.0	0.0	0.000	A
A-BCD	221	55	891	0.249	221	0.7	0.7	5.403	A
A-B	0	0			0				
A-C	413	103			413				
D-AB	54	13	419	0.129	54	0.1	0.1	9.862	A
D-BC	101	25	279	0.363	101	0.6	0.6	20.231	C
C-ABD	0	0	964	0.000	0	0.0	0.0	0.000	A
C-D	162	40			162				
C-A	480	120			480				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	379	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	297	0.000	0	0.0	0.0	0.000	A
A-BCD	149	37	838	0.178	150	0.7	0.4	5.250	A
A-B	0	0			0				
A-C	369	92			369				
D-AB	44	11	465	0.095	44	0.1	0.1	8.569	A
D-BC	83	21	322	0.257	84	0.6	0.4	15.153	C
C-ABD	0	0	1023	0.000	0	0.0	0.0	0.000	A
C-D	132	33			132				
C-A	392	98			392				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	407	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	327	0.000	0	0.0	0.0	0.000	A
A-BCD	109	27	802	0.135	109	0.4	0.3	5.207	A
A-B	0	0			0				
A-C	325	81			325				
D-AB	37	9	493	0.075	37	0.1	0.1	7.901	A
D-BC	69	17	353	0.196	70	0.4	0.2	12.737	B
C-ABD	0	0	1066	0.000	0	0.0	0.0	0.000	A
C-D	111	28			111				
C-A	328	82			328				

2037 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 DS	AM	J3 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	539	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	515	100.000
D		ONE HOUR	✓	176	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	492	47
	B	0	0	0	0
	C	419	0	0	96
	D	60	0	116	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D

From	A	0	0	9	0
	B	0	0	0	0
	C	7	0	0	2
	D	3	0	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.16	4.98	0.4	A	98	147
A-B					0	0
A-C					397	595
D-AB	0.18	11.61	0.2	B	55	83
D-BC	0.46	24.07	0.8	C	106	160
C-ABD	0.00	0.00	0.0	A	0	0
C-D					88	132
C-A					384	577

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	408	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	326	0.000	0	0.0	0.0	0.000	A
A-BCD	66	17	793	0.084	66	0.0	0.2	4.949	A
A-B	0	0			0				
A-C	339	85			339				
D-AB	45	11	469	0.096	45	0.0	0.1	8.483	A
D-BC	87	22	348	0.251	86	0.0	0.3	13.688	B
C-ABD	0	0	1069	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	315	79			315				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	381	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	296	0.000	0	0.0	0.0	0.000	A
A-BCD	91	23	827	0.110	91	0.2	0.2	4.879	A
A-B	0	0			0				
A-C	393	98			393				
D-AB	54	13	436	0.124	54	0.1	0.1	9.417	A
D-BC	104	26	318	0.328	104	0.3	0.5	16.722	C
C-ABD	0	0	1027	0.000	0	0.0	0.0	0.000	A
C-D	86	22			86				
C-A	377	94			377				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	342	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	255	0.000	0	0.0	0.0	0.000	A
A-BCD	136	34	878	0.155	135	0.2	0.4	4.841	A
A-B	0	0			0				
A-C	457	114			457				
D-AB	66	17	378	0.175	66	0.1	0.2	11.513	B
D-BC	128	32	277	0.461	126	0.5	0.8	23.654	C
C-ABD	0	0	968	0.000	0	0.0	0.0	0.000	A
C-D	106	26			106				
C-A	461	115			461				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	342	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	255	0.000	0	0.0	0.0	0.000	A
A-BCD	136	34	878	0.155	136	0.4	0.4	4.869	A
A-B	0	0			0				
A-C	457	114			457				
D-AB	66	17	376	0.176	66	0.2	0.2	11.613	B
D-BC	128	32	277	0.461	128	0.8	0.8	24.073	C
C-ABD	0	0	968	0.000	0	0.0	0.0	0.000	A
C-D	106	26			106				
C-A	461	115			461				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	380	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	296	0.000	0	0.0	0.0	0.000	A
A-BCD	92	23	828	0.111	92	0.4	0.3	4.930	A
A-B	0	0			0				
A-C	393	98			393				
D-AB	54	13	434	0.124	54	0.2	0.1	9.497	A
D-BC	104	26	318	0.328	106	0.8	0.5	17.038	C
C-ABD	0	0	1026	0.000	0	0.0	0.0	0.000	A
C-D	86	22			86				
C-A	377	94			377				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	408	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	325	0.000	0	0.0	0.0	0.000	A
A-BCD	67	17	793	0.084	67	0.3	0.2	4.984	A
A-B	0	0			0				
A-C	339	85			339				
D-AB	45	11	467	0.097	45	0.1	0.1	8.546	A
D-BC	87	22	348	0.251	88	0.5	0.3	13.900	B
C-ABD	0	0	1069	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	315	79			315				

2037 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 DS	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	438	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	662	100.000
D		ONE HOUR	✓	146	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	357	81
	B	0	0	0	0
	C	515	0	0	147
	D	55	0	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D

From	A	0	0	6	0
	B	0	0	0	0
	C	5	0	0	1
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.25	6.46	0.6	A	140	210
A-B					0	0
A-C					262	393
D-AB	0.15	10.50	0.2	B	50	76
D-BC	0.37	21.20	0.6	C	84	125
C-ABD	0.00	0.00	0.0	A	0	0
C-D					135	202
C-A					473	709

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	420	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	335	0.000	0	0.0	0.0	0.000	A
A-BCD	98	25	706	0.140	97	0.0	0.3	5.915	A
A-B	0	0			0				
A-C	231	58			231				
D-AB	41	10	488	0.085	41	0.0	0.1	8.052	A
D-BC	69	17	346	0.198	68	0.0	0.2	12.870	B
C-ABD	0	0	1109	0.000	0	0.0	0.0	0.000	A
C-D	111	28			111				
C-A	388	97			388				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	395	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	307	0.000	0	0.0	0.0	0.000	A
A-BCD	132	33	723	0.182	131	0.3	0.4	6.081	A
A-B	0	0			0				
A-C	262	66			262				
D-AB	49	12	456	0.108	49	0.1	0.1	8.850	A
D-BC	82	20	314	0.260	81	0.2	0.3	15.422	C
C-ABD	0	0	1073	0.000	0	0.0	0.0	0.000	A
C-D	132	33			132				
C-A	463	116			463				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	358	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	269	0.000	0	0.0	0.0	0.000	A
A-BCD	189	47	748	0.253	188	0.4	0.6	6.424	A
A-B	0	0			0				
A-C	293	73			293				
D-AB	61	15	405	0.150	60	0.1	0.2	10.449	B
D-BC	100	25	270	0.371	99	0.3	0.6	20.972	C
C-ABD	0	0	1025	0.000	0	0.0	0.0	0.000	A
C-D	162	40			162				
C-A	567	142			567				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	358	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	269	0.000	0	0.0	0.0	0.000	A
A-BCD	189	47	749	0.253	189	0.6	0.6	6.459	A
A-B	0	0			0				
A-C	293	73			293				
D-AB	61	15	403	0.150	61	0.2	0.2	10.501	B
D-BC	100	25	270	0.371	100	0.6	0.6	21.202	C
C-ABD	0	0	1025	0.000	0	0.0	0.0	0.000	A
C-D	162	40			162				
C-A	567	142			567				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	394	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	307	0.000	0	0.0	0.0	0.000	A
A-BCD	132	33	723	0.183	133	0.6	0.4	6.143	A
A-B	0	0			0				
A-C	262	65			262				
D-AB	49	12	454	0.109	50	0.2	0.1	8.901	A
D-BC	82	20	314	0.260	83	0.6	0.4	15.611	C
C-ABD	0	0	1073	0.000	0	0.0	0.0	0.000	A
C-D	132	33			132				
C-A	463	116			463				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	420	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	335	0.000	0	0.0	0.0	0.000	A
A-BCD	99	25	706	0.140	100	0.4	0.3	5.964	A
A-B	0	0			0				
A-C	231	58			231				
D-AB	41	10	486	0.085	42	0.1	0.1	8.098	A
D-BC	69	17	346	0.198	69	0.4	0.3	13.014	B
C-ABD	0	0	1108	0.000	0	0.0	0.0	0.000	A
C-D	111	28			111				
C-A	388	97			388				

2044 8.5k DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2044 8.5k DM	AM	J3 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	640	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	431	100.000
D		ONE HOUR	✓	176	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	598	42
	B	0	0	0	0
	C	333	0	0	98
	D	55	0	121	0

Vehicle Mix

Heavy Vehicle Percentages

	To

		A	B	C	D
From	A	0	0	1	0
	B	0	0	0	0
	C	2	0	0	2
	D	4	0	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.14	4.47	0.4	A	98	148
A-B					0	0
A-C					489	733
D-AB	0.16	10.95	0.2	B	50	76
D-BC	0.45	22.07	0.8	C	111	167
C-ABD	0.00	0.00	0.0	A	0	0
C-D					90	135
C-A					306	458

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	405	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	327	0.000	0	0.0	0.0	0.000	A
A-BCD	65	16	872	0.075	65	0.0	0.1	4.459	A
A-B	0	0			0				
A-C	416	104			416				
D-AB	41	10	471	0.088	41	0.0	0.1	8.368	A
D-BC	91	23	361	0.252	90	0.0	0.3	13.210	B
C-ABD	0	0	1047	0.000	0	0.0	0.0	0.000	A
C-D	74	18			74				
C-A	251	63			251				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	377	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	297	0.000	0	0.0	0.0	0.000	A
A-BCD	91	23	921	0.099	91	0.1	0.2	4.338	A
A-B	0	0			0				
A-C	484	121			484				
D-AB	49	12	442	0.112	49	0.1	0.1	9.161	A
D-BC	109	27	334	0.326	108	0.3	0.5	15.900	C
C-ABD	0	0	1001	0.000	0	0.0	0.0	0.000	A
C-D	88	22			88				
C-A	299	75			299				

08:15 - 08:30

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)				(Veh)			
B-CD	0	0	338	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	256	0.000	0	0.0	0.0	0.000	A
A-BCD	138	35	991	0.140	138	0.2	0.4	4.222	A
A-B	0	0			0				
A-C	566	142			566				
D-AB	61	15	391	0.155	60	0.1	0.2	10.876	B
D-BC	133	33	296	0.450	132	0.5	0.8	21.750	C
C-ABD	0	0	936	0.000	0	0.0	0.0	0.000	A
C-D	108	27			108				
C-A	367	92			367				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	338	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	256	0.000	0	0.0	0.0	0.000	A
A-BCD	139	35	992	0.140	139	0.4	0.4	4.230	A
A-B	0	0			0				
A-C	566	141			566				
D-AB	61	15	389	0.156	61	0.2	0.2	10.952	B
D-BC	133	33	296	0.450	133	0.8	0.8	22.073	C
C-ABD	0	0	936	0.000	0	0.0	0.0	0.000	A
C-D	108	27			108				
C-A	367	92			367				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	377	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	297	0.000	0	0.0	0.0	0.000	A
A-BCD	91	23	921	0.099	92	0.4	0.2	4.351	A
A-B	0	0			0				
A-C	484	121			484				
D-AB	49	12	440	0.112	50	0.2	0.1	9.229	A
D-BC	109	27	334	0.326	110	0.8	0.5	16.163	C
C-ABD	0	0	1000	0.000	0	0.0	0.0	0.000	A
C-D	88	22			88				
C-A	299	75			299				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	405	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	326	0.000	0	0.0	0.0	0.000	A
A-BCD	66	16	872	0.075	66	0.2	0.1	4.471	A
A-B	0	0			0				
A-C	416	104			416				
D-AB	41	10	469	0.088	42	0.1	0.1	8.424	A
D-BC	91	23	361	0.252	92	0.5	0.3	13.403	B
C-ABD	0	0	1047	0.000	0	0.0	0.0	0.000	A
C-D	74	18			74				
C-A	251	63			251				

2044 8.5k DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2044 8.5k DM	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	553	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	610	100.000
D		ONE HOUR	✓	144	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	477	76
	B	0	0	0	0
	C	457	0	0	153
	D	50	0	94	0

Vehicle Mix

Heavy Vehicle Percentages

	To

		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	1	0	0	1
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.25	5.54	0.7	A	155	232
A-B					0	0
A-C					353	529
D-AB	0.13	10.12	0.2	B	46	69
D-BC	0.37	20.77	0.6	C	86	129
C-ABD	0.00	0.00	0.0	A	0	0
C-D					140	211
C-A					419	629

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	410	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	328	0.000	0	0.0	0.0	0.000	A
A-BCD	105	26	785	0.134	104	0.0	0.3	5.286	A
A-B	0	0			0				
A-C	311	78			311				
D-AB	38	9	489	0.077	37	0.0	0.1	7.959	A
D-BC	71	18	352	0.201	70	0.0	0.2	12.734	B
C-ABD	0	0	1076	0.000	0	0.0	0.0	0.000	A
C-D	115	29			115				
C-A	344	86			344				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	382	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	299	0.000	0	0.0	0.0	0.000	A
A-BCD	144	36	818	0.176	144	0.3	0.4	5.346	A
A-B	0	0			0				
A-C	353	88			353				
D-AB	45	11	460	0.098	45	0.1	0.1	8.667	A
D-BC	85	21	320	0.264	84	0.2	0.4	15.216	C
C-ABD	0	0	1034	0.000	0	0.0	0.0	0.000	A
C-D	138	34			138				
C-A	411	103			411				

17:15 - 17:30

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)				(Veh)			
B-CD	0	0	343	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	259	0.000	0	0.0	0.0	0.000	A
A-BCD	214	53	866	0.247	213	0.4	0.7	5.521	A
A-B	0	0			0				
A-C	395	99			395				
D-AB	55	14	412	0.134	55	0.1	0.2	10.076	B
D-BC	103	26	277	0.374	103	0.4	0.6	20.545	C
C-ABD	0	0	977	0.000	0	0.0	0.0	0.000	A
C-D	168	42			168				
C-A	503	126			503				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	342	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	258	0.000	0	0.0	0.0	0.000	A
A-BCD	214	54	867	0.247	214	0.7	0.7	5.538	A
A-B	0	0			0				
A-C	394	99			394				
D-AB	55	14	411	0.134	55	0.2	0.2	10.123	B
D-BC	103	26	277	0.374	103	0.6	0.6	20.765	C
C-ABD	0	0	977	0.000	0	0.0	0.0	0.000	A
C-D	168	42			168				
C-A	503	126			503				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	382	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	299	0.000	0	0.0	0.0	0.000	A
A-BCD	145	36	819	0.177	146	0.7	0.4	5.367	A
A-B	0	0			0				
A-C	352	88			352				
D-AB	45	11	458	0.098	45	0.2	0.1	8.714	A
D-BC	85	21	320	0.264	85	0.6	0.4	15.401	C
C-ABD	0	0	1033	0.000	0	0.0	0.0	0.000	A
C-D	138	34			138				
C-A	411	103			411				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	409	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	328	0.000	0	0.0	0.0	0.000	A
A-BCD	106	27	786	0.135	107	0.4	0.3	5.313	A
A-B	0	0			0				
A-C	310	78			310				
D-AB	38	9	488	0.077	38	0.1	0.1	8.002	A
D-BC	71	18	351	0.201	71	0.4	0.3	12.876	B
C-ABD	0	0	1075	0.000	0	0.0	0.0	0.000	A
C-D	115	29			115				
C-A	344	86			344				

2044 8.5k DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 8.5k DS	AM	J3 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	641	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	565	100.000
D		ONE HOUR	✓	186	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	591	50
	B	0	0	0	0
	C	467	0	0	98
	D	66	0	120	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D

From	A	0	0	6	0
	B	0	0	0	0
	C	8	0	0	2
	D	3	0	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.19	4.77	0.6	A	123	185
A-B					0	0
A-C					465	697
D-AB	0.21	13.47	0.3	B	61	91
D-BC	0.54	31.24	1.1	D	110	165
C-ABD	0.00	0.00	0.0	A	0	0
C-D					90	135
C-A					429	643

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	388	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	305	0.000	0	0.0	0.0	0.000	A
A-BCD	80	20	839	0.095	79	0.0	0.2	4.737	A
A-B	0	0			0				
A-C	402	101			402				
D-AB	50	12	459	0.108	49	0.0	0.1	8.766	A
D-BC	90	23	327	0.276	89	0.0	0.4	14.998	B
C-ABD	0	0	1035	0.000	0	0.0	0.0	0.000	A
C-D	74	18			74				
C-A	352	88			352				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	356	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	270	0.000	0	0.0	0.0	0.000	A
A-BCD	113	28	884	0.128	113	0.2	0.3	4.661	A
A-B	0	0			0				
A-C	463	116			463				
D-AB	59	15	420	0.141	59	0.1	0.2	9.975	A
D-BC	108	27	294	0.367	107	0.4	0.6	19.171	C
C-ABD	0	0	986	0.000	0	0.0	0.0	0.000	A
C-D	88	22			88				
C-A	420	105			420				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	310	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	224	0.000	0	0.0	0.0	0.000	A
A-BCD	176	44	950	0.186	175	0.3	0.6	4.648	A
A-B	0	0			0				
A-C	530	132			530				
D-AB	73	18	344	0.211	72	0.2	0.3	13.232	B
D-BC	132	33	247	0.535	130	0.6	1.1	30.235	D
C-ABD	0	0	918	0.000	0	0.0	0.0	0.000	A
C-D	108	27			108				
C-A	514	129			514				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	310	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	223	0.000	0	0.0	0.0	0.000	A
A-BCD	177	44	950	0.186	177	0.6	0.6	4.669	A
A-B	0	0			0				
A-C	529	132			529				
D-AB	73	18	340	0.214	73	0.3	0.3	13.466	B
D-BC	132	33	247	0.535	132	1.1	1.1	31.243	D
C-ABD	0	0	918	0.000	0	0.0	0.0	0.000	A
C-D	108	27			108				
C-A	514	129			514				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	355	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	270	0.000	0	0.0	0.0	0.000	A
A-BCD	114	28	885	0.129	115	0.6	0.3	4.704	A
A-B	0	0			0				
A-C	462	116			462				
D-AB	59	15	416	0.143	60	0.3	0.2	10.118	B
D-BC	108	27	294	0.367	110	1.1	0.6	19.779	C
C-ABD	0	0	985	0.000	0	0.0	0.0	0.000	A
C-D	88	22			88				
C-A	420	105			420				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	387	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	304	0.000	0	0.0	0.0	0.000	A
A-BCD	81	20	840	0.096	81	0.3	0.2	4.767	A
A-B	0	0			0				
A-C	402	100			402				
D-AB	50	12	457	0.109	50	0.2	0.1	8.851	A
D-BC	90	23	327	0.276	91	0.6	0.4	15.305	C
C-ABD	0	0	1034	0.000	0	0.0	0.0	0.000	A
C-D	74	18			74				
C-A	352	88			352				

2044 8.5k DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2044 8.5k DS	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	531	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	832	100.000
D		ONE HOUR	✓	151	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	444	87
	B	0	0	0	0
	C	679	0	0	153
	D	60	0	91	0

Vehicle Mix

Heavy Vehicle Percentages

	To

		A	B	C	D
From	A	0	0	3	0
	B	0	0	0	0
	C	3	0	0	1
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.32	6.74	1.0	A	181	271
A-B					0	0
A-C					307	460
D-AB	0.19	12.95	0.2	B	55	83
D-BC	0.47	31.57	0.9	D	84	125
C-ABD	0.00	0.00	0.0	A	0	0
C-D					140	211
C-A					623	935

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	393	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	305	0.000	0	0.0	0.0	0.000	A
A-BCD	121	30	730	0.165	119	0.0	0.3	5.893	A
A-B	0	0			0				
A-C	279	70			279				
D-AB	45	11	464	0.097	45	0.0	0.1	8.584	A
D-BC	69	17	308	0.222	67	0.0	0.3	14.879	B
C-ABD	0	0	1077	0.000	0	0.0	0.0	0.000	A
C-D	115	29			115				
C-A	511	128			511				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	360	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	271	0.000	0	0.0	0.0	0.000	A
A-BCD	167	42	754	0.222	166	0.3	0.5	6.129	A
A-B	0	0			0				
A-C	310	78			310				
D-AB	54	13	422	0.128	54	0.1	0.1	9.770	A
D-BC	82	20	269	0.304	81	0.3	0.4	19.111	C
C-ABD	0	0	1036	0.000	0	0.0	0.0	0.000	A
C-D	138	34			138				
C-A	610	153			610				

17:15 - 17:30

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)				(Veh)			
B-CD	0	0	314	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	225	0.000	0	0.0	0.0	0.000	A
A-BCD	253	63	791	0.320	251	0.5	0.9	6.686	A
A-B	0	0			0				
A-C	332	83			332				
D-AB	66	17	347	0.190	66	0.1	0.2	12.773	B
D-BC	100	25	214	0.468	99	0.4	0.8	30.714	D
C-ABD	0	0	979	0.000	0	0.0	0.0	0.000	A
C-D	168	42			168				
C-A	748	187			748				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	313	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	224	0.000	0	0.0	0.0	0.000	A
A-BCD	254	63	792	0.321	254	0.9	1.0	6.738	A
A-B	0	0			0				
A-C	331	83			331				
D-AB	66	17	344	0.192	66	0.2	0.2	12.950	B
D-BC	100	25	214	0.469	100	0.8	0.9	31.571	D
C-ABD	0	0	978	0.000	0	0.0	0.0	0.000	A
C-D	168	42			168				
C-A	748	187			748				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	360	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	271	0.000	0	0.0	0.0	0.000	A
A-BCD	168	42	755	0.222	170	1.0	0.6	6.198	A
A-B	0	0			0				
A-C	309	77			309				
D-AB	54	13	419	0.129	54	0.2	0.1	9.885	A
D-BC	82	20	269	0.305	83	0.9	0.5	19.601	C
C-ABD	0	0	1034	0.000	0	0.0	0.0	0.000	A
C-D	138	34			138				
C-A	610	153			610				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	392	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	305	0.000	0	0.0	0.0	0.000	A
A-BCD	122	30	731	0.167	122	0.6	0.4	5.947	A
A-B	0	0			0				
A-C	278	70			278				
D-AB	45	11	462	0.098	45	0.1	0.1	8.652	A
D-BC	69	17	308	0.223	69	0.5	0.3	15.122	C
C-ABD	0	0	1076	0.000	0	0.0	0.0	0.000	A
C-D	115	29			115				
C-A	511	128			511				

2044 10k DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2044 10k DM	AM	J3 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	624	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	431	100.000
D		ONE HOUR	✓	173	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	583	41
	B	0	0	0	0
	C	334	0	0	97
	D	54	0	119	0

Vehicle Mix

Heavy Vehicle Percentages

	To

		A	B	C	D
From	A	0	0	1	0
	B	0	0	0	0
	C	1	0	0	2
	D	4	0	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.13	4.50	0.3	A	94	141
A-B					0	0
A-C					479	718
D-AB	0.15	10.76	0.2	B	50	74
D-BC	0.44	21.33	0.8	C	109	164
C-ABD	0.00	0.00	0.0	A	0	0
C-D					89	134
C-A					306	460

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	408	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	330	0.000	0	0.0	0.0	0.000	A
A-BCD	63	16	865	0.073	62	0.0	0.1	4.488	A
A-B	0	0			0				
A-C	407	102			407				
D-AB	41	10	472	0.086	40	0.0	0.1	8.325	A
D-BC	90	22	363	0.247	88	0.0	0.3	13.030	B
C-ABD	0	0	1053	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	251	63			251				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	381	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	301	0.000	0	0.0	0.0	0.000	A
A-BCD	87	22	912	0.095	87	0.1	0.2	4.363	A
A-B	0	0			0				
A-C	474	118			474				
D-AB	49	12	445	0.109	48	0.1	0.1	9.087	A
D-BC	107	27	337	0.318	106	0.3	0.5	15.588	C
C-ABD	0	0	1008	0.000	0	0.0	0.0	0.000	A
C-D	87	22			87				
C-A	300	75			300				

08:15 - 08:30

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)				(Veh)			
B-CD	0	0	343	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	261	0.000	0	0.0	0.0	0.000	A
A-BCD	132	33	980	0.134	131	0.2	0.3	4.241	A
A-B	0	0			0				
A-C	556	139			556				
D-AB	59	15	396	0.150	59	0.1	0.2	10.691	B
D-BC	131	33	300	0.437	130	0.5	0.7	21.047	C
C-ABD	0	0	945	0.000	0	0.0	0.0	0.000	A
C-D	107	27			107				
C-A	368	92			368				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	343	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	261	0.000	0	0.0	0.0	0.000	A
A-BCD	132	33	981	0.134	132	0.3	0.3	4.248	A
A-B	0	0			0				
A-C	555	139			555				
D-AB	59	15	394	0.151	59	0.2	0.2	10.756	B
D-BC	131	33	300	0.437	131	0.7	0.8	21.329	C
C-ABD	0	0	945	0.000	0	0.0	0.0	0.000	A
C-D	107	27			107				
C-A	368	92			368				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	381	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	300	0.000	0	0.0	0.0	0.000	A
A-BCD	87	22	913	0.096	88	0.3	0.2	4.373	A
A-B	0	0			0				
A-C	474	118			474				
D-AB	49	12	443	0.110	49	0.2	0.1	9.147	A
D-BC	107	27	337	0.318	108	0.8	0.5	15.826	C
C-ABD	0	0	1007	0.000	0	0.0	0.0	0.000	A
C-D	87	22			87				
C-A	300	75			300				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	408	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	329	0.000	0	0.0	0.0	0.000	A
A-BCD	63	16	865	0.073	63	0.2	0.1	4.496	A
A-B	0	0			0				
A-C	407	102			407				
D-AB	41	10	471	0.086	41	0.1	0.1	8.379	A
D-BC	90	22	363	0.247	90	0.5	0.3	13.209	B
C-ABD	0	0	1053	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	251	63			251				

2044 10k DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 10k DM	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	555	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	603	100.000
D		ONE HOUR	✓	142	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	480	75
	B	0	0	0	0
	C	452	0	0	151
	D	49	0	93	0

Vehicle Mix

Heavy Vehicle Percentages

	To

		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	1	0	0	1
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.24	5.49	0.7	A	153	230
A-B					0	0
A-C					356	534
D-AB	0.13	10.03	0.1	B	45	67
D-BC	0.37	20.46	0.6	C	85	128
C-ABD	0.00	0.00	0.0	A	0	0
C-D					139	208
C-A					415	622

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	410	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	329	0.000	0	0.0	0.0	0.000	A
A-BCD	104	26	788	0.132	103	0.0	0.3	5.257	A
A-B	0	0			0				
A-C	314	78			314				
D-AB	37	9	490	0.075	37	0.0	0.1	7.934	A
D-BC	70	18	353	0.199	69	0.0	0.2	12.656	B
C-ABD	0	0	1075	0.000	0	0.0	0.0	0.000	A
C-D	114	28			114				
C-A	340	85			340				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	382	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	300	0.000	0	0.0	0.0	0.000	A
A-BCD	143	36	821	0.174	142	0.3	0.4	5.308	A
A-B	0	0			0				
A-C	356	89			356				
D-AB	44	11	461	0.095	44	0.1	0.1	8.624	A
D-BC	84	21	321	0.260	83	0.2	0.3	15.083	C
C-ABD	0	0	1033	0.000	0	0.0	0.0	0.000	A
C-D	136	34			136				
C-A	406	102			406				

17:15 - 17:30

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)				(Veh)			
B-CD	0	0	343	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	259	0.000	0	0.0	0.0	0.000	A
A-BCD	212	53	870	0.243	211	0.4	0.6	5.472	A
A-B	0	0			0				
A-C	399	100			399				
D-AB	54	13	414	0.130	54	0.1	0.1	9.982	A
D-BC	102	26	278	0.368	102	0.3	0.6	20.251	C
C-ABD	0	0	976	0.000	0	0.0	0.0	0.000	A
C-D	166	42			166				
C-A	498	124			498				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	343	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	259	0.000	0	0.0	0.0	0.000	A
A-BCD	212	53	871	0.244	212	0.6	0.7	5.488	A
A-B	0	0			0				
A-C	399	100			399				
D-AB	54	13	413	0.131	54	0.1	0.1	10.026	B
D-BC	102	26	278	0.368	102	0.6	0.6	20.459	C
C-ABD	0	0	976	0.000	0	0.0	0.0	0.000	A
C-D	166	42			166				
C-A	498	124			498				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	382	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	299	0.000	0	0.0	0.0	0.000	A
A-BCD	143	36	822	0.174	144	0.7	0.4	5.330	A
A-B	0	0			0				
A-C	356	89			356				
D-AB	44	11	460	0.096	44	0.1	0.1	8.669	A
D-BC	84	21	321	0.260	84	0.6	0.4	15.259	C
C-ABD	0	0	1033	0.000	0	0.0	0.0	0.000	A
C-D	136	34			136				
C-A	406	102			406				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	409	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	328	0.000	0	0.0	0.0	0.000	A
A-BCD	105	26	788	0.133	106	0.4	0.3	5.284	A
A-B	0	0			0				
A-C	313	78			313				
D-AB	37	9	489	0.076	37	0.1	0.1	7.976	A
D-BC	70	18	352	0.199	70	0.4	0.3	12.793	B
C-ABD	0	0	1074	0.000	0	0.0	0.0	0.000	A
C-D	114	28			114				
C-A	340	85			340				

2044 10k DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2044 10k DS	AM	J3 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	664	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	576	100.000
D		ONE HOUR	✓	184	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	614	50
	B	0	0	0	0
	C	479	0	0	97
	D	66	0	118	0

Vehicle Mix

Heavy Vehicle Percentages

	To

		A	B	C	D
From	A	0	0	6	0
	B	0	0	0	0
	C	8	0	0	2
	D	3	0	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.19	4.72	0.6	A	129	193
A-B					0	0
A-C					481	721
D-AB	0.22	13.68	0.3	B	61	91
D-BC	0.54	32.54	1.1	D	108	162
C-ABD	0.00	0.00	0.0	A	0	0
C-D					89	134
C-A					440	659

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	383	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	300	0.000	0	0.0	0.0	0.000	A
A-BCD	83	21	850	0.097	82	0.0	0.2	4.688	A
A-B	0	0			0				
A-C	417	104			417				
D-AB	50	12	459	0.108	49	0.0	0.1	8.777	A
D-BC	89	22	323	0.275	87	0.0	0.4	15.205	C
C-ABD	0	0	1026	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	361	90			361				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	349	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	264	0.000	0	0.0	0.0	0.000	A
A-BCD	118	29	897	0.131	117	0.2	0.3	4.613	A
A-B	0	0			0				
A-C	479	120			479				
D-AB	59	15	419	0.142	59	0.1	0.2	10.009	B
D-BC	106	27	288	0.368	105	0.4	0.6	19.567	C
C-ABD	0	0	975	0.000	0	0.0	0.0	0.000	A
C-D	87	22			87				
C-A	431	108			431				

08:15 - 08:30

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)				(Veh)			
B-CD	0	0	302	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	216	0.000	0	0.0	0.0	0.000	A
A-BCD	185	46	966	0.191	184	0.3	0.6	4.603	A
A-B	0	0			0				
A-C	546	137			546				
D-AB	73	18	340	0.214	72	0.2	0.3	13.439	B
D-BC	130	32	240	0.541	128	0.6	1.1	31.416	D
C-ABD	0	0	905	0.000	0	0.0	0.0	0.000	A
C-D	107	27			107				
C-A	527	132			527				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	302	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	216	0.000	0	0.0	0.0	0.000	A
A-BCD	186	46	967	0.192	185	0.6	0.6	4.625	A
A-B	0	0			0				
A-C	546	136			546				
D-AB	73	18	336	0.216	73	0.3	0.3	13.676	B
D-BC	130	32	240	0.541	130	1.1	1.1	32.544	D
C-ABD	0	0	905	0.000	0	0.0	0.0	0.000	A
C-D	107	27			107				
C-A	527	132			527				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	349	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	264	0.000	0	0.0	0.0	0.000	A
A-BCD	118	30	898	0.132	119	0.6	0.3	4.655	A
A-B	0	0			0				
A-C	479	120			479				
D-AB	59	15	414	0.143	60	0.3	0.2	10.164	B
D-BC	106	27	288	0.368	108	1.1	0.6	20.222	C
C-ABD	0	0	974	0.000	0	0.0	0.0	0.000	A
C-D	87	22			87				
C-A	431	108			431				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	382	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	299	0.000	0	0.0	0.0	0.000	A
A-BCD	83	21	850	0.098	84	0.3	0.2	4.719	A
A-B	0	0			0				
A-C	417	104			417				
D-AB	50	12	456	0.109	50	0.2	0.1	8.864	A
D-BC	89	22	322	0.275	90	0.6	0.4	15.521	C
C-ABD	0	0	1026	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	361	90			361				

2044 10k DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2044 10k DS	PM	J3 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	546	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	850	100.000
D		ONE HOUR	✓	149	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	0	460	86
	B	0	0	0	0
	C	699	0	0	151
	D	59	0	90	0

Vehicle Mix

Heavy Vehicle Percentages

	To

		A	B	C	D
From	A	0	0	3	0
	B	0	0	0	0
	C	3	0	0	1
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.33	6.70	1.0	A	185	277
A-B					0	0
A-C					316	475
D-AB	0.19	13.29	0.2	B	54	81
D-BC	0.48	33.29	0.9	D	83	124
C-ABD	0.00	0.00	0.0	A	0	0
C-D					139	208
C-A					641	962

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	388	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	301	0.000	0	0.0	0.0	0.000	A
A-BCD	122	31	736	0.166	121	0.0	0.4	5.850	A
A-B	0	0			0				
A-C	289	72			289				
D-AB	44	11	460	0.097	44	0.0	0.1	8.649	A
D-BC	68	17	303	0.223	67	0.0	0.3	15.130	C
C-ABD	0	0	1072	0.000	0	0.0	0.0	0.000	A
C-D	114	28			114				
C-A	526	132			526				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	355	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	266	0.000	0	0.0	0.0	0.000	A
A-BCD	170	43	762	0.223	169	0.4	0.5	6.085	A
A-B	0	0			0				
A-C	321	80			321				
D-AB	53	13	417	0.127	53	0.1	0.1	9.877	A
D-BC	81	20	263	0.307	80	0.3	0.4	19.609	C
C-ABD	0	0	1029	0.000	0	0.0	0.0	0.000	A
C-D	136	34			136				
C-A	628	157			628				

17:15 - 17:30

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)				(Veh)			
B-CD	0	0	307	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	218	0.000	0	0.0	0.0	0.000	A
A-BCD	260	65	801	0.325	258	0.5	1.0	6.652	A
A-B	0	0			0				
A-C	341	85			341				
D-AB	65	16	339	0.191	65	0.1	0.2	13.085	B
D-BC	99	25	207	0.478	97	0.4	0.9	32.288	D
C-ABD	0	0	971	0.000	0	0.0	0.0	0.000	A
C-D	166	42			166				
C-A	770	192			770				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	306	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	218	0.000	0	0.0	0.0	0.000	A
A-BCD	261	65	802	0.325	261	1.0	1.0	6.704	A
A-B	0	0			0				
A-C	340	85			340				
D-AB	65	16	336	0.193	65	0.2	0.2	13.286	B
D-BC	99	25	207	0.479	99	0.9	0.9	33.293	D
C-ABD	0	0	970	0.000	0	0.0	0.0	0.000	A
C-D	166	42			166				
C-A	770	192			770				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	355	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	265	0.000	0	0.0	0.0	0.000	A
A-BCD	171	43	763	0.224	173	1.0	0.6	6.151	A
A-B	0	0			0				
A-C	320	80			320				
D-AB	53	13	414	0.128	53	0.2	0.1	10.000	A
D-BC	81	20	263	0.308	83	0.9	0.5	20.155	C
C-ABD	0	0	1028	0.000	0	0.0	0.0	0.000	A
C-D	136	34			136				
C-A	628	157			628				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	388	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	300	0.000	0	0.0	0.0	0.000	A
A-BCD	123	31	737	0.167	124	0.6	0.4	5.902	A
A-B	0	0			0				
A-C	288	72			288				
D-AB	44	11	458	0.097	45	0.1	0.1	8.721	A
D-BC	68	17	303	0.224	68	0.5	0.3	15.385	C
C-ABD	0	0	1070	0.000	0	0.0	0.0	0.000	A
C-D	114	28			114				
C-A	526	132			526				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: J4 A20 Ashford Rd - Stone Hill - UPDATED GEOMETRY.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J4 A20 Ashford Rd - Stone Hill
Report generation date: 10/11/2021 16:12:38

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Stream B-AC	D1	0.3	12.17	0.24	B	D2	0.2	11.26	0.14	B
Stream C-AB		0.0	5.53	0.00	A		0.0	4.81	0.01	A
	2037 DM									
Stream B-AC	D3	0.5	20.44	0.35	C	D4	0.3	16.63	0.21	C
Stream C-AB		0.0	0.00	0.00	A		0.0	4.48	0.03	A
	2037 DS									
Stream B-AC	D5	0.5	20.29	0.35	C	D6	0.2	15.49	0.20	C
Stream C-AB		0.0	6.74	0.01	A		0.0	4.21	0.03	A
	2044 8.5k DM									
Stream B-AC	D7	0.6	20.58	0.36	C	D8	0.3	16.62	0.21	C
Stream C-AB		0.0	0.00	0.00	A		0.0	4.39	0.03	A
	2044 8.5k DS									
Stream B-AC	D9	0.7	25.83	0.41	D	D10	0.3	19.71	0.24	C
Stream C-AB		0.0	6.46	0.01	A		0.1	4.03	0.04	A
	2044 10k DM									
Stream B-AC	D11	0.5	20.07	0.35	C	D12	0.3	16.50	0.21	C
Stream C-AB		0.0	0.00	0.00	A		0.0	4.41	0.03	A
	2044 10k DS									
Stream B-AC	D13	0.7	26.97	0.42	D	D14	0.3	20.40	0.25	C
Stream C-AB		0.0	6.38	0.01	A		0.1	3.99	0.05	A

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

File summary

File Description

Title	J4 Otterpool Park_Base Model
Location	A20 Ashford Road - Stone Hill
Site number	
Date	10/07/2017
Version	
Status	Draft 1
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J4 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D3	2037 DM	AM	J4 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D5	2037 DS	AM	J4 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D7	2044 8.5k DM	AM	J4 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D9	2044 8.5k DS	AM	J4 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D11	2044 10k DM	AM	J4 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D13	2044 10k DS	AM	J4 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D14	2044 10k DS	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A20 Ashford Road Westbound		Major
B	Stone Hill		Minor
C	A20 Ashford Road Eastbound		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.10			71.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.60	111	19

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	502	0.091	0.230	0.145	0.329
B-C	610	0.093	0.235	-	-
C-B	615	0.237	0.237	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J4 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	374	100.000
B		ONE HOUR	✓	84	100.000
C		ONE HOUR	✓	209	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	63	311
	B	76	0	8
	C	208	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	4
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.24	12.17	0.3	B	77	116
C-AB	0.00	5.53	0.0	A	1	2
C-A					190	286
A-B					58	87
A-C					285	428

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	427	0.148	63	0.0	0.2	9.858	A
C-AB	1	0.25	653	0.002	0.98	0.0	0.0	5.524	A
C-A	156	39			156				
A-B	47	12			47				
A-C	234	59			234				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-AC	76	19	411	0.184	75	0.2	0.2	10.724	B
C-AB	1	0.31	661	0.002	1	0.0	0.0	5.448	A
C-A	187	47			187				
A-B	57	14			57				
A-C	280	70			280				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	388	0.238	92	0.2	0.3	12.136	B
C-AB	2	0.42	674	0.002	2	0.0	0.0	5.346	A
C-A	228	57			228				
A-B	69	17			69				
A-C	342	86			342				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	388	0.238	92	0.3	0.3	12.168	B
C-AB	2	0.42	674	0.002	2	0.0	0.0	5.352	A
C-A	228	57			228				
A-B	69	17			69				
A-C	342	86			342				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	76	19	411	0.184	76	0.3	0.2	10.758	B
C-AB	1	0.31	661	0.002	1	0.0	0.0	5.464	A
C-A	187	47			187				
A-B	57	14			57				
A-C	280	70			280				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	427	0.148	63	0.2	0.2	9.907	A
C-AB	1	0.25	653	0.002	1	0.0	0.0	5.533	A
C-A	156	39			156				
A-B	47	12			47				
A-C	234	59			234				

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	315	100.000
B		ONE HOUR	✓	49	100.000
C		ONE HOUR	✓	391	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	51	264
	B	45	0	4
	C	386	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	2	1
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.14	11.26	0.2	B	45	67
C-AB	0.01	4.81	0.0	A	9	13
C-A					350	525
A-B					47	70
A-C					242	363

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	417	0.089	37	0.0	0.1	9.459	A
C-AB	6	2	756	0.008	6	0.0	0.0	4.800	A
C-A	288	72			288				
A-B	38	10			38				
A-C	199	50			199				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	44	11	399	0.111	44	0.1	0.1	10.145	B
C-AB	8	2	785	0.010	8	0.0	0.0	4.626	A
C-A	343	86			343				
A-B	46	11			46				
A-C	237	59			237				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	13	374	0.144	54	0.1	0.2	11.249	B
C-AB	11	3	827	0.014	11	0.0	0.0	4.406	A
C-A	419	105			419				
A-B	56	14			56				
A-C	291	73			291				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	13	374	0.144	54	0.2	0.2	11.260	B
C-AB	11	3	827	0.014	11	0.0	0.0	4.412	A
C-A	419	105			419				
A-B	56	14			56				
A-C	291	73			291				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	44	11	399	0.111	44	0.2	0.1	10.161	B

C-AB	8	2	785	0.010	8	0.0	0.0	4.636	A
C-A	343	86			343				
A-B	46	11			46				
A-C	237	59			237				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	417	0.089	37	0.1	0.1	9.483	A
C-AB	6	2	756	0.008	6	0.0	0.0	4.807	A
C-A	288	72			288				
A-B	38	10			38				
A-C	199	50			199				

2037 DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2037 DM	AM	J4 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	759	100.000
B		ONE HOUR	✓	86	100.000
C		ONE HOUR	✓	360	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	69	690
	B	77	0	9
	C	360	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	1	1
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.35	20.44	0.5	C	79	118
C-AB	0.00	0.00	0.0	A	0	0
C-A					330	496
A-B					63	95
A-C					633	950

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	347	0.186	64	0.0	0.2	12.663	B
C-AB	0	0	473	0.000	0	0.0	0.0	0.000	A
C-A	271	68			271				
A-B	52	13			52				
A-C	519	130			519				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	315	0.245	77	0.2	0.3	15.083	C
C-AB	0	0	447	0.000	0	0.0	0.0	0.000	A
C-A	324	81			324				
A-B	62	16			62				
A-C	620	155			620				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	271	0.350	94	0.3	0.5	20.264	C
C-AB	0	0	411	0.000	0	0.0	0.0	0.000	A
C-A	396	99			396				
A-B	76	19			76				
A-C	760	190			760				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	271	0.350	95	0.5	0.5	20.438	C
C-AB	0	0	411	0.000	0	0.0	0.0	0.000	A
C-A	396	99			396				
A-B	76	19			76				
A-C	760	190			760				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	315	0.245	78	0.5	0.3	15.233	C

C-AB	0	0	447	0.000	0	0.0	0.0	0.000	A
C-A	324	81			324				
A-B	62	16			62				
A-C	620	155			620				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	347	0.186	65	0.3	0.2	12.779	B
C-AB	0	0	473	0.000	0	0.0	0.0	0.000	A
C-A	271	68			271				
A-B	52	13			52				
A-C	519	130			519				

2037 DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2037 DM	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	610	100.000
B		ONE HOUR	✓	52	100.000
C		ONE HOUR	✓	580	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	49	561
	B	46	0	6
	C	573	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	2	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.21	16.63	0.3	C	48	72
C-AB	0.03	4.48	0.0	A	17	26
C-A					515	773
A-B					45	67
A-C					515	772

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	350	0.112	39	0.0	0.1	11.526	B
C-AB	11	3	815	0.014	11	0.0	0.0	4.479	A
C-A	425	106			425				
A-B	37	9			37				
A-C	422	106			422				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	318	0.147	47	0.1	0.2	13.248	B
C-AB	16	4	860	0.018	16	0.0	0.0	4.263	A
C-A	506	126			506				
A-B	44	11			44				
A-C	504	126			504				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	274	0.209	57	0.2	0.3	16.580	C
C-AB	24	6	925	0.026	24	0.0	0.0	3.994	A
C-A	614	154			614				
A-B	54	13			54				
A-C	618	154			618				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	274	0.209	57	0.3	0.3	16.631	C
C-AB	24	6	925	0.026	24	0.0	0.0	3.997	A
C-A	614	154			614				
A-B	54	13			54				
A-C	618	154			618				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	318	0.147	47	0.3	0.2	13.303	B

C-AB	16	4	860	0.018	16	0.0	0.0	4.267	A
C-A	506	126			506				
A-B	44	11			44				
A-C	504	126			504				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	350	0.112	39	0.2	0.1	11.594	B
C-AB	11	3	815	0.014	11	0.0	0.0	4.483	A
C-A	425	106			425				
A-B	37	9			37				
A-C	422	106			422				

2037 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 DS	AM	J4 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	643	100.000
B		ONE HOUR	✓	86	100.000
C		ONE HOUR	✓	452	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	69	574
	B	77	0	9
	C	451	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	8
	B	0	0	0
	C	7	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.35	20.29	0.5	C	79	118
C-AB	0.01	6.74	0.0	A	3	5
C-A					412	617
A-B					63	95
A-C					527	790

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	348	0.186	64	0.0	0.2	12.618	B
C-AB	2	0.51	536	0.004	2	0.0	0.0	6.742	A
C-A	338	85			338				
A-B	52	13			52				
A-C	432	108			432				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	316	0.244	77	0.2	0.3	15.011	C
C-AB	3	1	583	0.005	3	0.0	0.0	6.309	A
C-A	403	101			403				
A-B	62	16			62				
A-C	516	129			516				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	272	0.348	94	0.3	0.5	20.121	C
C-AB	5	1	650	0.007	5	0.0	0.0	5.682	A
C-A	493	123			493				
A-B	76	19			76				
A-C	632	158			632				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	272	0.348	95	0.5	0.5	20.292	C
C-AB	5	1	650	0.007	5	0.0	0.0	5.574	A
C-A	493	123			493				
A-B	76	19			76				
A-C	632	158			632				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	316	0.244	78	0.5	0.3	15.159	C

C-AB	3	1	584	0.005	3	0.0	0.0	6.020	A
C-A	403	101			403				
A-B	62	16			62				
A-C	516	129			516				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	348	0.186	65	0.3	0.2	12.730	B
C-AB	2	0.52	537	0.004	2	0.0	0.0	6.575	A
C-A	338	85			338				
A-B	52	13			52				
A-C	432	108			432				

2037 DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 DS	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	467	100.000
B		ONE HOUR	✓	52	100.000
C		ONE HOUR	✓	659	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	48	419
	B	46	0	6
	C	652	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	2	5
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	15.49	0.2	C	48	72
C-AB	0.03	4.21	0.0	A	19	28
C-A					586	879
A-B					44	66
A-C					384	577

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	361	0.108	39	0.0	0.1	11.152	B
C-AB	12	3	869	0.014	12	0.0	0.0	4.201	A
C-A	484	121			484				
A-B	36	9			36				
A-C	315	79			315				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	331	0.141	47	0.1	0.2	12.643	B
C-AB	17	4	924	0.019	17	0.0	0.0	3.965	A
C-A	575	144			575				
A-B	43	11			43				
A-C	377	94			377				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	290	0.198	57	0.2	0.2	15.453	C
C-AB	27	7	1003	0.027	27	0.0	0.0	3.683	A
C-A	698	175			698				
A-B	53	13			53				
A-C	461	115			461				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	290	0.198	57	0.2	0.2	15.494	C
C-AB	27	7	1003	0.027	27	0.0	0.0	3.690	A
C-A	698	175			698				
A-B	53	13			53				
A-C	461	115			461				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	331	0.141	47	0.2	0.2	12.688	B

C-AB	17	4	924	0.019	17	0.0	0.0	3.978	A
C-A	575	144			575				
A-B	43	11			43				
A-C	377	94			377				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	361	0.108	39	0.2	0.1	11.198	B
C-AB	12	3	869	0.014	12	0.0	0.0	4.210	A
C-A	484	121			484				
A-B	36	9			36				
A-C	315	79			315				

2044 8.5k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2044 8.5k DM	AM	J4 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	752	100.000
B		ONE HOUR	✓	89	100.000
C		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	71	681
	B	79	0	10
	C	366	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	1	1
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	20.58	0.6	C	82	123
C-AB	0.00	0.00	0.0	A	0	0
C-A					336	504
A-B					65	98
A-C					625	937

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	349	0.192	66	0.0	0.2	12.685	B
C-AB	0	0	475	0.000	0	0.0	0.0	0.000	A
C-A	276	69			276				
A-B	53	13			53				
A-C	513	128			513				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	317	0.252	80	0.2	0.3	15.136	C
C-AB	0	0	449	0.000	0	0.0	0.0	0.000	A
C-A	329	82			329				
A-B	64	16			64				
A-C	612	153			612				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	24	273	0.359	97	0.3	0.5	20.401	C
C-AB	0	0	413	0.000	0	0.0	0.0	0.000	A
C-A	403	101			403				
A-B	78	20			78				
A-C	750	187			750				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	24	273	0.359	98	0.5	0.6	20.577	C
C-AB	0	0	413	0.000	0	0.0	0.0	0.000	A
C-A	403	101			403				
A-B	78	20			78				
A-C	750	187			750				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	317	0.252	81	0.6	0.3	15.295	C

C-AB	0	0	449	0.000	0	0.0	0.0	0.000	A
C-A	329	82			329				
A-B	64	16			64				
A-C	612	153			612				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	349	0.192	67	0.3	0.2	12.805	B
C-AB	0	0	475	0.000	0	0.0	0.0	0.000	A
C-A	276	69			276				
A-B	53	13			53				
A-C	513	128			513				

2044 8.5k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2044 8.5k DM	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	589	100.000
B		ONE HOUR	✓	53	100.000
C		ONE HOUR	✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	50	539
	B	47	0	6
	C	599	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	2	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.21	16.62	0.3	C	49	73
C-AB	0.03	4.39	0.0	A	18	27
C-A					538	808
A-B					46	69
A-C					495	742

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	10	351	0.114	39	0.0	0.1	11.542	B
C-AB	12	3	832	0.014	11	0.0	0.0	4.389	A
C-A	445	111			445				
A-B	38	9			38				
A-C	406	101			406				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	319	0.149	47	0.1	0.2	13.245	B
C-AB	16	4	880	0.018	16	0.0	0.0	4.166	A
C-A	529	132			529				
A-B	45	11			45				
A-C	485	121			485				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	275	0.212	58	0.2	0.3	16.571	C
C-AB	25	6	950	0.027	25	0.0	0.0	3.891	A
C-A	642	160			642				
A-B	55	14			55				
A-C	593	148			593				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	275	0.212	58	0.3	0.3	16.623	C
C-AB	25	6	950	0.027	25	0.0	0.0	3.893	A
C-A	642	160			642				
A-B	55	14			55				
A-C	593	148			593				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	319	0.149	48	0.3	0.2	13.298	B

C-AB	16	4	880	0.019	16	0.0	0.0	4.170	A
C-A	528	132			528				
A-B	45	11			45				
A-C	485	121			485				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	10	351	0.114	40	0.2	0.1	11.596	B
C-AB	12	3	832	0.014	12	0.0	0.0	4.392	A
C-A	445	111			445				
A-B	38	9			38				
A-C	406	101			406				

2044 8.5k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 8.5k DS	AM	J4 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	752	100.000
B		ONE HOUR	✓	89	100.000
C		ONE HOUR	✓	501	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	70	682
	B	79	0	10
	C	500	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	6
	B	0	0	0
	C	8	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.41	25.83	0.7	D	82	123
C-AB	0.01	6.46	0.0	A	4	6
C-A					456	684
A-B					64	96
A-C					626	939

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	325	0.206	66	0.0	0.3	13.842	B
C-AB	2	0.57	560	0.004	2	0.0	0.0	6.458	A
C-A	375	94			375				
A-B	53	13			53				
A-C	513	128			513				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	288	0.278	80	0.3	0.4	17.187	C
C-AB	3	1	613	0.006	3	0.0	0.0	6.010	A
C-A	447	112			447				
A-B	63	16			63				
A-C	613	153			613				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	24	237	0.413	97	0.4	0.7	25.433	D
C-AB	6	1	687	0.008	6	0.0	0.0	5.376	A
C-A	546	137			546				
A-B	77	19			77				
A-C	751	188			751				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	24	237	0.413	98	0.7	0.7	25.829	D
C-AB	6	1	688	0.008	6	0.0	0.0	5.277	A
C-A	546	137			546				
A-B	77	19			77				
A-C	751	188			751				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	288	0.278	81	0.7	0.4	17.474	C

C-AB	3	1	613	0.006	3	0.0	0.0	5.736	A
C-A	447	112			447				
A-B	63	16			63				
A-C	613	153			613				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	325	0.206	68	0.4	0.3	14.005	B
C-AB	2	0.58	561	0.004	2	0.0	0.0	6.293	A
C-A	375	94			375				
A-B	53	13			53				
A-C	513	128			513				

2044 8.5k DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2044 8.5k DS	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	560	100.000
B		ONE HOUR	✓	53	100.000
C		ONE HOUR	✓	829	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	49	511
	B	47	0	6
	C	821	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	3	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.24	19.71	0.3	C	49	73
C-AB	0.04	4.03	0.1	A	32	48
C-A					729	1093
A-B					45	67
A-C					469	703

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	10	328	0.122	39	0.0	0.1	12.438	B
C-AB	19	5	912	0.021	19	0.0	0.0	4.031	A
C-A	605	151			605				
A-B	37	9			37				
A-C	385	96			385				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	292	0.163	47	0.1	0.2	14.714	B
C-AB	28	7	990	0.029	28	0.0	0.0	3.750	A
C-A	717	179			717				
A-B	44	11			44				
A-C	459	115			459				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	241	0.242	58	0.2	0.3	19.609	C
C-AB	49	12	1103	0.044	49	0.0	0.1	3.423	A
C-A	864	216			864				
A-B	54	13			54				
A-C	563	141			563				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	241	0.242	58	0.3	0.3	19.711	C
C-AB	49	12	1103	0.044	49	0.1	0.1	3.416	A
C-A	864	216			864				
A-B	54	13			54				
A-C	563	141			563				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	292	0.163	48	0.3	0.2	14.798	B

C-AB	28	7	991	0.029	28	0.1	0.0	3.724	A
C-A	717	179			717				
A-B	44	11			44				
A-C	459	115			459				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	10	328	0.122	40	0.2	0.1	12.504	B
C-AB	19	5	912	0.021	19	0.0	0.0	4.015	A
C-A	605	151			605				
A-B	37	9			37				
A-C	385	96			385				

2044 10k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2044 10k DM	AM	J4 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	736	100.000
B		ONE HOUR	✓	87	100.000
C		ONE HOUR	✓	368	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	70	666
	B	77	0	10
	C	368	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	1	2
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.35	20.07	0.5	C	80	120
C-AB	0.00	0.00	0.0	A	0	0
C-A					338	507
A-B					64	96
A-C					611	917

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	351	0.187	65	0.0	0.2	12.551	B
C-AB	0	0	476	0.000	0	0.0	0.0	0.000	A
C-A	277	69			277				
A-B	53	13			53				
A-C	501	125			501				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	20	319	0.245	78	0.2	0.3	14.907	B
C-AB	0	0	451	0.000	0	0.0	0.0	0.000	A
C-A	331	83			331				
A-B	63	16			63				
A-C	599	150			599				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	96	24	275	0.348	95	0.3	0.5	19.909	C
C-AB	0	0	415	0.000	0	0.0	0.0	0.000	A
C-A	405	101			405				
A-B	77	19			77				
A-C	733	183			733				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	96	24	275	0.348	96	0.5	0.5	20.074	C
C-AB	0	0	415	0.000	0	0.0	0.0	0.000	A
C-A	405	101			405				
A-B	77	19			77				
A-C	733	183			733				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	20	319	0.245	79	0.5	0.3	15.053	C

C-AB	0	0	451	0.000	0	0.0	0.0	0.000	A
C-A	331	83			331				
A-B	63	16			63				
A-C	599	150			599				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	351	0.187	66	0.3	0.2	12.665	B
C-AB	0	0	476	0.000	0	0.0	0.0	0.000	A
C-A	277	69			277				
A-B	53	13			53				
A-C	501	125			501				

2044 10k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 10k DM	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	591	100.000
B		ONE HOUR	✓	52	100.000
C		ONE HOUR	✓	600	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	49	542
	B	46	0	6
	C	593	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.21	16.50	0.3	C	48	72
C-AB	0.03	4.41	0.0	A	18	26
C-A					533	800
A-B					45	67
A-C					497	746

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	351	0.111	39	0.0	0.1	11.517	B
C-AB	11	3	828	0.014	11	0.0	0.0	4.407	A
C-A	440	110			440				
A-B	37	9			37				
A-C	408	102			408				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	320	0.146	47	0.1	0.2	13.180	B
C-AB	16	4	876	0.018	16	0.0	0.0	4.186	A
C-A	523	131			523				
A-B	44	11			44				
A-C	487	122			487				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	275	0.208	57	0.2	0.3	16.447	C
C-AB	25	6	945	0.027	25	0.0	0.0	3.912	A
C-A	636	159			636				
A-B	54	13			54				
A-C	597	149			597				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	275	0.208	57	0.3	0.3	16.497	C
C-AB	25	6	945	0.027	25	0.0	0.0	3.915	A
C-A	636	159			636				
A-B	54	13			54				
A-C	597	149			597				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	320	0.146	47	0.3	0.2	13.229	B

C-AB	16	4	876	0.018	16	0.0	0.0	4.190	A
C-A	523	131			523				
A-B	44	11			44				
A-C	487	122			487				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	351	0.111	39	0.2	0.1	11.548	B
C-AB	11	3	828	0.014	11	0.0	0.0	4.409	A
C-A	440	110			440				
A-B	37	9			37				
A-C	408	102			408				

2044 10k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2044 10k DS	AM	J4 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	774	100.000
B		ONE HOUR	✓	87	100.000
C		ONE HOUR	✓	514	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	69	705
	B	77	0	10
	C	513	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	8	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.42	26.97	0.7	D	80	120
C-AB	0.01	6.38	0.0	A	4	6
C-A					468	702
A-B					63	95
A-C					647	970

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	320	0.205	64	0.0	0.3	14.053	B
C-AB	2	0.59	566	0.004	2	0.0	0.0	6.381	A
C-A	385	96			385				
A-B	52	13			52				
A-C	531	133			531				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	20	282	0.278	78	0.3	0.4	17.598	C
C-AB	4	1	621	0.006	4	0.0	0.0	5.930	A
C-A	459	115			459				
A-B	62	16			62				
A-C	634	158			634				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	96	24	229	0.418	95	0.4	0.7	26.526	D
C-AB	6	1	698	0.008	6	0.0	0.0	5.295	A
C-A	560	140			560				
A-B	76	19			76				
A-C	776	194			776				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	96	24	229	0.418	96	0.7	0.7	26.975	D
C-AB	6	1	698	0.008	6	0.0	0.0	5.199	A
C-A	560	140			560				
A-B	76	19			76				
A-C	776	194			776				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	20	282	0.278	79	0.7	0.4	17.895	C

C-AB	4	1	622	0.006	4	0.0	0.0	5.658	A
C-A	459	115			459				
A-B	62	16			62				
A-C	634	158			634				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	320	0.205	66	0.4	0.3	14.223	B
C-AB	2	0.59	567	0.004	2	0.0	0.0	6.217	A
C-A	385	96			385				
A-B	52	13			52				
A-C	531	133			531				

2044 10k DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2044 10k DS	PM	J4 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	576	100.000
B		ONE HOUR	✓	52	100.000
C		ONE HOUR	✓	848	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	48	528
	B	46	0	6
	C	840	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	2
	B	0	0	0
	C	3	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.25	20.40	0.3	C	48	72
C-AB	0.05	3.99	0.1	A	33	50
C-A					745	1117
A-B					44	66
A-C					485	727

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	324	0.121	39	0.0	0.1	12.611	B
C-AB	19	5	921	0.021	19	0.0	0.0	3.993	A
C-A	619	155			619				
A-B	36	9			36				
A-C	398	99			398				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	286	0.163	47	0.1	0.2	15.015	C
C-AB	29	7	1001	0.029	29	0.0	0.0	3.711	A
C-A	733	183			733				
A-B	43	11			43				
A-C	475	119			475				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	234	0.245	57	0.2	0.3	20.290	C
C-AB	51	13	1117	0.046	51	0.0	0.1	3.385	A
C-A	882	221			882				
A-B	53	13			53				
A-C	581	145			581				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	234	0.245	57	0.3	0.3	20.402	C
C-AB	51	13	1118	0.046	51	0.1	0.1	3.379	A
C-A	882	221			882				
A-B	53	13			53				
A-C	581	145			581				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	286	0.163	47	0.3	0.2	15.104	C

C-AB	29	7	1002	0.029	30	0.1	0.0	3.688	A
C-A	733	183			733				
A-B	43	11			43				
A-C	475	119			475				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	323	0.121	39	0.2	0.1	12.681	B
C-AB	19	5	921	0.021	19	0.0	0.0	3.978	A
C-A	619	155			619				
A-B	36	9			36				
A-C	398	99			398				

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: J5 A20_Station Rd_Church Rd - UPDATED GEOMETRY.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J5 A20-Station Rd-Church Rd
Report generation date: 10/11/2021 16:14:34

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Stream B-ACD	D1	0.6	12.95	0.36	B	D2	0.7	14.34	0.42	B
Stream A-BCD		0.0	5.78	0.02	A		0.0	6.31	0.03	A
Stream D-AB		0.1	8.54	0.06	A		0.0	9.88	0.04	A
Stream D-BC		0.3	13.76	0.25	B		0.2	13.70	0.17	B
Stream C-ABD		0.2	6.54	0.18	A		0.2	6.29	0.16	A
	2037 DM									
Stream B-ACD	D3	1.3	25.60	0.57	D	D4	1.6	29.64	0.62	D
Stream A-BCD		0.0	6.34	0.02	A		0.0	7.23	0.04	A
Stream D-AB		0.1	12.19	0.11	B		0.1	14.27	0.08	B
Stream D-BC		0.7	24.64	0.40	C		0.4	23.68	0.28	C
Stream C-ABD		0.3	8.73	0.25	A		0.3	7.88	0.21	A
	2037 DS									
Stream B-ACD	D5	1.1	22.44	0.53	C	D6	1.3	23.51	0.56	C
Stream A-BCD		0.0	6.99	0.01	A		0.0	7.89	0.03	A
Stream D-AB		0.1	15.75	0.12	C		0.1	16.05	0.08	C
Stream D-BC		0.9	33.46	0.49	D		0.4	27.08	0.30	D
Stream C-ABD		0.4	8.69	0.27	A		0.3	7.52	0.22	A
	2044 8.5k DM									
Stream B-ACD	D7	1.4	27.22	0.59	D	D8	1.8	32.84	0.66	D
Stream A-BCD		0.0	6.46	0.02	A		0.0	7.43	0.04	A
Stream D-AB		0.1	13.20	0.12	B		0.1	15.03	0.08	C
Stream D-BC		0.8	27.05	0.44	D		0.4	25.57	0.30	D

Stream C-ABD		0.4	8.86	0.26	A		0.3	7.93	0.22	A
	2044 8.5k DS									
Stream B-ACD	D9	1.7	33.35	0.64	D	D10	2.2	39.12	0.70	E
Stream A-BCD		0.0	7.45	0.01	A		0.0	9.13	0.03	A
Stream D-AB		0.3	29.96	0.22	D		0.2	30.30	0.15	D
Stream D-BC		1.8	64.65	0.67	F		1.0	59.70	0.51	F
Stream C-ABD		0.5	9.89	0.32	A		0.4	8.31	0.26	A
	2044 10k DM									
Stream B-ACD	D11	1.4	26.92	0.59	D	D12	1.8	32.58	0.66	D
Stream A-BCD		0.0	6.46	0.02	A		0.0	7.41	0.04	A
Stream D-AB		0.1	13.08	0.12	B		0.1	14.98	0.08	B
Stream D-BC		0.8	26.70	0.44	D		0.4	25.49	0.30	D
Stream C-ABD		0.3	8.77	0.26	A		0.3	7.97	0.22	A
	2044 10k DS									
Stream B-ACD	D13	1.9	37.49	0.67	E	D14	2.4	42.68	0.72	E
Stream A-BCD		0.0	7.52	0.01	A		0.0	9.31	0.03	A
Stream D-AB		0.3	35.28	0.25	E		0.2	36.64	0.17	E
Stream D-BC		2.1	74.37	0.70	F		1.2	71.41	0.56	F
Stream C-ABD		0.5	10.10	0.33	B		0.4	8.45	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.

File summary

File Description

Title	J5 Otterpool Park Base Model
Location	A20 Hythe Road / Station Road / Church Road
Site number	
Date	14/06/2017
Version	
Status	Draft 1
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J5 A20-Station Rd AM PEAK	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓
D3	2037 DM	AM	J5 A20-Station Rd AM PEAK	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓
D5	2037 DS	AM	J5 A20-Station Rd AM PEAK	ONE HOUR	07:45	09:15	15	✓

D6	2037 DS	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓
D7	2044 8.5k DM	AM	J5 A20-Station Rd AM PEAK	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓
D9	2044 8.5k DS	AM	J5 A20-Station Rd AM PEAK	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓
D11	2044 10k DM	AM	J5 A20-Station Rd AM PEAK	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓
D13	2044 10k DS	AM	J5 A20-Station Rd AM PEAK	ONE HOUR	07:45	09:15	15	✓
D14	2044 10k DS	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A20 Hythe Road Westbound		Major
B	Station Road		Minor
C	A20 Hythe Road Eastbound		Major
D	Church Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.70		✓	3.80	150.0	✓	6.00
C	6.70		✓	3.80	150.0	✓	6.00

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)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00								28	18
D	One lane plus flare		8.93	3.56	3.21	3.10	3.03	✓	1.00	19	18

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	776	-	-	-	-	-	-	0.291	0.416	0.291	-	-	-
B-A	496	0.088	0.221	0.221	-	-	-	0.139	0.316	-	0.221	0.221	0.111
B-C	635	0.094	0.239	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	496	0.088	0.221	0.221	-	-	-	0.139	0.316	0.139	-	-	-
B-D, offside lane	496	0.088	0.221	0.221	-	-	-	0.139	0.316	0.139	-	-	-
C-B	776	0.291	0.291	0.416	-	-	-	-	-	-	-	-	-
D-A	694	-	-	-	-	-	-	0.261	-	0.103	-	-	-
D-B, nearside lane	538	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-

D-B, offside lane	521	0.146	0.146	0.332	-	-	-	0.233	0.233	0.092	-	-	-
D-C	521	-	0.146	0.332	0.116	0.233	0.233	0.233	0.233	0.092	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J5 A20-Station Rd AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	297	100.000
B		ONE HOUR	✓	145	100.000
C		ONE HOUR	✓	380	100.000
D		ONE HOUR	✓	107	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	47	241	9
	B	26	0	94	25
	C	199	108	0	73
	D	14	20	73	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	4	4	0
	B	8	0	4	4
	C	7	1	0	3
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.36	12.95	0.6	B	133	200
A-BCD	0.02	5.78	0.0	A	8	12
A-B					43	65
A-C					221	332
D-AB	0.06	8.54	0.1	A	24	36
D-BC	0.25	13.76	0.3	B	74	112
C-ABD	0.18	6.54	0.2	A	99	149

C-D					67	100
C-A					183	274

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	109	27	475	0.230	108	0.0	0.3	9.765	A
A-BCD	7	2	678	0.010	7	0.0	0.0	5.358	A
A-B	35	9			35				
A-C	181	45			181				
D-AB	19	5	511	0.037	19	0.0	0.0	7.309	A
D-BC	61	15	404	0.152	61	0.0	0.2	10.473	B
C-ABD	81	20	700	0.116	81	0.0	0.1	5.805	A
C-D	55	14			55				
C-A	150	37			150				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	130	33	460	0.284	130	0.3	0.4	10.901	B
A-BCD	8	2	659	0.012	8	0.0	0.0	5.527	A
A-B	42	11			42				
A-C	217	54			217				
D-AB	23	6	487	0.048	23	0.0	0.0	7.762	A
D-BC	73	18	381	0.192	73	0.2	0.2	11.659	B
C-ABD	97	24	687	0.141	97	0.1	0.2	6.097	A
C-D	66	16			66				
C-A	179	45			179				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	160	40	438	0.365	159	0.4	0.6	12.883	B
A-BCD	10	2	633	0.016	10	0.0	0.0	5.775	A
A-B	52	13			52				
A-C	265	66			265				
D-AB	29	7	451	0.064	29	0.0	0.1	8.532	A
D-BC	89	22	351	0.253	88	0.2	0.3	13.711	B
C-ABD	119	30	669	0.178	119	0.2	0.2	6.541	A
C-D	80	20			80				
C-A	219	55			219				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	160	40	438	0.365	160	0.6	0.6	12.946	B
A-BCD	10	2	633	0.016	10	0.0	0.0	5.776	A
A-B	52	13			52				
A-C	265	66			265				
D-AB	29	7	450	0.064	29	0.1	0.1	8.541	A
D-BC	89	22	350	0.253	89	0.3	0.3	13.759	B
C-ABD	119	30	669	0.178	119	0.2	0.2	6.544	A
C-D	80	20			80				
C-A	219	55			219				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	130	33	460	0.284	131	0.6	0.4	10.974	B
A-BCD	8	2	659	0.012	8	0.0	0.0	5.530	A
A-B	42	11			42				
A-C	217	54			217				
D-AB	23	6	486	0.048	23	0.1	0.1	7.775	A
D-BC	73	18	381	0.192	73	0.3	0.2	11.716	B
C-ABD	97	24	687	0.141	97	0.2	0.2	6.104	A
C-D	66	16			66				
C-A	179	45			179				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	109	27	475	0.230	110	0.4	0.3	9.855	A
A-BCD	7	2	678	0.010	7	0.0	0.0	5.361	A
A-B	35	9			35				
A-C	181	45			181				
D-AB	19	5	511	0.037	19	0.1	0.0	7.326	A
D-BC	61	15	403	0.152	62	0.2	0.2	10.544	B
C-ABD	81	20	700	0.116	81	0.2	0.1	5.817	A
C-D	55	14			55				
C-A	150	37			150				

2018, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	294	100.000
B		ONE HOUR	✓	162	100.000
C		ONE HOUR	✓	526	100.000
D		ONE HOUR	✓	63	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	40	236	18
	B	36	0	94	32
	C	329	96	0	101
	D	7	15	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	0	1	0

From	B	0	0	2	3
	C	3	0	0	0
	D	0	13	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.42	14.34	0.7	B	149	223
A-BCD	0.03	6.31	0.0	A	17	25
A-B					37	55
A-C					217	325
D-AB	0.04	9.88	0.0	A	14	21
D-BC	0.17	13.70	0.2	B	44	66
C-ABD	0.16	6.29	0.2	A	88	132
C-D					93	139
C-A					302	453

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	122	30	473	0.258	121	0.0	0.3	10.185	B
A-BCD	14	3	649	0.021	13	0.0	0.0	5.662	A
A-B	30	8			30				
A-C	178	44			178				
D-AB	11	3	442	0.026	11	0.0	0.0	8.347	A
D-BC	36	9	378	0.095	36	0.0	0.1	10.511	B
C-ABD	72	18	709	0.102	72	0.0	0.1	5.645	A
C-D	76	19			76				
C-A	248	62			248				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	146	36	455	0.320	145	0.3	0.5	11.606	B
A-BCD	16	4	625	0.026	16	0.0	0.0	5.917	A
A-B	36	9			36				
A-C	212	53			212				
D-AB	14	3	417	0.033	14	0.0	0.0	8.914	A
D-BC	43	11	351	0.122	43	0.1	0.1	11.663	B
C-ABD	86	22	696	0.124	86	0.1	0.1	5.902	A
C-D	91	23			91				
C-A	296	74			296				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	178	45	429	0.415	177	0.5	0.7	14.231	B
A-BCD	20	5	590	0.034	20	0.0	0.0	6.307	A
A-B	44	11			44				
A-C	260	65			260				

D-AB	17	4	382	0.045	17	0.0	0.0	9.866	A
D-BC	52	13	315	0.166	52	0.1	0.2	13.671	B
C-ABD	106	26	678	0.156	106	0.1	0.2	6.284	A
C-D	111	28			111				
C-A	362	91			362				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	178	45	429	0.415	178	0.7	0.7	14.336	B
A-BCD	20	5	590	0.034	20	0.0	0.0	6.308	A
A-B	44	11			44				
A-C	260	65			260				
D-AB	17	4	382	0.045	17	0.0	0.0	9.878	A
D-BC	52	13	315	0.166	52	0.2	0.2	13.701	B
C-ABD	106	26	678	0.156	106	0.2	0.2	6.286	A
C-D	111	28			111				
C-A	362	91			362				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	146	36	455	0.320	147	0.7	0.5	11.716	B
A-BCD	16	4	624	0.026	16	0.0	0.0	5.921	A
A-B	36	9			36				
A-C	212	53			212				
D-AB	14	3	417	0.033	14	0.0	0.0	8.933	A
D-BC	43	11	351	0.122	43	0.2	0.1	11.694	B
C-ABD	86	22	696	0.124	86	0.2	0.1	5.907	A
C-D	91	23			91				
C-A	296	74			296				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	122	30	473	0.258	122	0.5	0.4	10.298	B
A-BCD	14	3	649	0.021	14	0.0	0.0	5.666	A
A-B	30	8			30				
A-C	178	44			178				
D-AB	11	3	442	0.026	11	0.0	0.0	8.364	A
D-BC	36	9	377	0.096	36	0.1	0.1	10.559	B
C-ABD	72	18	709	0.102	72	0.1	0.1	5.654	A
C-D	76	19			76				
C-A	248	62			248				

2037 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		5.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2037 DM	AM	J5 A20-Station Rd AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	669	100.000
B		ONE HOUR	✓	166	100.000
C		ONE HOUR	✓	553	100.000
D		ONE HOUR	✓	121	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	45	615	9
	B	31	0	108	27
	C	350	122	0	81
	D	17	22	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	2	1	0

From	B	6	0	4	4
	C	2	2	0	2
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.57	25.60	1.3	D	152	228
A-BCD	0.02	6.34	0.0	A	8	12
A-B					41	62
A-C					564	847
D-AB	0.11	12.19	0.1	B	29	43
D-BC	0.40	24.64	0.7	C	82	124
C-ABD	0.25	8.73	0.3	A	112	168
C-D					74	111
C-A					321	482

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	125	31	402	0.311	123	0.0	0.4	12.829	B
A-BCD	7	2	640	0.011	7	0.0	0.0	5.680	A
A-B	34	8			34				
A-C	463	116			463				
D-AB	23	6	448	0.050	22	0.0	0.1	8.445	A
D-BC	68	17	332	0.206	67	0.0	0.3	13.561	B
C-ABD	92	23	614	0.149	91	0.0	0.2	6.871	A
C-D	61	15			61				
C-A	263	66			263				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	149	37	370	0.403	148	0.4	0.7	16.187	C
A-BCD	8	2	614	0.013	8	0.0	0.0	5.942	A
A-B	40	10			40				
A-C	553	138			553				
D-AB	28	7	404	0.068	28	0.1	0.1	9.553	A
D-BC	81	20	295	0.275	81	0.3	0.4	16.743	C
C-ABD	110	27	586	0.187	109	0.2	0.2	7.550	A
C-D	73	18			73				
C-A	315	79			315				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	183	46	323	0.566	180	0.7	1.2	24.853	C
A-BCD	10	2	577	0.017	10	0.0	0.0	6.343	A
A-B	50	12			50				
A-C	677	169			677				

D-AB	35	9	332	0.107	35	0.1	0.1	12.105	B
D-BC	98	24	244	0.400	97	0.4	0.6	24.219	C
C-ABD	134	34	547	0.246	134	0.2	0.3	8.711	A
C-D	89	22			89				
C-A	385	96			385				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	183	46	323	0.566	183	1.2	1.3	25.602	D
A-BCD	10	2	577	0.017	10	0.0	0.0	6.344	A
A-B	50	12			50				
A-C	677	169			677				
D-AB	35	9	331	0.107	35	0.1	0.1	12.188	B
D-BC	98	24	244	0.401	98	0.6	0.7	24.638	C
C-ABD	134	34	547	0.246	134	0.3	0.3	8.726	A
C-D	89	22			89				
C-A	385	96			385				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	149	37	370	0.404	152	1.3	0.7	16.669	C
A-BCD	8	2	614	0.013	8	0.0	0.0	5.947	A
A-B	40	10			40				
A-C	553	138			553				
D-AB	28	7	403	0.069	28	0.1	0.1	9.612	A
D-BC	81	20	294	0.275	82	0.7	0.4	17.048	C
C-ABD	110	27	586	0.187	110	0.3	0.2	7.571	A
C-D	73	18			73				
C-A	315	79			315				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	125	31	402	0.311	126	0.7	0.5	13.091	B
A-BCD	7	2	640	0.011	7	0.0	0.0	5.686	A
A-B	34	8			34				
A-C	463	116			463				
D-AB	23	6	447	0.051	23	0.1	0.1	8.483	A
D-BC	68	17	331	0.207	69	0.4	0.3	13.759	B
C-ABD	92	23	614	0.149	92	0.2	0.2	6.894	A
C-D	61	15			61				
C-A	263	66			263				

2037 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2037 DM	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	609	100.000
B		ONE HOUR	✓	179	100.000
C		ONE HOUR	✓	749	100.000
D		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	45	544	20
	B	38	0	106	35
	C	523	110	0	116
	D	8	17	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	0	0	0

From	B	3	0	2	3
	C	0	0	0	0
	D	0	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.62	29.64	1.6	D	164	246
A-BCD	0.04	7.23	0.0	A	18	28
A-B					41	62
A-C					499	749
D-AB	0.08	14.27	0.1	B	17	25
D-BC	0.28	23.68	0.4	C	49	73
C-ABD	0.21	7.88	0.3	A	101	151
C-D					106	160
C-A					480	720

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	135	34	401	0.336	133	0.0	0.5	13.349	B
A-BCD	15	4	601	0.025	15	0.0	0.0	6.141	A
A-B	34	8			34				
A-C	410	102			410				
D-AB	13	3	378	0.035	13	0.0	0.0	9.864	A
D-BC	40	10	307	0.131	40	0.0	0.1	13.444	B
C-ABD	83	21	640	0.129	82	0.0	0.1	6.443	A
C-D	87	22			87				
C-A	394	98			394				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	161	40	367	0.438	160	0.5	0.8	17.290	C
A-BCD	18	4	567	0.032	18	0.0	0.0	6.555	A
A-B	40	10			40				
A-C	489	122			489				
D-AB	16	4	336	0.048	16	0.0	0.0	11.232	B
D-BC	48	12	266	0.179	48	0.1	0.2	16.439	C
C-ABD	99	25	614	0.161	99	0.1	0.2	6.984	A
C-D	104	26			104				
C-A	470	118			470				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	197	49	318	0.620	194	0.8	1.5	28.399	D
A-BCD	22	6	520	0.042	22	0.0	0.0	7.226	A
A-B	50	12			50				
A-C	599	150			599				

D-AB	20	5	273	0.075	20	0.0	0.1	14.202	B
D-BC	58	14	210	0.274	57	0.2	0.4	23.429	C
C-ABD	121	30	578	0.210	121	0.2	0.3	7.874	A
C-D	128	32			128				
C-A	576	144			576				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	197	49	318	0.620	197	1.5	1.6	29.645	D
A-BCD	22	6	520	0.042	22	0.0	0.0	7.228	A
A-B	50	12			50				
A-C	599	150			599				
D-AB	20	5	273	0.075	20	0.1	0.1	14.270	B
D-BC	58	14	210	0.275	58	0.4	0.4	23.681	C
C-ABD	121	30	578	0.210	121	0.3	0.3	7.884	A
C-D	128	32			128				
C-A	576	144			576				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	161	40	367	0.439	164	1.6	0.8	17.999	C
A-BCD	18	4	567	0.032	18	0.0	0.0	6.559	A
A-B	40	10			40				
A-C	489	122			489				
D-AB	16	4	335	0.048	16	0.1	0.1	11.294	B
D-BC	48	12	265	0.180	48	0.4	0.2	16.616	C
C-ABD	99	25	614	0.161	99	0.3	0.2	6.995	A
C-D	104	26			104				
C-A	470	118			470				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	135	34	400	0.337	136	0.8	0.5	13.676	B
A-BCD	15	4	601	0.025	15	0.0	0.0	6.145	A
A-B	34	8			34				
A-C	410	102			410				
D-AB	13	3	377	0.035	13	0.1	0.0	9.899	A
D-BC	40	10	306	0.132	41	0.2	0.2	13.565	B
C-ABD	83	21	640	0.129	83	0.2	0.1	6.463	A
C-D	87	22			87				
C-A	394	98			394				

2037 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		5.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 DS	AM	J5 A20-Station Rd AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	556	100.000
B		ONE HOUR	✓	166	100.000
C		ONE HOUR	✓	687	100.000
D		ONE HOUR	✓	121	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	25	526	5
	B	18	0	121	27
	C	460	142	0	85
	D	13	22	86	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	0	9	0

From	B	0	0	5	4
	C	9	2	0	2
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.53	22.44	1.1	C	152	228
A-BCD	0.01	6.99	0.0	A	5	7
A-B					23	34
A-C					483	724
D-AB	0.12	15.75	0.1	C	25	38
D-BC	0.49	33.46	0.9	D	86	128
C-ABD	0.27	8.69	0.4	A	130	196
C-D					78	117
C-A					422	633

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	125	31	422	0.296	123	0.0	0.4	11.979	B
A-BCD	4	0.94	601	0.006	4	0.0	0.0	6.022	A
A-B	19	5			19				
A-C	396	99			396				
D-AB	20	5	405	0.049	20	0.0	0.1	9.338	A
D-BC	71	18	308	0.231	70	0.0	0.3	15.054	C
C-ABD	107	27	630	0.170	106	0.0	0.2	6.856	A
C-D	64	16			64				
C-A	346	87			346				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	149	37	390	0.382	148	0.4	0.6	14.828	B
A-BCD	4	1	567	0.008	4	0.0	0.0	6.396	A
A-B	22	6			22				
A-C	473	118			473				
D-AB	25	6	352	0.070	24	0.1	0.1	10.974	B
D-BC	84	21	267	0.316	84	0.3	0.4	19.610	C
C-ABD	128	32	605	0.211	127	0.2	0.3	7.532	A
C-D	76	19			76				
C-A	414	103			414				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	183	46	343	0.533	181	0.6	1.1	21.941	C
A-BCD	6	1	520	0.011	5	0.0	0.0	6.991	A
A-B	28	7			28				
A-C	579	145			579				

D-AB	32	8	264	0.122	32	0.1	0.1	15.521	C
D-BC	101	25	209	0.484	99	0.4	0.9	32.390	D
C-ABD	156	39	570	0.274	156	0.3	0.4	8.677	A
C-D	94	23			94				
C-A	506	127			506				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	183	46	343	0.533	183	1.1	1.1	22.445	C
A-BCD	6	1	520	0.011	6	0.0	0.0	6.994	A
A-B	28	7			28				
A-C	579	145			579				
D-AB	32	8	261	0.123	32	0.1	0.1	15.750	C
D-BC	101	25	208	0.485	101	0.9	0.9	33.457	D
C-ABD	156	39	570	0.274	156	0.4	0.4	8.694	A
C-D	94	23			94				
C-A	506	127			506				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	149	37	390	0.382	151	1.1	0.6	15.174	C
A-BCD	4	1	567	0.008	5	0.0	0.0	6.402	A
A-B	22	6			22				
A-C	473	118			473				
D-AB	25	6	350	0.070	25	0.1	0.1	11.090	B
D-BC	84	21	266	0.317	86	0.9	0.5	20.204	C
C-ABD	128	32	605	0.211	128	0.4	0.3	7.554	A
C-D	76	19			76				
C-A	414	103			414				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	125	31	422	0.296	126	0.6	0.4	12.187	B
A-BCD	4	0.94	601	0.006	4	0.0	0.0	6.027	A
A-B	19	5			19				
A-C	396	99			396				
D-AB	20	5	403	0.049	20	0.1	0.1	9.396	A
D-BC	71	18	307	0.232	72	0.5	0.3	15.339	C
C-ABD	107	27	630	0.170	107	0.3	0.2	6.885	A
C-D	64	16			64				
C-A	346	87			346				

2037 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 DS	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	468	100.000
B		ONE HOUR	✓	179	100.000
C		ONE HOUR	✓	866	100.000
D		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	30	425	13
	B	25	0	119	35
	C	617	126	0	123
	D	7	17	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	0	5	0

From	B	0	0	2	3
	C	5	0	0	0
	D	0	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.56	23.51	1.3	C	164	246
A-BCD	0.03	7.89	0.0	A	12	18
A-B					28	41
A-C					390	585
D-AB	0.08	16.05	0.1	C	16	24
D-BC	0.30	27.08	0.4	D	48	73
C-ABD	0.22	7.52	0.3	A	116	173
C-D					113	169
C-A					566	849

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	135	34	429	0.314	133	0.0	0.4	12.103	B
A-BCD	10	2	567	0.017	10	0.0	0.0	6.457	A
A-B	23	6			23				
A-C	320	80			320				
D-AB	12	3	356	0.035	12	0.0	0.0	10.456	B
D-BC	40	10	294	0.137	40	0.0	0.2	14.133	B
C-ABD	95	24	667	0.142	94	0.0	0.2	6.275	A
C-D	93	23			93				
C-A	465	116			465				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	161	40	397	0.405	160	0.4	0.7	15.132	C
A-BCD	12	3	526	0.022	12	0.0	0.0	6.992	A
A-B	27	7			27				
A-C	382	96			382				
D-AB	15	4	312	0.049	15	0.0	0.1	12.116	B
D-BC	48	12	251	0.190	47	0.2	0.2	17.700	C
C-ABD	113	28	646	0.175	113	0.2	0.2	6.751	A
C-D	111	28			111				
C-A	555	139			555				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	197	49	350	0.563	195	0.7	1.2	22.890	C
A-BCD	14	4	470	0.030	14	0.0	0.0	7.892	A
A-B	33	8			33				
A-C	468	117			468				

D-AB	20	5	245	0.080	19	0.1	0.1	15.954	C
D-BC	57	14	191	0.301	57	0.2	0.4	26.734	D
C-ABD	139	35	617	0.225	138	0.2	0.3	7.514	A
C-D	135	34			135				
C-A	679	170			679				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	197	49	350	0.564	197	1.2	1.3	23.506	C
A-BCD	14	4	470	0.030	14	0.0	0.0	7.894	A
A-B	33	8			33				
A-C	468	117			468				
D-AB	20	5	244	0.081	20	0.1	0.1	16.054	C
D-BC	57	14	190	0.302	57	0.4	0.4	27.078	D
C-ABD	139	35	617	0.225	139	0.3	0.3	7.523	A
C-D	135	34			135				
C-A	679	170			679				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	161	40	397	0.405	163	1.3	0.7	15.539	C
A-BCD	12	3	526	0.022	12	0.0	0.0	6.998	A
A-B	27	7			27				
A-C	382	96			382				
D-AB	15	4	311	0.049	15	0.1	0.1	12.197	B
D-BC	48	12	250	0.191	48	0.4	0.2	17.915	C
C-ABD	113	28	646	0.175	114	0.3	0.2	6.761	A
C-D	111	28			111				
C-A	555	139			555				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	135	34	428	0.315	136	0.7	0.5	12.337	B
A-BCD	10	2	567	0.017	10	0.0	0.0	6.464	A
A-B	23	6			23				
A-C	320	80			320				
D-AB	12	3	356	0.035	13	0.1	0.0	10.500	B
D-BC	40	10	293	0.137	41	0.2	0.2	14.272	B
C-ABD	95	24	667	0.142	95	0.2	0.2	6.294	A
C-D	93	23			93				
C-A	465	116			465				

2044 8.5k DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		5.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2044 8.5k DM	AM	J5 A20-Station Rd AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	660	100.000
B		ONE HOUR	✓	175	100.000
C		ONE HOUR	✓	573	100.000
D		ONE HOUR	✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	48	602	10
	B	31	0	115	29
	C	357	130	0	86
	D	17	24	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	2	1	0

From	B	6	0	4	3
	C	3	2	0	2
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.59	27.22	1.4	D	161	241
A-BCD	0.02	6.46	0.0	A	9	14
A-B					44	66
A-C					552	829
D-AB	0.12	13.20	0.1	B	30	45
D-BC	0.44	27.05	0.8	D	88	132
C-ABD	0.26	8.86	0.4	A	119	179
C-D					79	118
C-A					328	491

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	132	33	404	0.326	130	0.0	0.5	13.034	B
A-BCD	8	2	634	0.012	7	0.0	0.0	5.742	A
A-B	36	9			36				
A-C	453	113			453				
D-AB	24	6	437	0.054	23	0.0	0.1	8.703	A
D-BC	73	18	328	0.224	72	0.0	0.3	14.021	B
C-ABD	98	24	616	0.159	97	0.0	0.2	6.924	A
C-D	65	16			65				
C-A	269	67			269				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	157	39	372	0.423	156	0.5	0.7	16.634	C
A-BCD	9	2	607	0.015	9	0.0	0.0	6.023	A
A-B	43	11			43				
A-C	541	135			541				
D-AB	29	7	390	0.075	29	0.1	0.1	9.969	A
D-BC	87	22	290	0.299	86	0.3	0.4	17.603	C
C-ABD	117	29	588	0.199	117	0.2	0.2	7.630	A
C-D	77	19			77				
C-A	321	80			321				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	193	48	324	0.594	190	0.7	1.4	26.273	D
A-BCD	11	3	569	0.019	11	0.0	0.0	6.456	A
A-B	53	13			53				
A-C	663	166			663				

D-AB	37	9	312	0.120	37	0.1	0.1	13.078	B
D-BC	105	26	238	0.439	103	0.4	0.7	26.445	D
C-ABD	143	36	550	0.260	143	0.2	0.3	8.839	A
C-D	95	24			95				
C-A	393	98			393				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	193	48	324	0.594	192	1.4	1.4	27.222	D
A-BCD	11	3	568	0.019	11	0.0	0.0	6.458	A
A-B	53	13			53				
A-C	663	166			663				
D-AB	38	9	310	0.121	37	0.1	0.1	13.202	B
D-BC	105	26	237	0.440	104	0.7	0.8	27.045	D
C-ABD	143	36	550	0.261	143	0.3	0.4	8.856	A
C-D	95	24			95				
C-A	393	98			393				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	157	39	372	0.423	160	1.4	0.8	17.215	C
A-BCD	9	2	606	0.015	9	0.0	0.0	6.028	A
A-B	43	11			43				
A-C	541	135			541				
D-AB	29	7	388	0.075	29	0.1	0.1	10.046	B
D-BC	87	22	289	0.300	88	0.8	0.4	18.006	C
C-ABD	117	29	588	0.199	117	0.4	0.3	7.649	A
C-D	77	19			77				
C-A	321	80			321				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	132	33	404	0.326	133	0.8	0.5	13.327	B
A-BCD	8	2	634	0.012	8	0.0	0.0	5.748	A
A-B	36	9			36				
A-C	453	113			453				
D-AB	24	6	435	0.054	24	0.1	0.1	8.748	A
D-BC	73	18	327	0.224	74	0.4	0.3	14.256	B
C-ABD	98	24	616	0.159	98	0.3	0.2	6.952	A
C-D	65	16			65				
C-A	269	67			269				

2044 8.5k DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		5.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2044 8.5k DM	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	590	100.000
B		ONE HOUR	✓	190	100.000
C		ONE HOUR	✓	788	100.000
D		ONE HOUR	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	47	523	20
	B	40	0	113	37
	C	546	118	0	124
	D	8	18	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	0	0	0

From	B	3	0	2	3
	C	0	0	0	0
	D	0	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.66	32.84	1.8	D	174	262
A-BCD	0.04	7.43	0.0	A	18	28
A-B					43	65
A-C					480	720
D-AB	0.08	15.03	0.1	C	17	26
D-BC	0.30	25.57	0.4	D	52	77
C-ABD	0.22	7.93	0.3	A	108	162
C-D					114	171
C-A					501	752

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	401	0.356	141	0.0	0.5	13.716	B
A-BCD	15	4	592	0.025	15	0.0	0.0	6.240	A
A-B	35	9			35				
A-C	394	98			394				
D-AB	14	3	371	0.037	13	0.0	0.0	10.055	B
D-BC	43	11	302	0.142	42	0.0	0.2	13.814	B
C-ABD	89	22	645	0.138	88	0.0	0.2	6.464	A
C-D	93	23			93				
C-A	411	103			411				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	171	43	367	0.465	170	0.5	0.8	18.080	C
A-BCD	18	4	556	0.032	18	0.0	0.0	6.691	A
A-B	42	11			42				
A-C	470	118			470				
D-AB	17	4	328	0.051	17	0.0	0.1	11.553	B
D-BC	51	13	260	0.195	50	0.2	0.2	17.131	C
C-ABD	106	27	619	0.171	106	0.2	0.2	7.014	A
C-D	111	28			111				
C-A	491	123			491				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	209	52	318	0.658	206	0.8	1.8	31.072	D
A-BCD	22	6	506	0.043	22	0.0	0.0	7.430	A
A-B	52	13			52				
A-C	576	144			576				

D-AB	21	5	262	0.082	21	0.1	0.1	14.940	B
D-BC	61	15	203	0.302	60	0.2	0.4	25.208	D
C-ABD	130	32	584	0.223	130	0.2	0.3	7.920	A
C-D	137	34			137				
C-A	601	150			601				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	209	52	318	0.659	209	1.8	1.8	32.842	D
A-BCD	22	6	506	0.043	22	0.0	0.0	7.432	A
A-B	52	13			52				
A-C	576	144			576				
D-AB	21	5	261	0.082	21	0.1	0.1	15.029	C
D-BC	61	15	202	0.303	61	0.4	0.4	25.569	D
C-ABD	130	32	584	0.223	130	0.3	0.3	7.931	A
C-D	137	34			137				
C-A	601	150			601				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	171	43	367	0.465	175	1.8	0.9	19.018	C
A-BCD	18	4	556	0.032	18	0.0	0.0	6.695	A
A-B	42	11			42				
A-C	470	118			470				
D-AB	17	4	327	0.051	17	0.1	0.1	11.630	B
D-BC	51	13	259	0.196	51	0.4	0.2	17.361	C
C-ABD	106	27	619	0.171	106	0.3	0.2	7.026	A
C-D	111	28			111				
C-A	491	123			491				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	401	0.357	144	0.9	0.6	14.101	B
A-BCD	15	4	592	0.025	15	0.0	0.0	6.244	A
A-B	35	9			35				
A-C	394	98			394				
D-AB	14	3	371	0.037	14	0.1	0.0	10.096	B
D-BC	43	11	301	0.142	43	0.2	0.2	13.957	B
C-ABD	89	22	645	0.138	89	0.2	0.2	6.484	A
C-D	93	23			93				
C-A	411	103			411				

2044 8.5k DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		8.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 8.5k DS	AM	J5 A20-Station Rd AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	673	100.000
B		ONE HOUR	✓	175	100.000
C		ONE HOUR	✓	775	100.000
D		ONE HOUR	✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	22	647	4
	B	17	0	129	29
	C	526	157	0	92
	D	10	24	95	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	0	6	0

From	B	0	0	5	3
	C	9	2	0	2
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.64	33.35	1.7	D	161	241
A-BCD	0.01	7.45	0.0	A	4	6
A-B					20	30
A-C					594	891
D-AB	0.22	29.96	0.3	D	25	38
D-BC	0.67	64.65	1.8	F	93	140
C-ABD	0.32	9.89	0.5	A	144	216
C-D					84	127
C-A					483	724

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	132	33	399	0.331	130	0.0	0.5	13.303	B
A-BCD	3	0.75	579	0.005	3	0.0	0.0	6.246	A
A-B	17	4			17				
A-C	487	122			487				
D-AB	19	5	352	0.054	19	0.0	0.1	10.790	B
D-BC	78	20	279	0.281	77	0.0	0.4	17.699	C
C-ABD	118	30	607	0.195	117	0.0	0.2	7.334	A
C-D	69	17			69				
C-A	396	99			396				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	157	39	360	0.437	156	0.5	0.8	17.585	C
A-BCD	4	0.90	541	0.007	4	0.0	0.0	6.701	A
A-B	20	5			20				
A-C	582	145			582				
D-AB	24	6	286	0.083	24	0.1	0.1	13.704	B
D-BC	92	23	231	0.399	91	0.4	0.6	25.521	D
C-ABD	141	35	578	0.244	141	0.2	0.3	8.238	A
C-D	83	21			83				
C-A	473	118			473				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	193	48	300	0.642	189	0.8	1.6	31.511	D
A-BCD	4	1	488	0.009	4	0.0	0.0	7.445	A
A-B	24	6			24				
A-C	712	178			712				

D-AB	33	8	163	0.202	32	0.1	0.2	27.481	D
D-BC	109	27	164	0.666	105	0.6	1.7	57.478	F
C-ABD	173	43	537	0.322	173	0.3	0.5	9.861	A
C-D	101	25			101				
C-A	579	145			579				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	193	48	300	0.643	192	1.6	1.7	33.350	D
A-BCD	4	1	488	0.009	4	0.0	0.0	7.449	A
A-B	24	6			24				
A-C	712	178			712				
D-AB	33	8	153	0.217	33	0.2	0.3	29.958	D
D-BC	109	27	163	0.669	108	1.7	1.8	64.652	F
C-ABD	173	43	537	0.322	173	0.5	0.5	9.892	A
C-D	101	25			101				
C-A	579	145			579				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	157	39	359	0.438	161	1.7	0.8	18.449	C
A-BCD	4	0.90	540	0.007	4	0.0	0.0	6.706	A
A-B	20	5			20				
A-C	582	145			582				
D-AB	24	6	279	0.087	25	0.3	0.1	14.195	B
D-BC	92	23	230	0.400	96	1.8	0.7	27.859	D
C-ABD	141	35	578	0.244	142	0.5	0.3	8.272	A
C-D	83	21			83				
C-A	473	118			473				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	132	33	398	0.331	133	0.8	0.5	13.631	B
A-BCD	3	0.75	579	0.005	3	0.0	0.0	6.254	A
A-B	17	4			17				
A-C	487	122			487				
D-AB	19	5	350	0.054	19	0.1	0.1	10.903	B
D-BC	78	20	278	0.281	79	0.7	0.4	18.260	C
C-ABD	118	30	607	0.195	119	0.3	0.2	7.371	A
C-D	69	17			69				
C-A	396	99			396				

2044 8.5k DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		6.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2044 8.5k DS	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	564	100.000
B		ONE HOUR	✓	191	100.000
C		ONE HOUR	✓	1069	100.000
D		ONE HOUR	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	24	530	10
	B	21	0	133	37
	C	794	141	0	134
	D	5	18	52	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	0	3	0

From	B	0	0	2	3
	C	3	0	0	0
	D	0	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.70	39.12	2.2	E	175	263
A-BCD	0.03	9.13	0.0	A	9	14
A-B					22	33
A-C					486	730
D-AB	0.15	30.30	0.2	D	16	23
D-BC	0.51	59.70	1.0	F	53	80
C-ABD	0.26	8.31	0.4	A	129	194
C-D					123	184
C-A					729	1093

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	144	36	404	0.356	142	0.0	0.5	13.590	B
A-BCD	8	2	523	0.014	7	0.0	0.0	6.985	A
A-B	18	5			18				
A-C	399	100			399				
D-AB	12	3	294	0.039	11	0.0	0.0	12.714	B
D-BC	45	11	249	0.180	44	0.0	0.2	17.469	C
C-ABD	106	27	648	0.164	105	0.0	0.2	6.628	A
C-D	101	25			101				
C-A	598	149			598				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	172	43	364	0.471	170	0.5	0.9	18.449	C
A-BCD	9	2	473	0.019	9	0.0	0.0	7.751	A
A-B	22	5			22				
A-C	476	119			476				
D-AB	15	4	238	0.061	14	0.0	0.1	16.090	C
D-BC	53	13	197	0.269	52	0.2	0.4	24.840	C
C-ABD	127	32	623	0.204	127	0.2	0.3	7.250	A
C-D	120	30			120				
C-A	714	178			714				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	210	53	301	0.699	206	0.9	2.1	36.056	E
A-BCD	11	3	405	0.027	11	0.0	0.0	9.127	A
A-B	26	7			26				
A-C	584	146			584				

D-AB	20	5	143	0.141	20	0.1	0.2	29.048	D
D-BC	62	16	123	0.507	60	0.4	0.9	55.572	F
C-ABD	155	39	589	0.264	155	0.3	0.4	8.291	A
C-D	148	37			148				
C-A	874	219			874				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	210	53	301	0.699	210	2.1	2.2	39.116	E
A-BCD	11	3	405	0.027	11	0.0	0.0	9.131	A
A-B	26	7			26				
A-C	584	146			584				
D-AB	20	5	139	0.147	20	0.2	0.2	30.297	D
D-BC	62	16	122	0.511	62	0.9	1.0	59.705	F
C-ABD	155	39	589	0.264	155	0.4	0.4	8.306	A
C-D	148	37			148				
C-A	874	219			874				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	172	43	364	0.472	177	2.2	0.9	19.701	C
A-BCD	9	2	473	0.019	9	0.0	0.0	7.758	A
A-B	22	5			22				
A-C	476	119			476				
D-AB	15	4	235	0.062	15	0.2	0.1	16.432	C
D-BC	53	13	195	0.270	55	1.0	0.4	26.037	D
C-ABD	127	32	623	0.204	127	0.4	0.3	7.267	A
C-D	120	30			120				
C-A	714	178			714				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	144	36	404	0.356	145	0.9	0.6	13.978	B
A-BCD	8	2	522	0.014	8	0.0	0.0	6.994	A
A-B	18	5			18				
A-C	399	100			399				
D-AB	12	3	293	0.040	12	0.1	0.0	12.806	B
D-BC	45	11	248	0.181	45	0.4	0.2	17.789	C
C-ABD	106	27	648	0.164	106	0.3	0.2	6.655	A
C-D	101	25			101				
C-A	598	149			598				

2044 10k DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		5.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2044 10k DM	AM	J5 A20-Station Rd AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	644	100.000
B		ONE HOUR	✓	176	100.000
C		ONE HOUR	✓	576	100.000
D		ONE HOUR	✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	47	588	9
	B	32	0	115	29
	C	359	131	0	86
	D	17	24	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	2	1	0

From	B	6	0	4	3
	C	3	2	0	2
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.59	26.92	1.4	D	162	242
A-BCD	0.02	6.46	0.0	A	8	12
A-B					43	65
A-C					540	809
D-AB	0.12	13.08	0.1	B	30	45
D-BC	0.44	26.70	0.8	D	88	132
C-ABD	0.26	8.77	0.3	A	120	180
C-D					79	118
C-A					329	494

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	133	33	406	0.327	131	0.0	0.5	13.000	B
A-BCD	7	2	634	0.011	7	0.0	0.0	5.742	A
A-B	35	9			35				
A-C	443	111			443				
D-AB	24	6	438	0.054	23	0.0	0.1	8.680	A
D-BC	73	18	329	0.223	72	0.0	0.3	13.959	B
C-ABD	99	25	620	0.159	98	0.0	0.2	6.887	A
C-D	65	16			65				
C-A	270	68			270				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	158	40	374	0.423	157	0.5	0.7	16.560	C
A-BCD	8	2	606	0.013	8	0.0	0.0	6.023	A
A-B	42	11			42				
A-C	529	132			529				
D-AB	29	7	391	0.074	29	0.1	0.1	9.928	A
D-BC	87	22	292	0.298	86	0.3	0.4	17.484	C
C-ABD	118	29	593	0.199	118	0.2	0.2	7.576	A
C-D	77	19			77				
C-A	323	81			323				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	194	48	327	0.593	191	0.7	1.4	26.002	D
A-BCD	10	2	567	0.017	10	0.0	0.0	6.456	A
A-B	52	13			52				
A-C	647	162			647				

D-AB	37	9	315	0.119	37	0.1	0.1	12.976	B
D-BC	105	26	240	0.436	103	0.4	0.7	26.126	D
C-ABD	144	36	555	0.260	144	0.2	0.3	8.750	A
C-D	95	24			95				
C-A	395	99			395				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	194	48	327	0.593	194	1.4	1.4	26.921	D
A-BCD	10	2	567	0.017	10	0.0	0.0	6.458	A
A-B	52	13			52				
A-C	647	162			647				
D-AB	37	9	313	0.120	37	0.1	0.1	13.084	B
D-BC	105	26	239	0.437	104	0.7	0.8	26.702	D
C-ABD	144	36	555	0.260	144	0.3	0.3	8.767	A
C-D	95	24			95				
C-A	395	99			395				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	158	40	373	0.424	161	1.4	0.8	17.128	C
A-BCD	8	2	605	0.013	8	0.0	0.0	6.028	A
A-B	42	11			42				
A-C	529	132			529				
D-AB	29	7	389	0.075	29	0.1	0.1	10.005	B
D-BC	87	22	291	0.299	88	0.8	0.4	17.875	C
C-ABD	118	29	593	0.199	118	0.3	0.3	7.594	A
C-D	77	19			77				
C-A	323	81			323				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	133	33	405	0.327	134	0.8	0.5	13.292	B
A-BCD	7	2	633	0.011	7	0.0	0.0	5.746	A
A-B	35	9			35				
A-C	443	111			443				
D-AB	24	6	436	0.054	24	0.1	0.1	8.725	A
D-BC	73	18	328	0.224	74	0.4	0.3	14.191	B
C-ABD	99	25	620	0.159	99	0.3	0.2	6.915	A
C-D	65	16			65				
C-A	270	68			270				

2044 10k DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		5.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 10k DM	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	593	100.000
B		ONE HOUR	✓	190	100.000
C		ONE HOUR	✓	784	100.000
D		ONE HOUR	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	47	526	20
	B	39	0	114	37
	C	541	119	0	124
	D	8	18	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	0	0	0

From	B	3	0	2	3
	C	0	0	0	0
	D	0	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.66	32.58	1.8	D	174	262
A-BCD	0.04	7.41	0.0	A	18	28
A-B					43	65
A-C					483	724
D-AB	0.08	14.98	0.1	B	17	26
D-BC	0.30	25.49	0.4	D	52	77
C-ABD	0.22	7.97	0.3	A	109	164
C-D					114	171
C-A					496	745

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	402	0.356	141	0.0	0.5	13.673	B
A-BCD	15	4	593	0.025	15	0.0	0.0	6.231	A
A-B	35	9			35				
A-C	396	99			396				
D-AB	14	3	372	0.037	13	0.0	0.0	10.040	B
D-BC	43	11	302	0.142	42	0.0	0.2	13.799	B
C-ABD	90	22	644	0.139	89	0.0	0.2	6.481	A
C-D	93	23			93				
C-A	407	102			407				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	171	43	368	0.464	170	0.5	0.8	17.996	C
A-BCD	18	4	557	0.032	18	0.0	0.0	6.679	A
A-B	42	11			42				
A-C	473	118			473				
D-AB	17	4	329	0.051	17	0.0	0.1	11.531	B
D-BC	51	13	261	0.195	50	0.2	0.2	17.103	C
C-ABD	107	27	618	0.173	107	0.2	0.2	7.037	A
C-D	111	28			111				
C-A	486	122			486				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	209	52	319	0.656	206	0.8	1.7	30.849	D
A-BCD	22	6	508	0.043	22	0.0	0.0	7.412	A
A-B	52	13			52				
A-C	579	145			579				

D-AB	21	5	263	0.082	21	0.1	0.1	14.894	B
D-BC	61	15	203	0.301	60	0.2	0.4	25.145	D
C-ABD	131	33	583	0.225	131	0.2	0.3	7.956	A
C-D	137	34			137				
C-A	596	149			596				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	209	52	319	0.657	209	1.7	1.8	32.582	D
A-BCD	22	6	507	0.043	22	0.0	0.0	7.414	A
A-B	52	13			52				
A-C	579	145			579				
D-AB	21	5	262	0.082	21	0.1	0.1	14.982	B
D-BC	61	15	202	0.302	61	0.4	0.4	25.492	D
C-ABD	131	33	583	0.225	131	0.3	0.3	7.967	A
C-D	137	34			137				
C-A	596	149			596				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	171	43	368	0.464	175	1.8	0.9	18.920	C
A-BCD	18	4	557	0.032	18	0.0	0.0	6.683	A
A-B	42	11			42				
A-C	473	118			473				
D-AB	17	4	328	0.051	17	0.1	0.1	11.607	B
D-BC	51	13	260	0.195	51	0.4	0.2	17.333	C
C-ABD	107	27	618	0.173	107	0.3	0.2	7.052	A
C-D	111	28			111				
C-A	486	122			486				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	402	0.356	144	0.9	0.6	14.048	B
A-BCD	15	4	592	0.025	15	0.0	0.0	6.236	A
A-B	35	9			35				
A-C	396	99			396				
D-AB	14	3	371	0.037	14	0.1	0.0	10.082	B
D-BC	43	11	302	0.142	43	0.2	0.2	13.944	B
C-ABD	90	22	644	0.139	90	0.2	0.2	6.501	A
C-D	93	23			93				
C-A	407	102			407				

2044 10k DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		9.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2044 10k DS	AM	J5 A20-Station Rd AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	696	100.000
B		ONE HOUR	✓	176	100.000
C		ONE HOUR	✓	787	100.000
D		ONE HOUR	✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	21	671	4
	B	18	0	129	29
	C	539	157	0	91
	D	10	24	95	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	0	6	0

From	B	0	0	5	3
	C	9	2	0	2
	D	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.67	37.49	1.9	E	162	242
A-BCD	0.01	7.52	0.0	A	4	6
A-B					19	29
A-C					616	924
D-AB	0.25	35.28	0.3	E	26	38
D-BC	0.70	74.37	2.1	F	93	139
C-ABD	0.33	10.10	0.5	B	144	216
C-D					83	125
C-A					494	742

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	133	33	392	0.338	131	0.0	0.5	13.664	B
A-BCD	3	0.75	576	0.005	3	0.0	0.0	6.277	A
A-B	16	4			16				
A-C	505	126			505				
D-AB	19	5	346	0.055	19	0.0	0.1	10.980	B
D-BC	78	20	273	0.286	77	0.0	0.4	18.157	C
C-ABD	118	30	602	0.196	117	0.0	0.2	7.411	A
C-D	69	17			69				
C-A	406	101			406				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	158	40	352	0.450	157	0.5	0.8	18.375	C
A-BCD	4	0.90	537	0.007	4	0.0	0.0	6.744	A
A-B	19	5			19				
A-C	603	151			603				
D-AB	24	6	278	0.086	24	0.1	0.1	14.147	B
D-BC	92	23	225	0.409	91	0.4	0.7	26.675	D
C-ABD	141	35	571	0.247	141	0.2	0.3	8.351	A
C-D	82	20			82				
C-A	485	121			485				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	194	48	289	0.671	190	0.8	1.8	34.893	D
A-BCD	4	1	484	0.009	4	0.0	0.0	7.511	A
A-B	23	6			23				
A-C	739	185			739				

D-AB	33	8	147	0.226	32	0.1	0.3	31.192	D
D-BC	109	27	156	0.698	104	0.7	1.9	64.238	F
C-ABD	173	43	529	0.327	173	0.3	0.5	10.070	B
C-D	100	25			100				
C-A	593	148			593				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	194	48	288	0.672	193	1.8	1.9	37.488	E
A-BCD	4	1	483	0.009	4	0.0	0.0	7.515	A
A-B	23	6			23				
A-C	739	185			739				
D-AB	34	8	135	0.249	34	0.3	0.3	35.284	E
D-BC	108	27	154	0.702	108	1.9	2.1	74.372	F
C-ABD	173	43	529	0.327	173	0.5	0.5	10.103	B
C-D	100	25			100				
C-A	593	148			593				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	158	40	351	0.450	163	1.9	0.8	19.482	C
A-BCD	4	0.90	537	0.007	4	0.0	0.0	6.750	A
A-B	19	5			19				
A-C	603	151			603				
D-AB	24	6	270	0.090	25	0.3	0.1	14.784	B
D-BC	92	23	223	0.411	97	2.1	0.7	29.674	D
C-ABD	141	35	571	0.247	142	0.5	0.3	8.393	A
C-D	82	20			82				
C-A	485	121			485				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	133	33	392	0.338	134	0.8	0.5	14.030	B
A-BCD	3	0.75	576	0.005	3	0.0	0.0	6.283	A
A-B	16	4			16				
A-C	505	126			505				
D-AB	19	5	344	0.055	19	0.1	0.1	11.106	B
D-BC	78	20	272	0.287	79	0.7	0.4	18.781	C
C-ABD	118	30	602	0.196	119	0.3	0.2	7.454	A
C-D	69	17			69				
C-A	406	101			406				

2044 10k DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		7.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2044 10k DS	PM	J5 A20-Station Rd PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	583	100.000
B		ONE HOUR	✓	190	100.000
C		ONE HOUR	✓	1092	100.000
D		ONE HOUR	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	24	549	10
	B	20	0	133	37
	C	816	142	0	134
	D	4	18	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
	A	0	0	3	0

From	B	0	0	2	3
	C	3	0	0	0
	D	0	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.72	42.68	2.4	E	174	262
A-BCD	0.03	9.31	0.0	A	9	14
A-B					22	33
A-C					504	756
D-AB	0.17	36.64	0.2	E	15	22
D-BC	0.56	71.41	1.2	F	54	81
C-ABD	0.27	8.45	0.4	A	130	196
C-D					123	184
C-A					749	1123

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	400	0.358	141	0.0	0.5	13.781	B
A-BCD	8	2	518	0.015	7	0.0	0.0	7.057	A
A-B	18	5			18				
A-C	413	103			413				
D-AB	11	3	280	0.039	11	0.0	0.0	13.388	B
D-BC	46	11	243	0.187	45	0.0	0.2	18.064	C
C-ABD	107	27	643	0.166	106	0.0	0.2	6.690	A
C-D	101	25			101				
C-A	614	154			614				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	171	43	358	0.477	169	0.5	0.9	18.936	C
A-BCD	9	2	467	0.019	9	0.0	0.0	7.858	A
A-B	22	5			22				
A-C	494	123			494				
D-AB	14	3	222	0.062	14	0.0	0.1	17.267	C
D-BC	54	13	189	0.283	53	0.2	0.4	26.308	D
C-ABD	128	32	618	0.207	127	0.2	0.3	7.339	A
C-D	120	30			120				
C-A	734	183			734				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	209	52	292	0.717	204	0.9	2.2	38.800	E
A-BCD	11	3	398	0.028	11	0.0	0.0	9.310	A
A-B	26	7			26				
A-C	604	151			604				

D-AB	20	5	123	0.159	19	0.1	0.2	34.355	D
D-BC	63	16	114	0.555	60	0.4	1.1	64.726	F
C-ABD	156	39	583	0.269	156	0.3	0.4	8.432	A
C-D	148	37			148				
C-A	898	225			898				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	209	52	292	0.718	209	2.2	2.4	42.683	E
A-BCD	11	3	397	0.028	11	0.0	0.0	9.314	A
A-B	26	7			26				
A-C	604	151			604				
D-AB	20	5	118	0.168	20	0.2	0.2	36.638	E
D-BC	63	16	112	0.560	62	1.1	1.2	71.412	F
C-ABD	156	39	582	0.269	156	0.4	0.4	8.449	A
C-D	148	37			148				
C-A	898	225			898				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	171	43	358	0.477	176	2.4	0.9	20.400	C
A-BCD	9	2	467	0.019	9	0.0	0.0	7.864	A
A-B	22	5			22				
A-C	494	123			494				
D-AB	14	3	218	0.064	14	0.2	0.1	17.729	C
D-BC	53	13	188	0.285	56	1.2	0.4	27.952	D
C-ABD	128	32	618	0.207	128	0.4	0.3	7.357	A
C-D	120	30			120				
C-A	734	183			734				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	400	0.358	145	0.9	0.6	14.191	B
A-BCD	8	2	517	0.015	8	0.0	0.0	7.064	A
A-B	18	5			18				
A-C	413	103			413				
D-AB	11	3	278	0.039	11	0.1	0.0	13.490	B
D-BC	46	11	242	0.188	46	0.4	0.2	18.428	C
C-ABD	107	27	643	0.166	107	0.3	0.2	6.715	A
C-D	101	25			101				
C-A	614	154			614				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: J6 A20_Mersham - Updated Geometry.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J6 A20-Mersham
Report generation date: 10/11/2021 16:28:12

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Stream B-C	D1	0.3	8.19	0.21	A	D2	0.1	6.92	0.12	A
Stream B-A		0.1	12.75	0.08	B		0.1	11.73	0.06	B
Stream C-AB		0.2	8.25	0.19	A		0.2	7.56	0.18	A
	2037 DM									
Stream B-C	D3	0.5	11.85	0.32	B	D4	0.2	8.59	0.18	A
Stream B-A		0.1	22.69	0.11	C		0.1	19.45	0.05	C
Stream C-AB		0.4	11.62	0.29	B		0.4	10.10	0.28	B
	2037 DS									
Stream B-C	D5	0.5	11.64	0.31	B	D6	0.2	8.19	0.17	A
Stream B-A		0.1	25.55	0.12	D		0.0	19.55	0.04	C
Stream C-AB		0.4	11.32	0.28	B		0.4	9.55	0.27	A
	2044 8.5k DM									
Stream B-C	D7	0.5	12.34	0.34	B	D8	0.2	8.70	0.19	A
Stream B-A		0.1	24.19	0.12	C		0.1	20.42	0.06	C
Stream C-AB		0.4	11.85	0.31	B		0.4	10.28	0.29	B
	2044 8.5k DS									
Stream B-C	D9	0.6	14.14	0.37	B	D10	0.2	9.04	0.20	A
Stream B-A		0.2	41.85	0.18	E		0.1	30.23	0.07	D
Stream C-AB		0.5	13.04	0.33	B		0.4	10.64	0.30	B
	2044 10k DM									
Stream B-C	D11	0.5	12.24	0.34	B	D12	0.2	8.72	0.19	A
Stream B-A		0.1	23.93	0.12	C		0.1	20.48	0.06	C

Stream C-AB		0.4	11.73	0.30	B		0.4	10.34	0.30	B
	2044 10k DS									
Stream B-C	D13	0.6	14.56	0.38	B	D14	0.2	9.19	0.20	A
Stream B-A		0.2	45.22	0.19	E		0.1	32.81	0.07	D
Stream C-AB		0.5	13.24	0.33	B		0.4	10.85	0.31	B

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

File summary

File Description

Title	J6 Otterpool Park_Base Model
Location	A20 Hythe Road - Mersham
Site number	
Date	19/06/2017
Version	
Status	Draft 1
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J6 A20-Mersham AM Peak	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓
D3	2037 DM	AM	J6 A20-Mersham AM Peak	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓
D5	2037 DS	AM	J6 A20-Mersham AM Peak	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓
D7	2044 8.5k DM	AM	J6 A20-Mersham AM Peak	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓
D9	2044 8.5k DS	AM	J6 A20-Mersham AM Peak	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓
D11	2044 10k DM	AM	J6 A20-Mersham AM Peak	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓
D13	2044 10k DS	AM	J6 A20-Mersham AM Peak	ONE HOUR	07:45	09:15	15	✓
D14	2044 10k DS	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A20 Hythe Road Westbound		Major
B	Mersham		Minor
C	A20 Hythe Road Eastbound		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.68		✓	3.00	130.0	✓	9.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	7.22	4.28	2.90	2.90	✓	1.00	62	64

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	562	0.090	0.229	0.144	0.326
B-C	732	0.099	0.250	-	-
C-B	706	0.242	0.242	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario	Time Period	Description	Traffic	Start time	Finish time	Time segment	Run

	name	name		profile type	(HH:mm)	(HH:mm)	length (min)	automatically
D1	2018	AM	J6 A20-Mersham AM Peak	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	528	100.000
B		ONE HOUR	✓	128	100.000
C		ONE HOUR	✓	522	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	24	504
	B	21	0	107
	C	428	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	5	0	3
	C	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	8.19	0.3	A	98	147
B-A	0.08	12.75	0.1	B	19	29
C-AB	0.19	8.25	0.2	A	86	129
C-A					393	589
A-B					22	33
A-C					462	694

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	81	20	607	0.133	80	0.0	0.2	6.821	A
B-A	16	4	379	0.042	16	0.0	0.0	9.894	A
C-AB	71	18	584	0.121	70	0.0	0.1	7.004	A
C-A	322	81			322				
A-B	18	5			18				

A-C	379	95			379				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	587	0.164	96	0.2	0.2	7.337	A
B-A	19	5	348	0.054	19	0.0	0.1	10.920	B
C-AB	85	21	565	0.150	84	0.1	0.2	7.484	A
C-A	385	96			385				
A-B	22	5			22				
A-C	453	113			453				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	118	29	558	0.211	118	0.2	0.3	8.177	A
B-A	23	6	306	0.076	23	0.1	0.1	12.738	B
C-AB	103	26	540	0.192	103	0.2	0.2	8.244	A
C-A	471	118			471				
A-B	26	7			26				
A-C	555	139			555				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	118	29	557	0.211	118	0.3	0.3	8.187	A
B-A	23	6	305	0.076	23	0.1	0.1	12.750	B
C-AB	103	26	540	0.192	103	0.2	0.2	8.252	A
C-A	471	118			471				
A-B	26	7			26				
A-C	555	139			555				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	586	0.164	96	0.3	0.2	7.353	A
B-A	19	5	348	0.054	19	0.1	0.1	10.935	B
C-AB	85	21	565	0.150	85	0.2	0.2	7.495	A
C-A	385	96			385				
A-B	22	5			22				
A-C	453	113			453				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	81	20	607	0.133	81	0.2	0.2	6.841	A
B-A	16	4	379	0.042	16	0.1	0.0	9.914	A
C-AB	71	18	584	0.121	71	0.2	0.1	7.025	A
C-A	322	81			322				
A-B	18	5			18				
A-C	379	95			379				

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	445	100.000
B		ONE HOUR	✓	82	100.000
C		ONE HOUR	✓	654	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	23	422
	B	18	0	64
	C	559	95	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	1
	B	0	0	2
	C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.12	6.92	0.1	A	59	88
B-A	0.06	11.73	0.1	B	17	25
C-AB	0.18	7.56	0.2	A	87	131
C-A					513	769
A-B					21	32
A-C					387	581

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	48	12	632	0.076	48	0.0	0.1	6.165	A
B-A	14	3	402	0.034	13	0.0	0.0	9.273	A
C-AB	72	18	618	0.116	71	0.0	0.1	6.577	A
C-A	421	105			421				
A-B	17	4			17				
A-C	318	79			318				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	58	14	614	0.094	57	0.1	0.1	6.464	A
B-A	16	4	370	0.044	16	0.0	0.0	10.168	B
C-AB	85	21	602	0.142	85	0.1	0.2	6.962	A
C-A	503	126			503				
A-B	21	5			21				
A-C	379	95			379				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	70	18	590	0.119	70	0.1	0.1	6.921	A
B-A	20	5	327	0.061	20	0.0	0.1	11.720	B
C-AB	105	26	580	0.180	104	0.2	0.2	7.557	A
C-A	615	154			615				
A-B	25	6			25				
A-C	465	116			465				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	70	18	590	0.119	70	0.1	0.1	6.924	A
B-A	20	5	327	0.061	20	0.1	0.1	11.727	B
C-AB	105	26	580	0.180	105	0.2	0.2	7.563	A
C-A	615	154			615				
A-B	25	6			25				
A-C	465	116			465				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	58	14	614	0.094	58	0.1	0.1	6.470	A
B-A	16	4	370	0.044	16	0.1	0.0	10.178	B
C-AB	85	21	602	0.142	86	0.2	0.2	6.973	A
C-A	503	126			503				
A-B	21	5			21				
A-C	379	95			379				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	48	12	631	0.076	48	0.1	0.1	6.173	A
B-A	14	3	401	0.034	14	0.0	0.0	9.286	A
C-AB	72	18	618	0.116	72	0.2	0.1	6.594	A
C-A	421	105			421				
A-B	17	4			17				
A-C	318	79			318				

2037 DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2037 DM	AM	J6 A20-Mersham AM Peak	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	942	100.000
B		ONE HOUR	✓	145	100.000
C		ONE HOUR	✓	725	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	14	928
	B	17	0	128
	C	611	114	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	1
	B	0	0	3
	C	2	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.32	11.85	0.5	B	117	176
B-A	0.11	22.69	0.1	C	16	23
C-AB	0.29	11.62	0.4	B	105	157
C-A					561	841
A-B					13	19
A-C					852	1277

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	532	0.181	95	0.0	0.2	8.230	A
B-A	13	3	301	0.042	13	0.0	0.0	12.459	B
C-AB	86	21	512	0.168	85	0.0	0.2	8.411	A
C-A	460	115			460				
A-B	11	3			11				
A-C	699	175			699				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	115	29	496	0.232	115	0.2	0.3	9.429	A
B-A	15	4	250	0.061	15	0.0	0.1	15.352	C
C-AB	102	26	480	0.214	102	0.2	0.3	9.522	A
C-A	549	137			549				
A-B	13	3			13				
A-C	834	209			834				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	141	35	445	0.317	140	0.3	0.5	11.800	B
B-A	19	5	178	0.105	19	0.1	0.1	22.597	C
C-AB	126	31	435	0.288	125	0.3	0.4	11.579	B
C-A	673	168			673				
A-B	15	4			15				
A-C	1022	255			1022				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	141	35	445	0.317	141	0.5	0.5	11.854	B
B-A	19	5	177	0.106	19	0.1	0.1	22.689	C
C-AB	126	31	435	0.288	126	0.4	0.4	11.618	B
C-A	673	168			673				
A-B	15	4			15				
A-C	1022	255			1022				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	115	29	496	0.232	116	0.5	0.3	9.479	A
B-A	15	4	249	0.061	15	0.1	0.1	15.413	C
C-AB	102	26	480	0.214	103	0.4	0.3	9.563	A
C-A	549	137			549				
A-B	13	3			13				
A-C	834	209			834				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	532	0.181	97	0.3	0.2	8.279	A
B-A	13	3	301	0.043	13	0.1	0.0	12.499	B
C-AB	86	21	512	0.168	86	0.3	0.2	8.454	A
C-A	460	115			460				
A-B	11	3			11				
A-C	699	175			699				

2037 DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2037 DM	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	774	100.000
B		ONE HOUR	✓	90	100.000
C		ONE HOUR	✓	925	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	10	764
	B	9	0	81
	C	799	126	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	0
	B	0	0	1
	C	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.18	8.59	0.2	A	74	111
B-A	0.05	19.45	0.1	C	8	12
C-AB	0.28	10.10	0.4	B	116	173
C-A					733	1100
A-B					9	14
A-C					701	1052

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	578	0.106	61	0.0	0.1	6.951	A
B-A	7	2	312	0.022	7	0.0	0.0	11.802	B
C-AB	95	24	559	0.170	94	0.0	0.2	7.723	A
C-A	602	150			602				
A-B	8	2			8				
A-C	575	144			575				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	549	0.133	73	0.1	0.2	7.556	A
B-A	8	2	263	0.031	8	0.0	0.0	14.137	B
C-AB	113	28	532	0.213	113	0.2	0.3	8.579	A
C-A	718	180			718				
A-B	9	2			9				
A-C	687	172			687				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	508	0.176	89	0.2	0.2	8.585	A
B-A	10	2	195	0.051	10	0.0	0.1	19.419	C
C-AB	139	35	495	0.280	138	0.3	0.4	10.079	B
C-A	880	220			880				
A-B	11	3			11				
A-C	841	210			841				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	508	0.176	89	0.2	0.2	8.595	A
B-A	10	2	195	0.051	10	0.1	0.1	19.453	C
C-AB	139	35	495	0.280	139	0.4	0.4	10.105	B
C-A	880	220			880				
A-B	11	3			11				
A-C	841	210			841				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	549	0.133	73	0.2	0.2	7.571	A
B-A	8	2	262	0.031	8	0.1	0.0	14.166	B
C-AB	113	28	532	0.213	114	0.4	0.3	8.609	A
C-A	718	180			718				
A-B	9	2			9				
A-C	687	172			687				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	578	0.106	61	0.2	0.1	6.967	A
B-A	7	2	311	0.022	7	0.0	0.0	11.824	B
C-AB	95	24	559	0.170	95	0.3	0.2	7.758	A
C-A	602	150			602				
A-B	8	2			8				
A-C	575	144			575				

2037 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 DS	AM	J6 A20-Mersham AM Peak	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	868	100.000
B		ONE HOUR	✓	146	100.000
C		ONE HOUR	✓	860	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	14	854
	B	17	0	129
	C	746	114	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	3
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.31	11.64	0.5	B	118	178
B-A	0.12	25.55	0.1	D	16	23
C-AB	0.28	11.32	0.4	B	105	157
C-A					685	1027
A-B					13	19
A-C					784	1175

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	538	0.181	96	0.0	0.2	8.145	A
B-A	13	3	289	0.044	13	0.0	0.0	13.024	B
C-AB	86	21	518	0.166	85	0.0	0.2	8.302	A
C-A	562	140			562				
A-B	11	3			11				
A-C	643	161			643				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	503	0.231	116	0.2	0.3	9.296	A
B-A	15	4	235	0.065	15	0.0	0.1	16.389	C
C-AB	102	26	487	0.211	102	0.2	0.3	9.356	A
C-A	671	168			671				
A-B	13	3			13				
A-C	768	192			768				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	142	36	451	0.315	141	0.3	0.5	11.592	B
B-A	19	5	160	0.117	18	0.1	0.1	25.430	D
C-AB	126	31	444	0.283	125	0.3	0.4	11.283	B
C-A	821	205			821				
A-B	15	4			15				
A-C	940	235			940				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	142	36	451	0.315	142	0.5	0.5	11.644	B
B-A	19	5	160	0.117	19	0.1	0.1	25.552	D
C-AB	126	31	444	0.283	126	0.4	0.4	11.318	B
C-A	821	205			821				
A-B	15	4			15				
A-C	940	235			940				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	502	0.231	117	0.5	0.3	9.347	A
B-A	15	4	234	0.065	16	0.1	0.1	16.464	C
C-AB	102	26	487	0.211	103	0.4	0.3	9.395	A
C-A	671	168			671				
A-B	13	3			13				
A-C	768	192			768				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	537	0.181	97	0.3	0.2	8.188	A
B-A	13	3	288	0.044	13	0.1	0.0	13.069	B
C-AB	86	21	518	0.166	86	0.3	0.2	8.344	A
C-A	562	140			562				
A-B	11	3			11				
A-C	643	161			643				

2037 DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 DS	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	669	100.000
B		ONE HOUR	✓	90	100.000
C		ONE HOUR	✓	1043	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	10	659
	B	7	0	83
	C	917	126	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	4
	B	0	0	1
	C	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.17	8.19	0.2	A	76	114
B-A	0.04	19.55	0.0	C	6	10
C-AB	0.27	9.55	0.4	A	116	173
C-A					841	1262
A-B					9	14
A-C					605	907

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	16	593	0.105	62	0.0	0.1	6.770	A
B-A	5	1	309	0.017	5	0.0	0.0	11.830	B
C-AB	95	24	574	0.165	94	0.0	0.2	7.495	A
C-A	690	173			690				
A-B	8	2			8				
A-C	496	124			496				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	19	567	0.132	74	0.1	0.2	7.302	A
B-A	6	2	260	0.024	6	0.0	0.0	14.184	B
C-AB	113	28	549	0.206	113	0.2	0.3	8.248	A
C-A	824	206			824				
A-B	9	2			9				
A-C	592	148			592				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	531	0.172	91	0.2	0.2	8.185	A
B-A	8	2	192	0.040	8	0.0	0.0	19.525	C
C-AB	139	35	516	0.269	138	0.3	0.4	9.529	A
C-A	1010	252			1010				
A-B	11	3			11				
A-C	726	181			726				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	531	0.172	91	0.2	0.2	8.194	A
B-A	8	2	192	0.040	8	0.0	0.0	19.554	C
C-AB	139	35	516	0.269	139	0.4	0.4	9.549	A
C-A	1010	252			1010				
A-B	11	3			11				
A-C	726	181			726				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	19	567	0.132	75	0.2	0.2	7.315	A
B-A	6	2	260	0.024	6	0.0	0.0	14.209	B
C-AB	113	28	549	0.206	114	0.4	0.3	8.273	A
C-A	824	206			824				
A-B	9	2			9				
A-C	592	148			592				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	16	593	0.105	63	0.2	0.1	6.785	A
B-A	5	1	309	0.017	5	0.0	0.0	11.851	B
C-AB	95	24	574	0.165	95	0.3	0.2	7.530	A
C-A	690	173			690				
A-B	8	2			8				
A-C	496	124			496				

2044 8.5k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2044 8.5k DM	AM	J6 A20-Mersham AM Peak	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	948	100.000
B		ONE HOUR	✓	154	100.000
C		ONE HOUR	✓	757	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	15	933
	B	18	0	136
	C	635	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	1
	B	0	0	3
	C	2	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.34	12.34	0.5	B	125	187
B-A	0.12	24.19	0.1	C	17	25
C-AB	0.31	11.85	0.4	B	112	168
C-A					583	874
A-B					14	21
A-C					856	1284

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	26	531	0.193	101	0.0	0.2	8.371	A
B-A	14	3	296	0.046	13	0.0	0.0	12.741	B
C-AB	92	23	516	0.178	91	0.0	0.2	8.450	A
C-A	478	120			478				
A-B	11	3			11				
A-C	702	176			702				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	122	31	494	0.247	122	0.2	0.3	9.659	A
B-A	16	4	243	0.067	16	0.0	0.1	15.881	C
C-AB	110	27	483	0.227	109	0.2	0.3	9.617	A
C-A	571	143			571				
A-B	13	3			13				
A-C	839	210			839				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	37	442	0.339	149	0.3	0.5	12.273	B
B-A	20	5	169	0.117	20	0.1	0.1	24.075	C
C-AB	134	34	438	0.307	134	0.3	0.4	11.809	B
C-A	699	175			699				
A-B	17	4			17				
A-C	1027	257			1027				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	37	441	0.339	150	0.5	0.5	12.340	B
B-A	20	5	169	0.118	20	0.1	0.1	24.191	C
C-AB	134	34	438	0.307	134	0.4	0.4	11.850	B
C-A	699	175			699				
A-B	17	4			17				
A-C	1027	257			1027				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	122	31	494	0.247	123	0.5	0.3	9.720	A
B-A	16	4	242	0.067	16	0.1	0.1	15.955	C
C-AB	110	27	483	0.227	110	0.4	0.3	9.663	A
C-A	571	143			571				
A-B	13	3			13				
A-C	839	210			839				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	26	530	0.193	103	0.3	0.2	8.426	A
B-A	14	3	295	0.046	14	0.1	0.0	12.786	B
C-AB	92	23	516	0.178	92	0.3	0.2	8.496	A
C-A	478	120			478				
A-B	11	3			11				
A-C	702	176			702				

2044 8.5k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2044 8.5k DM	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	768	100.000
B		ONE HOUR	✓	96	100.000
C		ONE HOUR	✓	973	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	10	758
	B	10	0	86
	C	840	133	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	1
	C	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.19	8.70	0.2	A	79	118
B-A	0.06	20.42	0.1	C	9	14
C-AB	0.29	10.28	0.4	B	122	183
C-A					771	1156
A-B					9	14
A-C					696	1043

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	579	0.112	64	0.0	0.1	6.993	A
B-A	8	2	306	0.025	7	0.0	0.0	12.035	B
C-AB	100	25	560	0.179	99	0.0	0.2	7.792	A
C-A	632	158			632				
A-B	8	2			8				
A-C	571	143			571				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	77	19	550	0.141	77	0.1	0.2	7.617	A
B-A	9	2	256	0.035	9	0.0	0.0	14.546	B
C-AB	120	30	534	0.224	119	0.2	0.3	8.681	A
C-A	755	189			755				
A-B	9	2			9				
A-C	681	170			681				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	95	24	509	0.186	94	0.2	0.2	8.687	A
B-A	11	3	187	0.059	11	0.0	0.1	20.383	C
C-AB	146	37	497	0.295	146	0.3	0.4	10.251	B
C-A	925	231			925				
A-B	11	3			11				
A-C	835	209			835				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	95	24	508	0.186	95	0.2	0.2	8.699	A
B-A	11	3	187	0.059	11	0.1	0.1	20.425	C
C-AB	146	37	497	0.295	146	0.4	0.4	10.281	B
C-A	925	231			925				
A-B	11	3			11				
A-C	835	209			835				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	77	19	550	0.141	78	0.2	0.2	7.632	A
B-A	9	2	256	0.035	9	0.1	0.0	14.576	B
C-AB	120	30	534	0.224	120	0.4	0.3	8.715	A
C-A	755	189			755				
A-B	9	2			9				
A-C	681	170			681				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	579	0.112	65	0.2	0.1	7.011	A
B-A	8	2	306	0.025	8	0.0	0.0	12.064	B
C-AB	100	25	560	0.179	100	0.3	0.2	7.829	A
C-A	632	158			632				
A-B	8	2			8				
A-C	571	143			571				

2044 8.5k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 8.5k DS	AM	J6 A20-Mersham AM Peak	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1015	100.000
B		ONE HOUR	✓	153	100.000
C		ONE HOUR	✓	959	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	15	1000
	B	17	0	136
	C	837	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	3
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.37	14.14	0.6	B	125	187
B-A	0.18	41.85	0.2	E	16	23
C-AB	0.33	13.04	0.5	B	112	168
C-A					768	1152
A-B					14	21
A-C					918	1376

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	26	510	0.201	101	0.0	0.2	8.782	A
B-A	13	3	251	0.051	13	0.0	0.1	15.063	C
C-AB	92	23	497	0.185	91	0.0	0.2	8.843	A
C-A	630	158			630				
A-B	11	3			11				
A-C	753	188			753				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	122	31	469	0.261	122	0.2	0.3	10.354	B
B-A	15	4	190	0.080	15	0.1	0.1	20.585	C
C-AB	110	27	461	0.238	109	0.2	0.3	10.234	B
C-A	752	188			752				
A-B	13	3			13				
A-C	899	225			899				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	37	405	0.370	149	0.3	0.6	14.006	B
B-A	19	5	105	0.178	18	0.1	0.2	41.269	E
C-AB	134	34	410	0.327	134	0.3	0.5	12.982	B
C-A	922	230			922				
A-B	17	4			17				
A-C	1101	275			1101				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	37	404	0.371	150	0.6	0.6	14.143	B
B-A	19	5	105	0.179	19	0.2	0.2	41.847	E
C-AB	134	34	410	0.327	134	0.5	0.5	13.044	B
C-A	922	230			922				
A-B	17	4			17				
A-C	1101	275			1101				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	122	31	469	0.261	123	0.6	0.4	10.444	B
B-A	15	4	189	0.081	16	0.2	0.1	20.782	C
C-AB	110	27	461	0.238	110	0.5	0.3	10.294	B
C-A	752	188			752				
A-B	13	3			13				
A-C	899	225			899				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	26	510	0.201	103	0.4	0.3	8.846	A
B-A	13	3	251	0.051	13	0.1	0.1	15.136	C
C-AB	92	23	497	0.185	92	0.3	0.2	8.896	A
C-A	630	158			630				
A-B	11	3			11				
A-C	753	188			753				

2044 8.5k DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2044 8.5k DS	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	797	100.000
B		ONE HOUR	✓	96	100.000
C		ONE HOUR	✓	1256	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	10	787
	B	8	0	88
	C	1123	133	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	2
	B	0	0	1
	C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.20	9.04	0.2	A	81	121
B-A	0.07	30.23	0.1	D	7	11
C-AB	0.30	10.64	0.4	B	122	183
C-A					1030	1546
A-B					9	14
A-C					722	1083

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	66	17	571	0.116	66	0.0	0.1	7.122	A
B-A	6	2	266	0.023	6	0.0	0.0	13.853	B
C-AB	100	25	552	0.181	99	0.0	0.2	7.929	A
C-A	845	211			845				
A-B	8	2			8				
A-C	592	148			592				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	79	20	540	0.147	79	0.1	0.2	7.808	A
B-A	7	2	208	0.035	7	0.0	0.0	17.936	C
C-AB	120	30	524	0.228	119	0.2	0.3	8.887	A
C-A	1010	252			1010				
A-B	9	2			9				
A-C	707	177			707				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	495	0.196	97	0.2	0.2	9.027	A
B-A	9	2	128	0.069	9	0.0	0.1	30.119	D
C-AB	146	37	485	0.302	146	0.3	0.4	10.606	B
C-A	1236	309			1236				
A-B	11	3			11				
A-C	867	217			867				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	495	0.196	97	0.2	0.2	9.043	A
B-A	9	2	128	0.069	9	0.1	0.1	30.233	D
C-AB	146	37	485	0.302	146	0.4	0.4	10.639	B
C-A	1236	309			1236				
A-B	11	3			11				
A-C	867	217			867				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	79	20	540	0.147	79	0.2	0.2	7.826	A
B-A	7	2	208	0.035	7	0.1	0.0	17.996	C
C-AB	120	30	524	0.228	120	0.4	0.3	8.923	A
C-A	1010	252			1010				
A-B	9	2			9				
A-C	707	177			707				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	66	17	571	0.116	66	0.2	0.1	7.144	A
B-A	6	2	265	0.023	6	0.0	0.0	13.891	B
C-AB	100	25	552	0.181	100	0.3	0.2	7.971	A
C-A	845	211			845				
A-B	8	2			8				
A-C	592	148			592				

2044 10k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2044 10k DM	AM	J6 A20-Mersham AM Peak	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	936	100.000
B		ONE HOUR	✓	155	100.000
C		ONE HOUR	✓	759	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	15	921
	B	19	0	136
	C	637	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	3
	C	2	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.34	12.24	0.5	B	125	187
B-A	0.12	23.93	0.1	C	17	26
C-AB	0.30	11.73	0.4	B	112	168
C-A					585	877
A-B					14	21
A-C					845	1268

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	26	532	0.192	101	0.0	0.2	8.334	A
B-A	14	4	298	0.048	14	0.0	0.0	12.688	B
C-AB	92	23	518	0.177	91	0.0	0.2	8.407	A
C-A	480	120			480				
A-B	11	3			11				
A-C	693	173			693				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	122	31	496	0.246	122	0.2	0.3	9.603	A
B-A	17	4	245	0.070	17	0.0	0.1	15.787	C
C-AB	110	27	486	0.226	109	0.2	0.3	9.552	A
C-A	573	143			573				
A-B	13	3			13				
A-C	828	207			828				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	37	444	0.337	149	0.3	0.5	12.172	B
B-A	21	5	172	0.122	21	0.1	0.1	23.812	C
C-AB	134	34	441	0.304	134	0.3	0.4	11.688	B
C-A	701	175			701				
A-B	17	4			17				
A-C	1014	254			1014				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	37	444	0.337	150	0.5	0.5	12.236	B
B-A	21	5	171	0.122	21	0.1	0.1	23.928	C
C-AB	134	34	441	0.304	134	0.4	0.4	11.729	B
C-A	701	175			701				
A-B	17	4			17				
A-C	1014	254			1014				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	122	31	496	0.246	123	0.5	0.3	9.663	A
B-A	17	4	245	0.070	17	0.1	0.1	15.861	C
C-AB	110	27	486	0.226	110	0.4	0.3	9.597	A
C-A	573	143			573				
A-B	13	3			13				
A-C	828	207			828				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	26	532	0.192	103	0.3	0.2	8.388	A
B-A	14	4	297	0.048	14	0.1	0.1	12.738	B
C-AB	92	23	518	0.177	92	0.3	0.2	8.453	A
C-A	480	120			480				
A-B	11	3			11				
A-C	693	173			693				

2044 10k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 10k DM	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	771	100.000
B		ONE HOUR	✓	96	100.000
C		ONE HOUR	✓	970	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	10	761
	B	10	0	86
	C	836	134	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	0
	B	0	0	1
	C	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.19	8.72	0.2	A	79	118
B-A	0.06	20.48	0.1	C	9	14
C-AB	0.30	10.34	0.4	B	123	184
C-A					767	1151
A-B					9	14
A-C					698	1047

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	578	0.112	64	0.0	0.1	7.000	A
B-A	8	2	306	0.025	7	0.0	0.0	12.048	B
C-AB	101	25	560	0.180	100	0.0	0.2	7.812	A
C-A	629	157			629				
A-B	8	2			8				
A-C	573	143			573				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	77	19	549	0.141	77	0.1	0.2	7.628	A
B-A	9	2	256	0.035	9	0.0	0.0	14.569	B
C-AB	120	30	533	0.226	120	0.2	0.3	8.713	A
C-A	752	188			752				
A-B	9	2			9				
A-C	684	171			684				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	95	24	508	0.186	94	0.2	0.2	8.705	A
B-A	11	3	187	0.059	11	0.0	0.1	20.443	C
C-AB	148	37	496	0.298	147	0.3	0.4	10.307	B
C-A	920	230			920				
A-B	11	3			11				
A-C	838	209			838				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	95	24	508	0.187	95	0.2	0.2	8.717	A
B-A	11	3	187	0.059	11	0.1	0.1	20.482	C
C-AB	148	37	496	0.298	148	0.4	0.4	10.337	B
C-A	920	230			920				
A-B	11	3			11				
A-C	838	209			838				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	77	19	549	0.141	78	0.2	0.2	7.640	A
B-A	9	2	256	0.035	9	0.1	0.0	14.603	B
C-AB	120	30	533	0.226	121	0.4	0.3	8.747	A
C-A	752	188			752				
A-B	9	2			9				
A-C	684	171			684				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	578	0.112	65	0.2	0.1	7.019	A
B-A	8	2	306	0.025	8	0.0	0.0	12.075	B
C-AB	101	25	560	0.180	101	0.3	0.2	7.851	A
C-A	629	157			629				
A-B	8	2			8				
A-C	573	143			573				

2044 10k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2044 10k DS	AM	J6 A20-Mersham AM Peak	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1040	100.000
B		ONE HOUR	✓	154	100.000
C		ONE HOUR	✓	972	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	14	1026
	B	17	0	137
	C	850	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	4
	B	0	0	3
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.38	14.56	0.6	B	126	189
B-A	0.19	45.22	0.2	E	16	23
C-AB	0.33	13.24	0.5	B	112	168
C-A					780	1170
A-B					13	19
A-C					941	1412

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	507	0.203	102	0.0	0.3	8.864	A
B-A	13	3	247	0.052	13	0.0	0.1	15.344	C
C-AB	92	23	494	0.186	91	0.0	0.2	8.905	A
C-A	640	160			640				
A-B	11	3			11				
A-C	772	193			772				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	465	0.265	123	0.3	0.4	10.494	B
B-A	15	4	185	0.083	15	0.1	0.1	21.223	C
C-AB	110	27	457	0.240	109	0.2	0.3	10.335	B
C-A	764	191			764				
A-B	13	3			13				
A-C	922	231			922				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	151	38	399	0.378	150	0.4	0.6	14.399	B
B-A	19	5	99	0.190	18	0.1	0.2	44.499	E
C-AB	134	34	406	0.331	134	0.3	0.5	13.177	B
C-A	936	234			936				
A-B	15	4			15				
A-C	1130	282			1130				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	151	38	398	0.379	151	0.6	0.6	14.559	B
B-A	19	5	98	0.191	19	0.2	0.2	45.219	E
C-AB	134	34	406	0.331	134	0.5	0.5	13.242	B
C-A	936	234			936				
A-B	15	4			15				
A-C	1130	282			1130				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	465	0.265	124	0.6	0.4	10.594	B
B-A	15	4	184	0.083	16	0.2	0.1	21.448	C
C-AB	110	27	457	0.240	110	0.5	0.3	10.396	B
C-A	764	191			764				
A-B	13	3			13				
A-C	922	231			922				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	507	0.203	104	0.4	0.3	8.932	A
B-A	13	3	246	0.052	13	0.1	0.1	15.425	C
C-AB	92	23	494	0.186	92	0.3	0.2	8.961	A
C-A	640	160			640				
A-B	11	3			11				
A-C	772	193			772				

2044 10k DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2044 10k DS	PM	J6 A20-Mersham PM Peak	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	817	100.000
B		ONE HOUR	✓	96	100.000
C		ONE HOUR	✓	1281	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	10	807
	B	8	0	88
	C	1147	134	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	2
	B	0	0	1
	C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.20	9.19	0.2	A	81	121
B-A	0.07	32.81	0.1	D	7	11
C-AB	0.31	10.85	0.4	B	123	184
C-A					1053	1579
A-B					9	14
A-C					741	1111

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	66	17	567	0.117	66	0.0	0.1	7.177	A
B-A	6	2	259	0.023	6	0.0	0.0	14.204	B
C-AB	101	25	549	0.184	100	0.0	0.2	8.003	A
C-A	864	216			864				
A-B	8	2			8				
A-C	608	152			608				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	79	20	535	0.148	79	0.1	0.2	7.889	A
B-A	7	2	200	0.036	7	0.0	0.0	18.647	C
C-AB	120	30	520	0.232	120	0.2	0.3	9.005	A
C-A	1031	258			1031				
A-B	9	2			9				
A-C	725	181			725				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	489	0.198	97	0.2	0.2	9.171	A
B-A	9	2	119	0.074	9	0.0	0.1	32.660	D
C-AB	148	37	479	0.308	147	0.3	0.4	10.810	B
C-A	1263	316			1263				
A-B	11	3			11				
A-C	889	222			889				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	489	0.198	97	0.2	0.2	9.188	A
B-A	9	2	119	0.074	9	0.1	0.1	32.806	D
C-AB	148	37	479	0.308	148	0.4	0.4	10.846	B
C-A	1263	316			1263				
A-B	11	3			11				
A-C	889	222			889				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	79	20	535	0.148	79	0.2	0.2	7.906	A
B-A	7	2	200	0.036	7	0.1	0.0	18.718	C
C-AB	120	30	520	0.232	121	0.4	0.3	9.044	A
C-A	1031	258			1031				
A-B	9	2			9				
A-C	725	181			725				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	66	17	567	0.117	66	0.2	0.1	7.197	A
B-A	6	2	259	0.023	6	0.0	0.0	14.241	B
C-AB	101	25	549	0.184	101	0.3	0.2	8.048	A
C-A	864	216			864				
A-B	8	2			8				
A-C	608	152			608				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

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Filename: J7A Kennington Rd_The Street fdeb - UPDATED GEOMETRY.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J7A Kennington Rd - The St
Report generation date: 10/11/2021 16:36:28

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Stream B-ACD	D1	0.0	0.00	0.00	A	D2	0.0	7.81	0.01	A
Stream A-BCD		0.3	8.27	0.24	A		0.4	9.72	0.29	A
Stream D-ABC		0.1	10.26	0.13	B		0.1	8.50	0.09	A
Stream C-ABD		0.0	7.54	0.00	A		0.0	6.20	0.00	A
	2037 DM									
Stream B-ACD	D3	0.1	43.31	0.06	E	D4	0.0	19.80	0.03	C
Stream A-BCD		0.3	11.63	0.24	B		0.5	14.62	0.34	B
Stream D-ABC		0.6	42.01	0.38	E		0.2	23.50	0.20	C
Stream C-ABD		0.0	10.09	0.00	B		0.0	9.05	0.00	A
	2037 DS									
Stream B-ACD	D5	0.1	49.34	0.07	E	D6	0.0	21.57	0.03	C
Stream A-BCD		0.3	11.84	0.25	B		0.5	15.14	0.35	C
Stream D-ABC		0.7	49.20	0.42	E		0.3	28.00	0.23	D
Stream C-ABD		0.0	10.31	0.00	B		0.0	9.20	0.00	A
	2044 8.5k DM									
Stream B-ACD	D7	0.1	58.09	0.10	F	D8	0.0	22.39	0.03	C
Stream A-BCD		0.4	12.32	0.27	B		0.6	16.13	0.38	C
Stream D-ABC		0.9	61.87	0.49	F		0.4	36.04	0.29	E
Stream C-ABD		0.0	10.55	0.00	B		0.0	9.22	0.00	A
	2044 8.5k DS									
Stream B-ACD		0.1	78.25	0.13	F		0.0	26.63	0.04	D
Stream A-BCD		0.4	12.69	0.27	B		0.7	16.99	0.40	C

Stream D-ABC	D9	1.3	96.35	0.60	F	D10	0.7	67.96	0.44	F
Stream C-ABD		0.0	10.94	0.00	B		0.0	9.49	0.00	A
	2044 10k DM									
Stream B-ACD	D11	0.1	57.91	0.10	F	D12	0.0	22.42	0.03	C
Stream A-BCD		0.4	12.34	0.27	B		0.6	16.11	0.38	C
Stream D-ABC		0.9	62.17	0.49	F		0.4	35.50	0.29	E
Stream C-ABD		0.0	10.54	0.00	B		0.0	9.22	0.00	A
	2044 10k DS									
Stream B-ACD	D13	0.1	80.03	0.13	F	D14	0.0	27.11	0.04	D
Stream A-BCD		0.4	12.73	0.27	B		0.7	17.05	0.40	C
Stream D-ABC		1.4	100.41	0.61	F		0.8	74.40	0.47	F
Stream C-ABD		0.0	10.95	0.00	B		0.0	9.52	0.00	A

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

File summary

File Description

Title	J7A Otterpool Park_Base Model
Location	Kennington Rd - The St
Site number	
Date	12/07/2017
Version	
Status	Draft 1
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J7A Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D3	2037 DM	AM	J7A Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D5	2037 DS	AM	J7A Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D7	2044 8.5k DM	AM	J7A Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D9	2044 8.5k DS	AM	J7A Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

D11	2044 10k DM	AM	J7A Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D13	2044 10k DS	AM	J7A Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D14	2044 10k DS	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		1.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A2070 Kennington Rd Northbound		Major
B	The Street Eastbound		Minor
C	A2070 Kennington Rd Southbound		Major
D	The Street Westbound		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	7.30	✓	2.00	✓	3.50	100.0	✓	6.00
C	6.90	✓	2.00	✓	2.80	100.0	✓	2.00

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	One lane	3.00	37	77
D	One lane	4.00	99	41

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
A-D	721	-	-	-	0.264	0.264	0.264	-	0.264	-	-
B-AD	551	0.092	0.233	-	-	-	0.147	0.333	0.147	0.092	0.233
B-C	672	0.099	0.250	-	-	-	-	-	-	0.099	0.250
C-B	673	0.251	0.251	-	-	-	-	-	-	0.251	0.251
D-A	715	-	-	-	0.261	0.103	0.261	-	0.103	-	-
D-BC	609	0.159	0.159	0.362	0.253	0.100	0.253	-	0.100	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J7A Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	797	100.000
B		ONE HOUR	✓	2	100.000
C		ONE HOUR	✓	458	100.000
D		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	1	669	127
	B	1	0	0	1
	C	394	2	0	62
	D	24	1	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	2
	B	0	0	0	0
	C	2	0	0	2
	D	8	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.24	8.27	0.3	A	117	175
A-B					0.92	1
A-C					614	921
D-ABC	0.13	10.26	0.1	B	44	66
C-ABD	0.00	7.54	0.0	A	2	3
C-D					57	85
C-A					362	542

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	444	0.000	0	0.0	0.0	0.000	A
A-BCD	96	24	617	0.155	95	0.0	0.2	6.889	A
A-B	0.75	0.19			0.75				
A-C	504	126			504				
D-ABC	36	9	483	0.075	36	0.0	0.1	8.049	A
C-ABD	2	0.38	541	0.003	1	0.0	0.0	6.672	A
C-D	47	12			47				
C-A	297	74			297				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	411	0.000	0	0.0	0.0	0.000	A
A-BCD	114	29	599	0.191	114	0.2	0.2	7.417	A
A-B	0.90	0.22			0.90				
A-C	601	150			601				
D-ABC	43	11	450	0.096	43	0.1	0.1	8.836	A
C-ABD	2	0.45	515	0.003	2	0.0	0.0	7.010	A
C-D	56	14			56				
C-A	354	89			354				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	366	0.000	0	0.0	0.0	0.000	A
A-BCD	140	35	575	0.243	140	0.2	0.3	8.261	A
A-B	1	0.28			1				
A-C	737	184			737				
D-ABC	53	13	404	0.131	53	0.1	0.1	10.250	B
C-ABD	2	0.55	480	0.005	2	0.0	0.0	7.537	A
C-D	68	17			68				
C-A	434	108			434				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	366	0.000	0	0.0	0.0	0.000	A
A-BCD	140	35	575	0.243	140	0.3	0.3	8.274	A
A-B	1	0.28			1				
A-C	737	184			737				
D-ABC	53	13	404	0.131	53	0.1	0.1	10.263	B
C-ABD	2	0.55	480	0.005	2	0.0	0.0	7.537	A
C-D	68	17			68				
C-A	434	108			434				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	411	0.000	0	0.0	0.0	0.000	A
A-BCD	114	29	599	0.191	115	0.3	0.2	7.433	A
A-B	0.90	0.22			0.90				
A-C	601	150			601				
D-ABC	43	11	450	0.096	43	0.1	0.1	8.852	A
C-ABD	2	0.45	515	0.003	2	0.0	0.0	7.011	A
C-D	56	14			56				

C-A	354	89			354				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	444	0.000	0	0.0	0.0	0.000	A
A-BCD	96	24	617	0.155	96	0.2	0.2	6.914	A
A-B	0.75	0.19			0.75				
A-C	504	126			504				
D-ABC	36	9	482	0.075	36	0.1	0.1	8.068	A
C-ABD	2	0.38	541	0.003	2	0.0	0.0	6.676	A
C-D	47	12			47				
C-A	297	74			297				

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		1.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	454	100.000
B		ONE HOUR	✓	5	100.000
C		ONE HOUR	✓	676	100.000
D		ONE HOUR	✓	40	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	8	307	139
	B	2	0	3	0
	C	610	2	0	64
	D	32	1	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	0
	B	0	0	0	0
	C	1	0	0	0

	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.01	7.81	0.0	A	5	7
A-BCD	0.29	9.72	0.4	A	128	191
A-B					7	11
A-C					282	423
D-ABC	0.09	8.50	0.1	A	37	55
C-ABD	0.00	6.20	0.0	A	2	3
C-D					59	88
C-A					560	840

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	517	0.007	4	0.0	0.0	7.015	A
A-BCD	105	26	586	0.179	104	0.0	0.2	7.453	A
A-B	6	2			6				
A-C	231	58			231				
D-ABC	30	8	541	0.056	30	0.0	0.1	7.035	A
C-ABD	2	0.38	612	0.002	1	0.0	0.0	5.899	A
C-D	48	12			48				
C-A	459	115			459				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	496	0.009	4	0.0	0.0	7.323	A
A-BCD	125	31	560	0.223	125	0.2	0.3	8.272	A
A-B	7	2			7				
A-C	276	69			276				
D-ABC	36	9	511	0.070	36	0.1	0.1	7.579	A
C-ABD	2	0.45	600	0.003	2	0.0	0.0	6.020	A
C-D	58	14			58				
C-A	548	137			548				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	466	0.012	5	0.0	0.0	7.812	A
A-BCD	153	38	523	0.292	153	0.3	0.4	9.694	A
A-B	9	2			9				
A-C	338	84			338				
D-ABC	44	11	468	0.094	44	0.1	0.1	8.497	A
C-ABD	2	0.55	583	0.004	2	0.0	0.0	6.195	A
C-D	70	18			70				
C-A	672	168			672				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	466	0.012	6	0.0	0.0	7.812	A
A-BCD	153	38	523	0.292	153	0.4	0.4	9.719	A
A-B	9	2			9				
A-C	338	84			338				
D-ABC	44	11	467	0.094	44	0.1	0.1	8.501	A
C-ABD	2	0.55	583	0.004	2	0.0	0.0	6.195	A
C-D	70	18			70				
C-A	672	168			672				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	496	0.009	5	0.0	0.0	7.324	A
A-BCD	125	31	560	0.223	125	0.4	0.3	8.300	A
A-B	7	2			7				
A-C	276	69			276				
D-ABC	36	9	511	0.070	36	0.1	0.1	7.587	A
C-ABD	2	0.45	600	0.003	2	0.0	0.0	6.020	A
C-D	58	14			58				
C-A	548	137			548				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	517	0.007	4	0.0	0.0	7.018	A
A-BCD	105	26	586	0.179	105	0.3	0.2	7.488	A
A-B	6	2			6				
A-C	231	58			231				
D-ABC	30	8	541	0.056	30	0.1	0.1	7.047	A
C-ABD	2	0.38	612	0.002	2	0.0	0.0	5.900	A
C-D	48	12			48				
C-A	459	115			459				

2037 DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		1.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2037 DM	AM	J7A Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1191	100.000
B		ONE HOUR	✓	5	100.000
C		ONE HOUR	✓	1035	100.000
D		ONE HOUR	✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	**B**	**C**	**D**
From	**A**	0	1	1100	90
	B	2	0	0	3
	C	957	1	0	77
	D	18	0	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	**B**	**C**	**D**
From	**A**	0	0	1	2
	B	0	0	0	0
	C	1	0	0	1

	D	11	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.06	43.31	0.1	E	5	7
A-BCD	0.24	11.63	0.3	B	83	124
A-B					0.92	1
A-C					1009	1514
D-ABC	0.38	42.01	0.6	E	43	65
C-ABD	0.00	10.09	0.0	B	0.92	1
C-D					71	106
C-A					878	1317

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	235	0.016	4	0.0	0.0	15.555	C
A-BCD	68	17	503	0.135	67	0.0	0.2	8.249	A
A-B	0.75	0.19			0.75				
A-C	828	207			828				
D-ABC	35	9	313	0.113	35	0.0	0.1	12.915	B
C-ABD	0.75	0.19	458	0.002	0.75	0.0	0.0	7.875	A
C-D	58	14			58				
C-A	720	180			720				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	174	0.026	4	0.0	0.0	21.271	C
A-BCD	81	20	463	0.175	81	0.2	0.2	9.401	A
A-B	0.90	0.22			0.90				
A-C	989	247			989				
D-ABC	42	11	244	0.173	42	0.1	0.2	17.795	C
C-ABD	0.90	0.22	416	0.002	0.90	0.0	0.0	8.671	A
C-D	69	17			69				
C-A	860	215			860				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	89	0.062	5	0.0	0.1	43.066	E
A-BCD	99	25	409	0.243	99	0.2	0.3	11.595	B
A-B	1	0.28			1				
A-C	1211	303			1211				
D-ABC	52	13	137	0.377	50	0.2	0.6	40.716	E
C-ABD	1	0.28	358	0.003	1	0.0	0.0	10.080	B
C-D	85	21			85				
C-A	1054	263			1054				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	89	0.062	5	0.1	0.1	43.315	E
A-BCD	99	25	409	0.243	99	0.3	0.3	11.628	B
A-B	1	0.28			1				
A-C	1211	303			1211				
D-ABC	52	13	137	0.377	52	0.6	0.6	42.008	E
C-ABD	1	0.28	358	0.003	1	0.0	0.0	10.086	B
C-D	85	21			85				
C-A	1054	263			1054				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	173	0.026	5	0.1	0.0	21.350	C
A-BCD	81	20	463	0.175	81	0.3	0.2	9.435	A
A-B	0.90	0.22			0.90				
A-C	989	247			989				
D-ABC	42	11	244	0.173	44	0.6	0.2	18.132	C
C-ABD	0.90	0.22	416	0.002	0.90	0.0	0.0	8.679	A
C-D	69	17			69				
C-A	860	215			860				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	235	0.016	4	0.0	0.0	15.577	C
A-BCD	68	17	503	0.135	68	0.2	0.2	8.283	A
A-B	0.75	0.19			0.75				
A-C	828	207			828				
D-ABC	35	9	313	0.113	36	0.2	0.1	13.007	B
C-ABD	0.75	0.19	458	0.002	0.75	0.0	0.0	7.878	A
C-D	58	14			58				
C-A	720	180			720				

2037 DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		1.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2037 DM	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1104	100.000
B		ONE HOUR	✓	5	100.000
C		ONE HOUR	✓	1185	100.000
D		ONE HOUR	✓	34	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	**B**	**C**	**D**
From	**A**	0	12	975	117
	B	2	0	3	0
	C	1123	1	0	61
	D	27	1	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	**B**	**C**	**D**
From	**A**	0	0	0	0
	B	0	0	0	0
	C	1	0	0	0

	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	19.80	0.0	C	5	7
A-BCD	0.34	14.62	0.5	B	108	161
A-B					11	17
A-C					894	1342
D-ABC	0.20	23.50	0.2	C	31	47
C-ABD	0.00	9.05	0.0	A	0.92	1
C-D					56	84
C-A					1030	1546

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	349	0.011	4	0.0	0.0	10.414	B
A-BCD	88	22	484	0.182	87	0.0	0.2	9.061	A
A-B	9	2			9				
A-C	734	184			734				
D-ABC	26	6	400	0.064	25	0.0	0.1	9.595	A
C-ABD	0.75	0.19	486	0.002	0.75	0.0	0.0	7.423	A
C-D	46	11			46				
C-A	845	211			845				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	287	0.016	4	0.0	0.0	12.728	B
A-BCD	105	26	438	0.240	105	0.2	0.3	10.804	B
A-B	11	3			11				
A-C	876	219			876				
D-ABC	31	8	329	0.093	30	0.1	0.1	12.062	B
C-ABD	0.90	0.22	449	0.002	0.90	0.0	0.0	8.030	A
C-D	55	14			55				
C-A	1010	252			1010				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	187	0.029	5	0.0	0.0	19.788	C
A-BCD	129	32	376	0.345	129	0.3	0.5	14.532	B
A-B	13	3			13				
A-C	1073	268			1073				
D-ABC	37	9	191	0.196	37	0.1	0.2	23.270	C
C-ABD	1	0.28	399	0.003	1	0.0	0.0	9.050	A
C-D	67	17			67				
C-A	1236	309			1236				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	187	0.029	6	0.0	0.0	19.804	C
A-BCD	129	32	376	0.345	129	0.5	0.5	14.624	B
A-B	13	3			13				
A-C	1073	268			1073				
D-ABC	37	9	191	0.196	37	0.2	0.2	23.498	C
C-ABD	1	0.28	399	0.003	1	0.0	0.0	9.050	A
C-D	67	17			67				
C-A	1236	309			1236				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	287	0.016	5	0.0	0.0	12.737	B
A-BCD	105	26	438	0.240	106	0.5	0.3	10.882	B
A-B	11	3			11				
A-C	876	219			876				
D-ABC	31	8	328	0.093	31	0.2	0.1	12.132	B
C-ABD	0.90	0.22	449	0.002	0.90	0.0	0.0	8.032	A
C-D	55	14			55				
C-A	1010	252			1010				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	349	0.011	4	0.0	0.0	10.420	B
A-BCD	88	22	484	0.182	88	0.3	0.2	9.118	A
A-B	9	2			9				
A-C	734	184			734				
D-ABC	26	6	400	0.064	26	0.1	0.1	9.624	A
C-ABD	0.75	0.19	486	0.002	0.75	0.0	0.0	7.427	A
C-D	46	11			46				
C-A	845	211			845				

2037 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		1.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 DS	AM	J7A Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1218	100.000
B		ONE HOUR	✓	5	100.000
C		ONE HOUR	✓	1054	100.000
D		ONE HOUR	✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	**B**	**C**	**D**
From	**A**	0	1	1127	90
	B	2	0	0	3
	C	976	1	0	77
	D	18	0	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	**B**	**C**	**D**
From	**A**	0	0	1	2
	B	0	0	0	0
	C	1	0	0	1

	D	11	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.07	49.34	0.1	E	5	7
A-BCD	0.25	11.84	0.3	B	83	124
A-B					0.92	1
A-C					1034	1551
D-ABC	0.42	49.20	0.7	E	43	65
C-ABD	0.00	10.31	0.0	B	0.92	1
C-D					71	106
C-A					896	1343

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	228	0.017	4	0.0	0.0	16.035	C
A-BCD	68	17	499	0.136	67	0.0	0.2	8.320	A
A-B	0.75	0.19			0.75				
A-C	848	212			848				
D-ABC	35	9	306	0.116	35	0.0	0.1	13.237	B
C-ABD	0.75	0.19	453	0.002	0.75	0.0	0.0	7.964	A
C-D	58	14			58				
C-A	735	184			735				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	165	0.027	4	0.0	0.0	22.360	C
A-BCD	81	20	459	0.176	81	0.2	0.2	9.513	A
A-B	0.90	0.22			0.90				
A-C	1013	253			1013				
D-ABC	42	11	235	0.180	42	0.1	0.2	18.598	C
C-ABD	0.90	0.22	410	0.002	0.90	0.0	0.0	8.802	A
C-D	69	17			69				
C-A	877	219			877				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	79	0.070	5	0.0	0.1	48.997	E
A-BCD	99	25	403	0.246	99	0.2	0.3	11.803	B
A-B	1	0.28			1				
A-C	1241	310			1241				
D-ABC	52	13	125	0.415	50	0.2	0.7	47.146	E
C-ABD	1	0.28	351	0.003	1	0.0	0.0	10.297	B
C-D	85	21			85				
C-A	1075	269			1075				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	78	0.070	5	0.1	0.1	49.340	E
A-BCD	99	25	403	0.246	99	0.3	0.3	11.837	B
A-B	1	0.28			1				
A-C	1241	310			1241				
D-ABC	52	13	125	0.416	52	0.7	0.7	49.202	E
C-ABD	1	0.28	350	0.003	1	0.0	0.0	10.305	B
C-D	85	21			85				
C-A	1075	269			1075				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	165	0.027	5	0.1	0.0	22.466	C
A-BCD	81	20	459	0.176	81	0.3	0.2	9.549	A
A-B	0.90	0.22			0.90				
A-C	1013	253			1013				
D-ABC	42	11	235	0.180	44	0.7	0.2	19.038	C
C-ABD	0.90	0.22	410	0.002	0.90	0.0	0.0	8.811	A
C-D	69	17			69				
C-A	877	219			877				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	228	0.017	4	0.0	0.0	16.058	C
A-BCD	68	17	499	0.136	68	0.2	0.2	8.353	A
A-B	0.75	0.19			0.75				
A-C	848	212			848				
D-ABC	35	9	306	0.116	36	0.2	0.1	13.338	B
C-ABD	0.75	0.19	453	0.002	0.76	0.0	0.0	7.967	A
C-D	58	14			58				
C-A	735	184			735				

2037 DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		1.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 DS	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1127	100.000
B		ONE HOUR	✓	5	100.000
C		ONE HOUR	✓	1214	100.000
D		ONE HOUR	✓	34	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	**B**	**C**	**D**
From	**A**	0	12	998	117
	B	2	0	3	0
	C	1152	1	0	61
	D	27	1	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	**B**	**C**	**D**
From	**A**	0	0	0	0
	B	0	0	0	0
	C	1	0	0	0

	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	21.57	0.0	C	5	7
A-BCD	0.35	15.14	0.5	C	108	161
A-B					11	17
A-C					916	1373
D-ABC	0.23	28.00	0.3	D	31	47
C-ABD	0.00	9.20	0.0	A	0.92	1
C-D					56	84
C-A					1057	1586

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	342	0.011	4	0.0	0.0	10.638	B
A-BCD	88	22	478	0.184	87	0.0	0.2	9.194	A
A-B	9	2			9				
A-C	751	188			751				
D-ABC	26	6	392	0.065	25	0.0	0.1	9.805	A
C-ABD	0.75	0.19	481	0.002	0.75	0.0	0.0	7.490	A
C-D	46	11			46				
C-A	867	217			867				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	278	0.016	4	0.0	0.0	13.176	B
A-BCD	105	26	431	0.244	105	0.2	0.3	11.032	B
A-B	11	3			11				
A-C	897	224			897				
D-ABC	31	8	317	0.096	30	0.1	0.1	12.535	B
C-ABD	0.90	0.22	444	0.002	0.90	0.0	0.0	8.123	A
C-D	55	14			55				
C-A	1036	259			1036				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	172	0.032	5	0.0	0.0	21.559	C
A-BCD	130	32	367	0.353	129	0.3	0.5	15.032	C
A-B	13	3			13				
A-C	1098	275			1098				
D-ABC	37	9	167	0.225	37	0.1	0.3	27.589	D
C-ABD	1	0.28	393	0.003	1	0.0	0.0	9.196	A
C-D	67	17			67				
C-A	1268	317			1268				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	172	0.032	6	0.0	0.0	21.573	C
A-BCD	130	32	367	0.353	130	0.5	0.5	15.135	C
A-B	13	3			13				
A-C	1098	275			1098				
D-ABC	37	9	166	0.226	37	0.3	0.3	28.000	D
C-ABD	1	0.28	392	0.003	1	0.0	0.0	9.197	A
C-D	67	17			67				
C-A	1268	317			1268				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	278	0.016	5	0.0	0.0	13.188	B
A-BCD	105	26	431	0.244	106	0.5	0.3	11.116	B
A-B	11	3			11				
A-C	897	224			897				
D-ABC	31	8	317	0.096	31	0.3	0.1	12.626	B
C-ABD	0.90	0.22	444	0.002	0.90	0.0	0.0	8.124	A
C-D	55	14			55				
C-A	1036	259			1036				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	342	0.011	4	0.0	0.0	10.644	B
A-BCD	88	22	478	0.184	88	0.3	0.2	9.257	A
A-B	9	2			9				
A-C	751	188			751				
D-ABC	26	6	392	0.065	26	0.1	0.1	9.834	A
C-ABD	0.75	0.19	481	0.002	0.75	0.0	0.0	7.494	A
C-D	46	11			46				
C-A	867	217			867				

2044 8.5k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		2.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2044 8.5k DM	AM	J7A Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1253	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	1068	100.000
D		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	1	1155	97
	B	3	0	0	3
	C	985	1	0	82
	D	20	0	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	2
	B	0	0	0	0
	C	1	0	0	1

	D	10	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.10	58.09	0.1	F	6	8
A-BCD	0.27	12.32	0.4	B	89	134
A-B					0.92	1
A-C					1060	1590
D-ABC	0.49	61.87	0.9	F	46	69
C-ABD	0.00	10.55	0.0	B	0.92	1
C-D					75	113
C-A					904	1356

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	221	0.020	4	0.0	0.0	16.582	C
A-BCD	73	18	496	0.147	72	0.0	0.2	8.479	A
A-B	0.75	0.19			0.75				
A-C	870	217			870				
D-ABC	38	9	303	0.124	37	0.0	0.1	13.528	B
C-ABD	0.75	0.19	447	0.002	0.75	0.0	0.0	8.063	A
C-D	62	15			62				
C-A	742	185			742				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	157	0.034	5	0.0	0.0	23.667	C
A-BCD	87	22	455	0.192	87	0.2	0.2	9.764	A
A-B	0.90	0.22			0.90				
A-C	1038	260			1038				
D-ABC	45	11	229	0.196	45	0.1	0.2	19.481	C
C-ABD	0.90	0.22	403	0.002	0.90	0.0	0.0	8.946	A
C-D	74	18			74				
C-A	885	221			885				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	69	0.096	6	0.0	0.1	57.354	F
A-BCD	107	27	399	0.268	106	0.2	0.4	12.274	B
A-B	1	0.28			1				
A-C	1272	318			1272				
D-ABC	55	14	113	0.488	53	0.2	0.8	57.721	F
C-ABD	1	0.28	343	0.003	1	0.0	0.0	10.541	B
C-D	90	23			90				
C-A	1085	271			1085				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	69	0.096	7	0.1	0.1	58.086	F
A-BCD	107	27	399	0.268	107	0.4	0.4	12.318	B
A-B	1	0.28			1				
A-C	1272	318			1272				
D-ABC	55	14	113	0.489	55	0.8	0.9	61.867	F
C-ABD	1	0.28	342	0.003	1	0.0	0.0	10.552	B
C-D	90	23			90				
C-A	1085	271			1085				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	157	0.034	6	0.1	0.0	23.830	C
A-BCD	87	22	455	0.192	88	0.4	0.2	9.806	A
A-B	0.90	0.22			0.90				
A-C	1038	260			1038				
D-ABC	45	11	229	0.197	48	0.9	0.3	20.149	C
C-ABD	0.90	0.22	403	0.002	0.90	0.0	0.0	8.958	A
C-D	74	18			74				
C-A	885	221			885				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	221	0.020	5	0.0	0.0	16.614	C
A-BCD	73	18	496	0.147	73	0.2	0.2	8.518	A
A-B	0.75	0.19			0.75				
A-C	870	217			870				
D-ABC	38	9	302	0.125	38	0.3	0.1	13.648	B
C-ABD	0.75	0.19	447	0.002	0.76	0.0	0.0	8.066	A
C-D	62	15			62				
C-A	742	185			742				

2044 8.5k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		1.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2044 8.5k DM	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1137	100.000
B		ONE HOUR	✓	5	100.000
C		ONE HOUR	✓	1237	100.000
D		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	13	999	125
	B	2	0	3	0
	C	1171	1	0	65
	D	29	1	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	1	0	0	0

	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	22.39	0.0	C	5	7
A-BCD	0.38	16.13	0.6	C	115	173
A-B					12	18
A-C					916	1374
D-ABC	0.29	36.04	0.4	E	34	51
C-ABD	0.00	9.22	0.0	A	0.92	1
C-D					60	89
C-A					1075	1612

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	339	0.011	4	0.0	0.0	10.721	B
A-BCD	94	24	473	0.199	93	0.0	0.2	9.449	A
A-B	10	2			10				
A-C	752	188			752				
D-ABC	28	7	383	0.073	28	0.0	0.1	10.133	B
C-ABD	0.75	0.19	481	0.002	0.75	0.0	0.0	7.499	A
C-D	49	12			49				
C-A	882	220			882				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	274	0.016	4	0.0	0.0	13.354	B
A-BCD	112	28	425	0.264	112	0.2	0.4	11.472	B
A-B	12	3			12				
A-C	898	224			898				
D-ABC	33	8	304	0.109	33	0.1	0.1	13.262	B
C-ABD	0.90	0.22	443	0.002	0.90	0.0	0.0	8.136	A
C-D	58	15			58				
C-A	1053	263			1053				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	166	0.033	5	0.0	0.0	22.365	C
A-BCD	139	35	362	0.384	138	0.4	0.6	15.993	C
A-B	14	4			14				
A-C	1099	275			1099				
D-ABC	41	10	141	0.288	40	0.1	0.4	35.079	E
C-ABD	1	0.28	392	0.003	1	0.0	0.0	9.216	A
C-D	72	18			72				
C-A	1289	322			1289				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	166	0.033	6	0.0	0.0	22.395	C
A-BCD	139	35	362	0.384	139	0.6	0.6	16.130	C
A-B	14	4			14				
A-C	1099	275			1099				
D-ABC	41	10	140	0.290	41	0.4	0.4	36.036	E
C-ABD	1	0.28	392	0.003	1	0.0	0.0	9.217	A
C-D	72	18			72				
C-A	1289	322			1289				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	274	0.016	5	0.0	0.0	13.365	B
A-BCD	112	28	425	0.264	113	0.6	0.4	11.578	B
A-B	12	3			12				
A-C	898	224			898				
D-ABC	33	8	304	0.109	34	0.4	0.1	13.408	B
C-ABD	0.90	0.22	443	0.002	0.90	0.0	0.0	8.137	A
C-D	58	15			58				
C-A	1053	263			1053				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	339	0.011	4	0.0	0.0	10.727	B
A-BCD	94	24	473	0.199	95	0.4	0.3	9.517	A
A-B	10	2			10				
A-C	752	188			752				
D-ABC	28	7	382	0.073	28	0.1	0.1	10.169	B
C-ABD	0.75	0.19	481	0.002	0.75	0.0	0.0	7.500	A
C-D	49	12			49				
C-A	882	220			882				

2044 8.5k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		2.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 8.5k DS	AM	J7A Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1295	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	1098	100.000
D		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	1	1197	97
	B	3	0	0	3
	C	1015	1	0	82
	D	19	0	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	2
	B	0	0	0	0
	C	1	0	0	1

	D	11	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.13	78.25	0.1	F	6	8
A-BCD	0.27	12.69	0.4	B	89	134
A-B					0.92	1
A-C					1098	1647
D-ABC	0.60	96.35	1.3	F	45	67
C-ABD	0.00	10.94	0.0	B	0.92	1
C-D					75	113
C-A					931	1397

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	211	0.021	4	0.0	0.0	17.449	C
A-BCD	73	18	490	0.149	72	0.0	0.2	8.598	A
A-B	0.75	0.19			0.75				
A-C	901	225			901				
D-ABC	37	9	289	0.128	36	0.0	0.1	14.220	B
C-ABD	0.75	0.19	439	0.002	0.75	0.0	0.0	8.210	A
C-D	62	15			62				
C-A	764	191			764				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	144	0.037	5	0.0	0.0	25.857	D
A-BCD	87	22	448	0.195	87	0.2	0.2	9.955	A
A-B	0.90	0.22			0.90				
A-C	1076	269			1076				
D-ABC	44	11	212	0.208	44	0.1	0.3	21.304	C
C-ABD	0.90	0.22	394	0.002	0.90	0.0	0.0	9.164	A
C-D	74	18			74				
C-A	912	228			912				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	53	0.124	6	0.0	0.1	76.308	F
A-BCD	107	27	391	0.274	106	0.2	0.4	12.640	B
A-B	1	0.28			1				
A-C	1318	329			1318				
D-ABC	54	13	90	0.599	50	0.3	1.2	83.901	F
C-ABD	1	0.28	331	0.003	1	0.0	0.0	10.916	B
C-D	90	23			90				
C-A	1118	279			1118				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	53	0.126	7	0.1	0.1	78.252	F
A-BCD	107	27	391	0.274	107	0.4	0.4	12.691	B
A-B	1	0.28			1				
A-C	1318	329			1318				
D-ABC	54	13	90	0.601	53	1.2	1.3	96.351	F
C-ABD	1	0.28	330	0.003	1	0.0	0.0	10.935	B
C-D	90	23			90				
C-A	1118	279			1118				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	144	0.038	6	0.1	0.0	26.149	D
A-BCD	87	22	448	0.195	88	0.4	0.2	10.002	B
A-B	0.90	0.22			0.90				
A-C	1076	269			1076				
D-ABC	44	11	212	0.208	48	1.3	0.3	22.553	C
C-ABD	0.90	0.22	393	0.002	0.90	0.0	0.0	9.181	A
C-D	74	18			74				
C-A	912	228			912				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	210	0.021	5	0.0	0.0	17.488	C
A-BCD	73	18	490	0.149	73	0.2	0.2	8.637	A
A-B	0.75	0.19			0.75				
A-C	901	225			901				
D-ABC	37	9	289	0.128	37	0.3	0.1	14.359	B
C-ABD	0.75	0.19	439	0.002	0.76	0.0	0.0	8.215	A
C-D	62	15			62				
C-A	764	191			764				

2044 8.5k DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		1.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2044 8.5k DS	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1177	100.000
B		ONE HOUR	✓	5	100.000
C		ONE HOUR	✓	1277	100.000
D		ONE HOUR	✓	38	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	13	1039	125
	B	2	0	3	0
	C	1211	1	0	65
	D	30	1	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	1	0	0	0

	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.04	26.63	0.0	D	5	7
A-BCD	0.40	16.99	0.7	C	115	173
A-B					12	18
A-C					953	1429
D-ABC	0.44	67.96	0.7	F	35	52
C-ABD	0.00	9.49	0.0	A	0.92	1
C-D					60	89
C-A					1111	1667

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	328	0.011	4	0.0	0.0	11.115	B
A-BCD	94	24	465	0.202	93	0.0	0.3	9.648	A
A-B	10	2			10				
A-C	782	196			782				
D-ABC	29	7	372	0.077	28	0.0	0.1	10.449	B
C-ABD	0.75	0.19	473	0.002	0.75	0.0	0.0	7.619	A
C-D	49	12			49				
C-A	912	228			912				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	258	0.017	4	0.0	0.0	14.192	B
A-BCD	112	28	416	0.270	112	0.3	0.4	11.830	B
A-B	12	3			12				
A-C	934	233			934				
D-ABC	34	9	289	0.118	34	0.1	0.1	14.102	B
C-ABD	0.90	0.22	434	0.002	0.90	0.0	0.0	8.305	A
C-D	58	15			58				
C-A	1089	272			1089				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	141	0.039	5	0.0	0.0	26.560	D
A-BCD	139	35	351	0.397	138	0.4	0.6	16.817	C
A-B	14	4			14				
A-C	1142	286			1142				
D-ABC	42	10	95	0.439	40	0.1	0.7	62.398	F
C-ABD	1	0.28	381	0.003	1	0.0	0.0	9.484	A
C-D	72	18			72				
C-A	1333	333			1333				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	141	0.039	6	0.0	0.0	26.629	D
A-BCD	139	35	351	0.397	139	0.6	0.7	16.985	C
A-B	14	4			14				
A-C	1142	286			1142				
D-ABC	42	10	94	0.444	42	0.7	0.7	67.960	F
C-ABD	1	0.28	381	0.003	1	0.0	0.0	9.487	A
C-D	72	18			72				
C-A	1333	333			1333				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	258	0.017	5	0.0	0.0	14.211	B
A-BCD	112	28	416	0.270	114	0.7	0.4	11.954	B
A-B	12	3			12				
A-C	934	233			934				
D-ABC	34	9	288	0.119	37	0.7	0.1	14.436	B
C-ABD	0.90	0.22	434	0.002	0.90	0.0	0.0	8.308	A
C-D	58	15			58				
C-A	1089	272			1089				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	328	0.011	4	0.0	0.0	11.122	B
A-BCD	94	24	465	0.202	95	0.4	0.3	9.726	A
A-B	10	2			10				
A-C	782	196			782				
D-ABC	29	7	372	0.077	29	0.1	0.1	10.494	B
C-ABD	0.75	0.19	473	0.002	0.75	0.0	0.0	7.623	A
C-D	49	12			49				
C-A	912	228			912				

2044 10k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		2.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2044 10k DM	AM	J7A Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1251	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	1070	100.000
D		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	1	1153	97
	B	3	0	0	3
	C	987	1	0	82
	D	20	0	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	2
	B	0	0	0	0
	C	1	0	0	1

	D	10	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.10	57.91	0.1	F	6	8
A-BCD	0.27	12.34	0.4	B	89	134
A-B					0.92	1
A-C					1058	1587
D-ABC	0.49	62.17	0.9	F	46	69
C-ABD	0.00	10.54	0.0	B	0.92	1
C-D					75	113
C-A					906	1359

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	222	0.020	4	0.0	0.0	16.572	C
A-BCD	73	18	496	0.147	72	0.0	0.2	8.486	A
A-B	0.75	0.19			0.75				
A-C	868	217			868				
D-ABC	38	9	302	0.124	37	0.0	0.1	13.538	B
C-ABD	0.75	0.19	448	0.002	0.75	0.0	0.0	8.056	A
C-D	62	15			62				
C-A	743	186			743				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	158	0.034	5	0.0	0.0	23.642	C
A-BCD	87	22	455	0.192	87	0.2	0.2	9.777	A
A-B	0.90	0.22			0.90				
A-C	1037	259			1037				
D-ABC	45	11	229	0.197	45	0.1	0.2	19.508	C
C-ABD	0.90	0.22	404	0.002	0.90	0.0	0.0	8.936	A
C-D	74	18			74				
C-A	887	222			887				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	69	0.096	6	0.0	0.1	57.180	F
A-BCD	107	27	399	0.268	106	0.2	0.4	12.299	B
A-B	1	0.28			1				
A-C	1269	317			1269				
D-ABC	55	14	113	0.489	53	0.2	0.9	57.972	F
C-ABD	1	0.28	343	0.003	1	0.0	0.0	10.524	B
C-D	90	23			90				
C-A	1087	272			1087				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	69	0.096	7	0.1	0.1	57.911	F
A-BCD	107	27	399	0.268	107	0.4	0.4	12.342	B
A-B	1	0.28			1				
A-C	1269	317			1269				
D-ABC	55	14	112	0.490	55	0.9	0.9	62.169	F
C-ABD	1	0.28	343	0.003	1	0.0	0.0	10.535	B
C-D	90	23			90				
C-A	1087	272			1087				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	157	0.034	6	0.1	0.0	23.805	C
A-BCD	87	22	455	0.192	88	0.4	0.2	9.819	A
A-B	0.90	0.22			0.90				
A-C	1037	259			1037				
D-ABC	45	11	228	0.197	48	0.9	0.3	20.178	C
C-ABD	0.90	0.22	403	0.002	0.90	0.0	0.0	8.948	A
C-D	74	18			74				
C-A	887	222			887				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	221	0.020	5	0.0	0.0	16.604	C
A-BCD	73	18	496	0.147	73	0.2	0.2	8.524	A
A-B	0.75	0.19			0.75				
A-C	868	217			868				
D-ABC	38	9	302	0.125	38	0.3	0.1	13.655	B
C-ABD	0.75	0.19	447	0.002	0.76	0.0	0.0	8.060	A
C-D	62	15			62				
C-A	743	186			743				

2044 10k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		1.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 10k DM	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1138	100.000
B		ONE HOUR	✓	5	100.000
C		ONE HOUR	✓	1236	100.000
D		ONE HOUR	✓	38	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	13	1000	125
	B	2	0	3	0
	C	1170	1	0	65
	D	30	1	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	1	0	0	0

	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.03	22.42	0.0	C	5	7
A-BCD	0.38	16.11	0.6	C	115	173
A-B					12	18
A-C					917	1376
D-ABC	0.29	35.50	0.4	E	35	52
C-ABD	0.00	9.22	0.0	A	0.92	1
C-D					60	89
C-A					1074	1610

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	339	0.011	4	0.0	0.0	10.724	B
A-BCD	94	24	473	0.199	93	0.0	0.2	9.444	A
A-B	10	2			10				
A-C	753	188			753				
D-ABC	29	7	385	0.074	28	0.0	0.1	10.091	B
C-ABD	0.75	0.19	481	0.002	0.75	0.0	0.0	7.502	A
C-D	49	12			49				
C-A	881	220			881				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	274	0.016	4	0.0	0.0	13.361	B
A-BCD	112	28	426	0.264	112	0.2	0.4	11.463	B
A-B	12	3			12				
A-C	899	225			899				
D-ABC	34	9	307	0.111	34	0.1	0.1	13.183	B
C-ABD	0.90	0.22	443	0.002	0.90	0.0	0.0	8.140	A
C-D	58	15			58				
C-A	1052	263			1052				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	166	0.033	5	0.0	0.0	22.388	C
A-BCD	139	35	362	0.384	138	0.4	0.6	15.973	C
A-B	14	4			14				
A-C	1100	275			1100				
D-ABC	42	10	144	0.291	41	0.1	0.4	34.569	D
C-ABD	1	0.28	391	0.003	1	0.0	0.0	9.222	A
C-D	72	18			72				
C-A	1288	322			1288				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	166	0.033	6	0.0	0.0	22.417	C
A-BCD	139	35	362	0.384	139	0.6	0.6	16.109	C
A-B	14	4			14				
A-C	1100	275			1100				
D-ABC	42	10	143	0.292	42	0.4	0.4	35.504	E
C-ABD	1	0.28	391	0.003	1	0.0	0.0	9.224	A
C-D	72	18			72				
C-A	1288	322			1288				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	274	0.016	5	0.0	0.0	13.371	B
A-BCD	112	28	426	0.264	113	0.6	0.4	11.572	B
A-B	12	3			12				
A-C	899	225			899				
D-ABC	34	9	306	0.111	35	0.4	0.1	13.327	B
C-ABD	0.90	0.22	443	0.002	0.90	0.0	0.0	8.142	A
C-D	58	15			58				
C-A	1052	263			1052				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	339	0.011	4	0.0	0.0	10.729	B
A-BCD	94	24	473	0.199	95	0.4	0.3	9.514	A
A-B	10	2			10				
A-C	753	188			753				
D-ABC	29	7	384	0.074	29	0.1	0.1	10.129	B
C-ABD	0.75	0.19	480	0.002	0.75	0.0	0.0	7.503	A
C-D	49	12			49				
C-A	881	220			881				

2044 10k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		2.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2044 10k DS	AM	J7A Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1297	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	1101	100.000
D		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	1	1199	97
	B	3	0	0	3
	C	1018	1	0	82
	D	19	0	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	2
	B	0	0	0	0
	C	1	0	0	1

	D	11	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.13	80.03	0.1	F	6	8
A-BCD	0.27	12.73	0.4	B	89	134
A-B					0.92	1
A-C					1100	1650
D-ABC	0.61	100.41	1.4	F	45	67
C-ABD	0.00	10.95	0.0	B	0.92	1
C-D					75	113
C-A					934	1401

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	210	0.022	4	0.0	0.0	17.508	C
A-BCD	73	18	490	0.149	72	0.0	0.2	8.611	A
A-B	0.75	0.19			0.75				
A-C	903	226			903				
D-ABC	37	9	288	0.128	36	0.0	0.1	14.268	B
C-ABD	0.75	0.19	439	0.002	0.75	0.0	0.0	8.217	A
C-D	62	15			62				
C-A	766	192			766				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	144	0.038	5	0.0	0.0	26.011	D
A-BCD	87	22	448	0.195	87	0.2	0.2	9.974	A
A-B	0.90	0.22			0.90				
A-C	1078	269			1078				
D-ABC	44	11	211	0.209	44	0.1	0.3	21.442	C
C-ABD	0.90	0.22	393	0.002	0.90	0.0	0.0	9.174	A
C-D	74	18			74				
C-A	915	229			915				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	52	0.127	6	0.0	0.1	77.976	F
A-BCD	107	27	390	0.274	106	0.2	0.4	12.678	B
A-B	1	0.28			1				
A-C	1320	330			1320				
D-ABC	54	13	88	0.610	50	0.3	1.2	86.712	F
C-ABD	1	0.28	330	0.003	1	0.0	0.0	10.934	B
C-D	90	23			90				
C-A	1121	280			1121				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	2	51	0.128	7	0.1	0.1	80.033	F
A-BCD	107	27	390	0.274	107	0.4	0.4	12.730	B
A-B	1	0.28			1				
A-C	1320	330			1320				
D-ABC	54	13	88	0.612	53	1.2	1.4	100.415	F
C-ABD	1	0.28	330	0.003	1	0.0	0.0	10.954	B
C-D	90	23			90				
C-A	1121	280			1121				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	143	0.038	6	0.1	0.0	26.314	D
A-BCD	87	22	447	0.195	88	0.4	0.2	10.020	B
A-B	0.90	0.22			0.90				
A-C	1078	269			1078				
D-ABC	44	11	211	0.209	48	1.4	0.3	22.762	C
C-ABD	0.90	0.22	392	0.002	0.90	0.0	0.0	9.192	A
C-D	74	18			74				
C-A	915	229			915				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	1	210	0.022	5	0.0	0.0	17.549	C
A-BCD	73	18	490	0.149	73	0.2	0.2	8.650	A
A-B	0.75	0.19			0.75				
A-C	903	226			903				
D-ABC	37	9	288	0.128	37	0.3	0.1	14.409	B
C-ABD	0.75	0.19	439	0.002	0.76	0.0	0.0	8.222	A
C-D	62	15			62				
C-A	766	192			766				

2044 10k DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		2.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2044 10k DS	PM	J7A Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1181	100.000
B		ONE HOUR	✓	5	100.000
C		ONE HOUR	✓	1280	100.000
D		ONE HOUR	✓	38	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	13	1043	125
	B	2	0	3	0
	C	1214	1	0	65
	D	30	1	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	1	0	0	0

	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.04	27.11	0.0	D	5	7
A-BCD	0.40	17.05	0.7	C	115	173
A-B					12	18
A-C					956	1435
D-ABC	0.47	74.40	0.8	F	35	52
C-ABD	0.00	9.52	0.0	A	0.92	1
C-D					60	89
C-A					1114	1671

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	326	0.012	4	0.0	0.0	11.153	B
A-BCD	94	24	465	0.203	93	0.0	0.3	9.664	A
A-B	10	2			10				
A-C	785	196			785				
D-ABC	29	7	371	0.077	28	0.0	0.1	10.480	B
C-ABD	0.75	0.19	472	0.002	0.75	0.0	0.0	7.631	A
C-D	49	12			49				
C-A	914	228			914				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	257	0.018	4	0.0	0.0	14.275	B
A-BCD	112	28	415	0.271	112	0.3	0.4	11.858	B
A-B	12	3			12				
A-C	938	234			938				
D-ABC	34	9	287	0.119	34	0.1	0.1	14.197	B
C-ABD	0.90	0.22	433	0.002	0.90	0.0	0.0	8.322	A
C-D	58	15			58				
C-A	1091	273			1091				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	138	0.040	5	0.0	0.0	27.041	D
A-BCD	139	35	350	0.398	138	0.4	0.6	16.881	C
A-B	14	4			14				
A-C	1147	287			1147				
D-ABC	42	10	91	0.461	39	0.1	0.8	67.434	F
C-ABD	1	0.28	380	0.003	1	0.0	0.0	9.512	A
C-D	72	18			72				
C-A	1337	334			1337				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	1	138	0.040	6	0.0	0.0	27.114	D
A-BCD	139	35	350	0.398	139	0.6	0.7	17.052	C
A-B	14	4			14				
A-C	1147	287			1147				
D-ABC	42	10	89	0.468	42	0.8	0.8	74.399	F
C-ABD	1	0.28	379	0.003	1	0.0	0.0	9.515	A
C-D	72	18			72				
C-A	1337	334			1337				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	1	256	0.018	5	0.0	0.0	14.296	B
A-BCD	112	28	415	0.271	114	0.7	0.4	11.981	B
A-B	12	3			12				
A-C	938	234			938				
D-ABC	34	9	287	0.119	37	0.8	0.1	14.555	B
C-ABD	0.90	0.22	433	0.002	0.90	0.0	0.0	8.326	A
C-D	58	15			58				
C-A	1091	273			1091				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	0.94	326	0.012	4	0.0	0.0	11.160	B
A-BCD	94	24	465	0.203	95	0.4	0.3	9.742	A
A-B	10	2			10				
A-C	785	196			785				
D-ABC	29	7	371	0.077	29	0.1	0.1	10.525	B
C-ABD	0.75	0.19	472	0.002	0.75	0.0	0.0	7.635	A
C-D	49	12			49				
C-A	914	228			914				

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: J7B A20 Hythe Rd-The St.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J7B A20 Hythe Rd-The Street
Report generation date: 10/11/2021 16:39:21

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Base									
Arm A	D1	2.1	10.88	0.68	B	D2	1.3	8.42	0.56	A
Arm B		0.4	5.03	0.30	A		0.9	5.83	0.46	A
Arm C		0.7	3.51	0.41	A		1.2	4.56	0.54	A
Arm D		0.9	14.44	0.48	B		1.3	23.45	0.56	C
	2037 DM									
Arm A	D3	3.0	14.04	0.76	B	D4	1.6	9.39	0.62	A
Arm B		0.5	5.53	0.34	A		1.0	6.16	0.49	A
Arm C		0.6	3.25	0.37	A		0.6	3.39	0.39	A
Arm D		1.5	17.92	0.60	C		0.6	12.09	0.37	B
	2037 DS									
Arm A	D5	5.1	21.96	0.84	C	D6	1.9	10.87	0.66	B
Arm B		0.6	5.97	0.36	A		1.0	6.51	0.51	A
Arm C		0.5	3.02	0.32	A		0.5	3.10	0.35	A
Arm D		1.2	14.76	0.56	B		0.5	10.29	0.34	B
	2044 8.5k DM									
Arm A	D7	4.0	17.89	0.81	C	D8	1.8	10.41	0.65	B
Arm B		0.6	5.92	0.37	A		1.1	6.67	0.53	A
Arm C		0.6	3.34	0.39	A		0.6	3.35	0.38	A
Arm D		1.8	21.11	0.66	C		0.6	12.33	0.39	B
	2044 8.5k DS									
Arm A		9.5	39.00	0.92	E		2.6	13.77	0.73	B
Arm B		0.6	6.59	0.39	A		1.2	7.34	0.55	A

Arm C	D9	0.5	3.06	0.33	A	D10	0.5	3.09	0.34	A
Arm D		1.5	16.60	0.60	C		0.6	10.59	0.36	B
	2044 10k DM									
Arm A	D11	3.8	17.12	0.80	C	D12	1.8	10.42	0.65	B
Arm B		0.6	5.90	0.37	A		1.1	6.66	0.53	A
Arm C		0.6	3.27	0.37	A		0.6	3.38	0.39	A
Arm D		1.8	20.16	0.65	C		0.7	12.51	0.40	B
	2044 10k DS									
Arm A	D13	9.6	39.43	0.92	E	D14	2.7	14.26	0.74	B
Arm B		0.7	6.62	0.40	A		1.2	7.42	0.56	A
Arm C		0.5	3.02	0.32	A		0.5	3.09	0.35	A
Arm D		1.4	16.03	0.59	C		0.5	10.48	0.36	B

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

File summary

File Description

Title	J7B Otterpool Park_Base Model AM PEAK
Location	A20 Hythe Road - The St
Site number	
Date	27/06/2017
Version	
Status	Draft 1
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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
D1	Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base	PM	ONE HOUR	16:30	18:00	15	✓
D3	2037 DM	AM	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	ONE HOUR	16:30	18:00	15	✓
D5	2037 DS	AM	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	ONE HOUR	16:30	18:00	15	✓
D7	2044 8.5k DM	AM	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	ONE HOUR	16:30	18:00	15	✓
D9	2044 8.5k DS	AM	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	ONE HOUR	16:30	18:00	15	✓
D11	2044 10k DM	AM	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	ONE HOUR	16:30	18:00	15	✓
D13	2044 10k DS	AM	ONE HOUR	07:45	09:15	15	✓
D14	2044 10k DS	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	7.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A20 Hythe Road Westbound	
B	Tesco Access	
C	A20 Hythe Road Eastbound	
D	The Street	

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
A	3.66	4.26	19.8	46.4	37.5	32.0	
B	3.68	6.04	21.9	7.7	37.5	37.0	
C	3.76	7.19	21.8	23.6	37.5	28.0	
D	3.00	3.00	0.0	14.2	37.5	36.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.573	1301
B	0.571	1478
C	0.683	1857
D	0.468	872

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	Base	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	627	100.000
B		ONE HOUR	✓	279	100.000
C		ONE HOUR	✓	660	100.000
D		ONE HOUR	✓	212	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	2	105	520	0
	B	67	1	211	0
	C	440	214	6	0
	D	39	34	139	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	3	3	0
	B	1	0	3	0
	C	4	1	0	0
	D	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.68	10.88	2.1	B	575	863
B	0.30	5.03	0.4	A	256	384
C	0.41	3.51	0.7	A	606	908
D	0.48	14.44	0.9	B	195	292

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	472	118	295	1098	0.430	469	411	0.0	0.7	5.694	A
B	210	53	499	1157	0.181	209	265	0.0	0.2	3.792	A
C	497	124	52	1768	0.281	495	655	0.0	0.4	2.825	A
D	160	40	548	605	0.264	158	0	0.0	0.4	8.057	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	564	141	354	1066	0.529	562	492	0.7	1.1	7.130	A
B	251	63	598	1101	0.228	251	318	0.2	0.3	4.233	A
C	593	148	63	1761	0.337	593	786	0.4	0.5	3.080	A

D	191	48	656	553	0.344	190	0	0.4	0.5	9.888	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	690	173	432	1022	0.676	687	602	1.1	2.0	10.633	B
B	307	77	730	1025	0.300	307	389	0.3	0.4	5.006	A
C	727	182	77	1751	0.415	726	960	0.5	0.7	3.505	A
D	233	58	803	483	0.483	232	0	0.5	0.9	14.247	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	690	173	434	1021	0.676	690	603	2.0	2.1	10.877	B
B	307	77	734	1023	0.300	307	390	0.4	0.4	5.027	A
C	727	182	77	1751	0.415	727	964	0.7	0.7	3.512	A
D	233	58	804	483	0.484	233	0	0.9	0.9	14.438	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	564	141	356	1064	0.530	567	494	2.1	1.1	7.294	A
B	251	63	604	1098	0.229	251	319	0.4	0.3	4.256	A
C	593	148	63	1761	0.337	594	792	0.7	0.5	3.087	A
D	191	48	657	553	0.345	192	0	0.9	0.5	10.028	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	472	118	297	1097	0.430	474	413	1.1	0.8	5.786	A
B	210	53	504	1155	0.182	210	267	0.3	0.2	3.815	A
C	497	124	53	1768	0.281	497	661	0.5	0.4	2.836	A
D	160	40	550	604	0.264	160	0	0.5	0.4	8.129	A

Base, 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		A, B, C, D	7.51	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	Base	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	504	100.000
B		ONE HOUR	✓	481	100.000
C		ONE HOUR	✓	844	100.000
D		ONE HOUR	✓	180	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	1	105	398	0
	B	154	0	327	0
	C	500	342	2	0
	D	43	37	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	2	0
	B	1	0	1	0
	C	2	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.56	8.42	1.3	A	462	694
B	0.46	5.83	0.9	A	441	662
C	0.54	4.56	1.2	A	774	1162
D	0.56	23.45	1.3	C	165	248

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	379	95	360	1078	0.352	377	523	0.0	0.5	5.124	A
B	362	91	375	1248	0.290	360	363	0.0	0.4	4.048	A
C	635	159	116	1756	0.362	633	619	0.0	0.6	3.199	A
D	136	34	749	517	0.262	134	0	0.0	0.4	9.366	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	453	113	431	1038	0.437	452	627	0.5	0.8	6.139	A
B	432	108	449	1205	0.359	432	434	0.4	0.6	4.654	A
C	759	190	139	1740	0.436	758	742	0.6	0.8	3.661	A
D	162	40	897	447	0.362	161	0	0.4	0.6	12.543	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	555	139	527	984	0.564	553	767	0.8	1.3	8.318	A
B	530	132	549	1148	0.461	528	531	0.6	0.8	5.797	A
C	929	232	170	1719	0.541	928	907	0.8	1.2	4.540	A
D	198	50	1098	352	0.563	196	0	0.6	1.2	22.622	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	555	139	529	982	0.565	555	768	1.3	1.3	8.420	A
B	530	132	551	1147	0.462	530	533	0.8	0.9	5.834	A
C	929	232	171	1719	0.541	929	910	1.2	1.2	4.559	A
D	198	50	1100	351	0.564	198	0	1.2	1.3	23.451	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	453	113	435	1036	0.438	455	629	1.3	0.8	6.224	A
B	432	108	453	1203	0.359	434	437	0.9	0.6	4.687	A
C	759	190	140	1740	0.436	760	747	1.2	0.8	3.682	A
D	162	40	900	446	0.363	165	0	1.3	0.6	12.918	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	379	95	363	1076	0.353	380	526	0.8	0.5	5.182	A
B	362	91	378	1246	0.291	363	365	0.6	0.4	4.079	A
C	635	159	117	1755	0.362	636	624	0.8	0.6	3.220	A
D	136	34	753	515	0.263	136	0	0.6	0.4	9.521	A

2037 DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	9.84	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
D3	2037 DM	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	723	100.000
B		ONE HOUR	✓	306	100.000
C		ONE HOUR	✓	592	100.000
D		ONE HOUR	✓	278	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	98	625	0
	B	108	0	198	0
	C	417	175	0	0
	D	63	102	113	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	4	0
	C	0	3	0	0
	D	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.76	14.04	3.0	B	663	995
B	0.34	5.53	0.5	A	281	421
C	0.37	3.25	0.6	A	543	815
D	0.60	17.92	1.5	C	255	383

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	544	136	292	1131	0.481	541	441	0.0	0.9	6.057	A
B	230	58	552	1133	0.203	229	281	0.0	0.3	3.979	A
C	446	111	81	1786	0.250	444	700	0.0	0.3	2.681	A
D	209	52	525	622	0.337	207	0	0.0	0.5	8.647	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	650	162	350	1098	0.592	648	528	0.9	1.4	7.970	A
B	275	69	661	1072	0.257	275	336	0.3	0.3	4.513	A
C	532	133	97	1775	0.300	532	839	0.3	0.4	2.896	A
D	250	62	629	573	0.436	249	0	0.5	0.8	11.070	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	796	199	427	1052	0.756	790	646	1.4	2.9	13.412	B
B	337	84	806	991	0.340	336	411	0.3	0.5	5.491	A
C	652	163	119	1760	0.370	651	1024	0.4	0.6	3.244	A
D	306	77	770	507	0.604	303	0	0.8	1.5	17.448	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	796	199	429	1051	0.757	796	647	2.9	3.0	14.037	B
B	337	84	812	988	0.341	337	413	0.5	0.5	5.530	A
C	652	163	119	1760	0.370	652	1030	0.6	0.6	3.247	A
D	306	77	771	506	0.604	306	0	1.5	1.5	17.924	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	650	162	353	1096	0.593	656	530	3.0	1.5	8.301	A
B	275	69	670	1067	0.258	276	339	0.5	0.3	4.552	A
C	532	133	97	1775	0.300	533	848	0.6	0.4	2.899	A
D	250	62	630	572	0.437	253	0	1.5	0.8	11.356	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	544	136	295	1130	0.482	547	443	1.5	0.9	6.195	A
B	230	58	558	1130	0.204	231	283	0.3	0.3	4.007	A
C	446	111	81	1785	0.250	446	707	0.4	0.3	2.690	A
D	209	52	528	621	0.337	210	0	0.8	0.5	8.798	A

2037 DM, 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		A, B, C, D	6.72	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
D4	2037 DM	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	556	100.000
B		ONE HOUR	✓	518	100.000
C		ONE HOUR	✓	620	100.000
D		ONE HOUR	✓	162	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	115	441	0
	B	148	0	370	0
	C	273	347	0	0
	D	24	78	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	1	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.62	9.39	1.6	A	510	765
B	0.49	6.16	1.0	A	475	713
C	0.39	3.39	0.6	A	569	853
D	0.37	12.09	0.6	B	149	223

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	419	105	363	1093	0.383	416	334	0.0	0.6	5.300	A
B	390	97	375	1255	0.311	388	405	0.0	0.4	4.145	A
C	467	117	111	1781	0.262	465	652	0.0	0.4	2.734	A
D	122	30	576	602	0.203	121	0	0.0	0.3	7.466	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	500	125	435	1052	0.475	499	400	0.6	0.9	6.497	A
B	466	116	449	1213	0.384	465	485	0.4	0.6	4.810	A
C	557	139	133	1766	0.316	557	781	0.4	0.5	2.977	A
D	146	36	690	549	0.265	145	0	0.3	0.4	8.906	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	612	153	533	996	0.615	610	489	0.9	1.6	9.254	A
B	570	143	549	1156	0.493	569	593	0.6	1.0	6.116	A
C	683	171	163	1746	0.391	682	956	0.5	0.6	3.382	A
D	178	45	844	477	0.374	177	0	0.4	0.6	11.995	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	612	153	534	995	0.615	612	490	1.6	1.6	9.391	A
B	570	143	552	1155	0.494	570	595	1.0	1.0	6.158	A
C	683	171	163	1746	0.391	683	959	0.6	0.6	3.386	A
D	178	45	846	476	0.375	178	0	0.6	0.6	12.086	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	500	125	437	1051	0.476	502	401	1.6	0.9	6.596	A
B	466	116	453	1211	0.385	467	487	1.0	0.6	4.848	A
C	557	139	133	1766	0.316	558	786	0.6	0.5	2.984	A
D	146	36	692	548	0.266	147	0	0.6	0.4	8.983	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	419	105	366	1092	0.383	420	335	0.9	0.6	5.368	A
B	390	97	378	1253	0.311	391	407	0.6	0.5	4.179	A
C	467	117	112	1781	0.262	467	657	0.5	0.4	2.741	A
D	122	30	579	601	0.203	122	0	0.4	0.3	7.528	A

2037 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	13.14	B

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
D5	2037 DS	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	789	100.000
B		ONE HOUR	✓	306	100.000
C		ONE HOUR	✓	517	100.000
D		ONE HOUR	✓	277	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	100	689	0
	B	98	0	208	0
	C	344	173	0	0
	D	57	102	118	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	3	2	0
	B	1	0	3	0
	C	1	2	0	0
	D	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.84	21.96	5.1	C	724	1086
B	0.36	5.97	0.6	A	281	421
C	0.32	3.02	0.5	A	474	712
D	0.56	14.76	1.2	B	254	381

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	594	148	294	1107	0.536	589	374	0.0	1.1	6.895	A
B	230	58	603	1101	0.209	229	281	0.0	0.3	4.123	A
C	389	97	73	1782	0.218	388	759	0.0	0.3	2.579	A
D	209	52	462	650	0.321	207	0	0.0	0.5	8.081	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	709	177	353	1074	0.660	706	448	1.1	1.9	9.710	A
B	275	69	722	1033	0.266	275	336	0.3	0.4	4.743	A
C	465	116	88	1773	0.262	464	909	0.3	0.4	2.752	A
D	249	62	552	607	0.410	248	0	0.5	0.7	9.994	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	869	217	431	1029	0.844	857	548	1.9	4.7	19.698	C
B	337	84	878	945	0.356	336	410	0.4	0.5	5.904	A
C	569	142	108	1759	0.324	569	1106	0.4	0.5	3.022	A
D	305	76	676	549	0.556	303	0	0.7	1.2	14.506	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	869	217	433	1028	0.845	867	549	4.7	5.1	21.956	C
B	337	84	887	940	0.359	337	413	0.5	0.6	5.973	A
C	569	142	108	1759	0.324	569	1116	0.5	0.5	3.025	A
D	305	76	677	549	0.556	305	0	1.2	1.2	14.759	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	709	177	355	1073	0.661	721	450	5.1	2.0	10.586	B
B	275	69	737	1025	0.268	276	340	0.6	0.4	4.811	A
C	465	116	88	1772	0.262	465	924	0.5	0.4	2.756	A
D	249	62	554	607	0.410	251	0	1.2	0.7	10.175	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	594	148	297	1106	0.537	597	376	2.0	1.2	7.126	A
B	230	58	611	1097	0.210	231	283	0.4	0.3	4.158	A
C	389	97	74	1782	0.218	390	768	0.4	0.3	2.585	A
D	209	52	463	649	0.321	209	0	0.7	0.5	8.200	A

2037 DS, 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		A, B, C, D	7.21	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
D6	2037 DS	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	590	100.000
B		ONE HOUR	✓	517	100.000
C		ONE HOUR	✓	564	100.000
D		ONE HOUR	✓	163	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	**B**	**C**	**D**
From	**A**	0	111	479	0
	B	101	0	416	0
	C	214	350	0	0
	D	17	78	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	**B**	**C**	**D**
From	**A**	0	0	1	0
	B	0	0	1	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.66	10.87	1.9	B	541	812
B	0.51	6.51	1.0	A	474	712
C	0.35	3.10	0.5	A	518	776
D	0.34	10.29	0.5	B	150	224

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	444	111	372	1079	0.412	441	249	0.0	0.7	5.620	A
B	389	97	409	1232	0.316	387	404	0.0	0.5	4.250	A
C	425	106	76	1805	0.235	423	721	0.0	0.3	2.603	A
D	123	31	499	638	0.192	122	0	0.0	0.2	6.956	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	530	133	445	1038	0.511	529	298	0.7	1.0	7.061	A
B	465	116	490	1186	0.392	464	484	0.5	0.6	4.981	A
C	507	127	91	1795	0.282	507	864	0.3	0.4	2.794	A
D	147	37	597	592	0.247	146	0	0.2	0.3	8.062	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	650	162	545	981	0.662	646	365	1.0	1.9	10.645	B
B	569	142	599	1124	0.507	568	592	0.6	1.0	6.457	A
C	621	155	111	1781	0.349	620	1056	0.4	0.5	3.099	A
D	179	45	731	530	0.339	179	0	0.3	0.5	10.238	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	650	162	546	980	0.663	649	366	1.9	1.9	10.871	B
B	569	142	602	1122	0.507	569	593	1.0	1.0	6.511	A
C	621	155	111	1781	0.349	621	1060	0.5	0.5	3.102	A
D	179	45	732	529	0.339	179	0	0.5	0.5	10.290	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	530	133	447	1037	0.512	534	299	1.9	1.1	7.209	A
B	465	116	495	1183	0.393	466	486	1.0	0.7	5.031	A
C	507	127	91	1795	0.283	508	870	0.5	0.4	2.799	A
D	147	37	599	592	0.248	147	0	0.5	0.3	8.112	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	444	111	374	1078	0.412	446	250	1.1	0.7	5.703	A
B	389	97	413	1230	0.316	390	406	0.7	0.5	4.288	A
C	425	106	76	1805	0.235	425	727	0.4	0.3	2.611	A
D	123	31	501	637	0.193	123	0	0.3	0.2	7.007	A

2044 8.5k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	11.86	B

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
D7	2044 8.5k DM	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	758	100.000
B		ONE HOUR	✓	324	100.000
C		ONE HOUR	✓	618	100.000
D		ONE HOUR	✓	293	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	104	654	0
	B	109	0	215	0
	C	430	188	0	0
	D	63	109	121	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	4	0
	C	0	3	0	0
	D	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.81	17.89	4.0	C	696	1043
B	0.37	5.92	0.6	A	297	446
C	0.39	3.34	0.6	A	567	851
D	0.66	21.11	1.8	C	269	403

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	571	143	313	1119	0.510	567	451	0.0	1.0	6.467	A
B	244	61	579	1117	0.218	243	300	0.0	0.3	4.112	A
C	465	116	82	1785	0.261	464	740	0.0	0.4	2.723	A
D	221	55	546	612	0.360	218	0	0.0	0.6	9.095	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	681	170	375	1083	0.629	679	540	1.0	1.7	8.852	A
B	291	73	694	1053	0.277	291	360	0.3	0.4	4.721	A
C	556	139	98	1774	0.313	555	887	0.4	0.5	2.954	A
D	263	66	653	562	0.469	262	0	0.6	0.9	11.973	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	835	209	457	1035	0.806	826	661	1.7	3.8	16.572	C
B	357	89	844	969	0.368	356	439	0.4	0.6	5.862	A
C	680	170	120	1759	0.387	680	1081	0.5	0.6	3.334	A
D	323	81	799	493	0.655	319	0	0.9	1.8	20.285	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	835	209	460	1033	0.808	834	663	3.8	4.0	17.888	C
B	357	89	853	965	0.370	357	441	0.6	0.6	5.920	A
C	680	170	120	1759	0.387	680	1089	0.6	0.6	3.337	A
D	323	81	800	492	0.655	322	0	1.8	1.8	21.108	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	681	170	379	1081	0.631	690	543	4.0	1.8	9.428	A
B	291	73	706	1046	0.278	292	363	0.6	0.4	4.778	A
C	556	139	98	1774	0.313	556	900	0.6	0.5	2.958	A
D	263	66	655	561	0.470	267	0	1.8	0.9	12.403	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	571	143	316	1117	0.511	573	454	1.8	1.1	6.654	A
B	244	61	586	1113	0.219	244	303	0.4	0.3	4.145	A
C	465	116	82	1784	0.261	466	749	0.5	0.4	2.730	A
D	221	55	548	611	0.361	222	0	0.9	0.6	9.286	A

2044 8.5k DM, 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		A, B, C, D	7.24	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
D8	2044 8.5k DM	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	573	100.000
B		ONE HOUR	✓	550	100.000
C		ONE HOUR	✓	611	100.000
D		ONE HOUR	✓	173	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	123	450	0
	B	145	0	405	0
	C	245	366	0	0
	D	24	83	66	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	1	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.65	10.41	1.8	B	526	789
B	0.53	6.67	1.1	A	505	757
C	0.38	3.35	0.6	A	561	841
D	0.39	12.33	0.6	B	159	238

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	431	108	386	1080	0.399	429	310	0.0	0.7	5.505	A
B	414	104	386	1248	0.332	412	429	0.0	0.5	4.295	A
C	460	115	109	1783	0.258	459	689	0.0	0.3	2.716	A
D	130	33	567	606	0.215	129	0	0.0	0.3	7.526	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	515	129	462	1036	0.497	514	372	0.7	1.0	6.874	A
B	494	124	463	1205	0.410	494	513	0.5	0.7	5.056	A
C	549	137	130	1768	0.311	549	826	0.3	0.4	2.953	A
D	156	39	679	554	0.281	155	0	0.3	0.4	9.015	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	631	158	566	977	0.646	628	455	1.0	1.8	10.214	B
B	606	151	565	1147	0.528	604	628	0.7	1.1	6.612	A
C	673	168	159	1748	0.385	672	1010	0.4	0.6	3.344	A
D	190	48	831	483	0.394	189	0	0.4	0.6	12.228	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	631	158	567	976	0.646	631	456	1.8	1.8	10.410	B
B	606	151	568	1145	0.529	606	630	1.1	1.1	6.670	A
C	673	168	160	1748	0.385	673	1014	0.6	0.6	3.347	A
D	190	48	832	482	0.395	190	0	0.6	0.6	12.328	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	515	129	464	1035	0.498	518	373	1.8	1.0	7.008	A
B	494	124	467	1203	0.411	496	516	1.1	0.7	5.106	A
C	549	137	131	1768	0.311	550	832	0.6	0.5	2.957	A
D	156	39	681	553	0.281	157	0	0.6	0.4	9.095	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	431	108	388	1079	0.400	433	312	1.0	0.7	5.586	A
B	414	104	390	1246	0.332	415	431	0.7	0.5	4.333	A
C	460	115	109	1782	0.258	460	695	0.5	0.3	2.723	A
D	130	33	570	605	0.215	131	0	0.4	0.3	7.596	A

2044 8.5k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	20.98	C

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
D9	2044 8.5k DS	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	848	100.000
B		ONE HOUR	✓	324	100.000
C		ONE HOUR	✓	525	100.000
D		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	106	742	0
	B	102	0	222	0
	C	340	185	0	0
	D	59	109	126	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	3	2	0
	B	1	0	3	0
	C	1	2	0	0
	D	2	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.92	39.00	9.5	E	778	1167
B	0.39	6.59	0.6	A	297	446
C	0.33	3.06	0.5	A	482	723
D	0.60	16.60	1.5	C	270	405

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	638	160	314	1096	0.583	633	376	0.0	1.4	7.690	A
B	244	61	648	1076	0.227	243	299	0.0	0.3	4.316	A
C	395	99	76	1780	0.222	394	814	0.0	0.3	2.595	A
D	221	55	471	643	0.344	219	0	0.0	0.5	8.447	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	762	191	377	1060	0.719	758	450	1.4	2.4	11.739	B
B	291	73	776	1003	0.290	291	359	0.3	0.4	5.053	A
C	472	118	92	1770	0.267	472	975	0.3	0.4	2.773	A
D	264	66	563	600	0.441	263	0	0.5	0.8	10.661	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	934	233	460	1013	0.922	911	550	2.4	8.2	30.138	D
B	357	89	935	913	0.391	356	436	0.4	0.6	6.454	A
C	578	145	112	1756	0.329	578	1178	0.4	0.5	3.053	A
D	324	81	690	540	0.599	321	0	0.8	1.4	16.209	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	934	233	462	1012	0.923	929	552	8.2	9.5	39.004	E
B	357	89	951	903	0.395	357	440	0.6	0.6	6.586	A
C	578	145	112	1756	0.329	578	1196	0.5	0.5	3.056	A
D	324	81	690	540	0.599	324	0	1.4	1.5	16.597	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	762	191	380	1058	0.720	789	452	9.5	2.7	14.583	B
B	291	73	805	986	0.295	292	364	0.6	0.4	5.194	A
C	472	118	92	1769	0.267	472	1005	0.5	0.4	2.776	A
D	264	66	564	599	0.441	267	0	1.5	0.8	10.915	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	638	160	317	1094	0.584	643	378	2.7	1.4	8.078	A
B	244	61	658	1070	0.228	244	302	0.4	0.3	4.366	A
C	395	99	77	1780	0.222	396	826	0.4	0.3	2.602	A
D	221	55	473	643	0.344	222	0	0.8	0.5	8.590	A

2044 8.5k DS, 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		A, B, C, D	8.56	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
D10	2044 8.5k DS	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	639	100.000
B		ONE HOUR	✓	550	100.000
C		ONE HOUR	✓	554	100.000
D		ONE HOUR	✓	174	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	123	516	0
	B	107	0	443	0
	C	188	366	0	0
	D	18	83	73	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	0
	B	0	0	1	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.73	13.77	2.6	B	586	880
B	0.55	7.34	1.2	A	505	757
C	0.34	3.09	0.5	A	508	763
D	0.36	10.59	0.6	B	160	239

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	481	120	391	1068	0.450	478	235	0.0	0.8	6.064	A
B	414	104	440	1215	0.341	412	429	0.0	0.5	4.475	A
C	417	104	80	1802	0.231	416	772	0.0	0.3	2.594	A
D	131	33	496	640	0.205	130	0	0.0	0.3	7.047	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	574	144	469	1024	0.561	573	281	0.8	1.3	7.939	A
B	494	124	528	1165	0.425	494	513	0.5	0.7	5.359	A
C	498	125	96	1791	0.278	498	925	0.3	0.4	2.783	A
D	156	39	594	594	0.263	156	0	0.3	0.4	8.212	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	704	176	574	965	0.729	698	344	1.3	2.6	13.259	B
B	606	151	644	1098	0.551	604	628	0.7	1.2	7.252	A
C	610	152	117	1777	0.343	609	1130	0.4	0.5	3.082	A
D	192	48	727	532	0.360	191	0	0.4	0.6	10.534	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	704	176	575	964	0.730	703	345	2.6	2.6	13.767	B
B	606	151	648	1096	0.553	606	630	1.2	1.2	7.341	A
C	610	152	118	1776	0.343	610	1136	0.5	0.5	3.085	A
D	192	48	728	531	0.361	192	0	0.6	0.6	10.594	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	574	144	470	1023	0.561	580	282	2.6	1.3	8.209	A
B	494	124	534	1161	0.426	496	516	1.2	0.7	5.433	A
C	498	125	97	1791	0.278	499	934	0.5	0.4	2.786	A
D	156	39	595	593	0.264	157	0	0.6	0.4	8.268	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	481	120	394	1067	0.451	483	236	1.3	0.8	6.182	A
B	414	104	445	1212	0.342	415	431	0.7	0.5	4.524	A
C	417	104	81	1802	0.231	417	779	0.4	0.3	2.600	A
D	131	33	498	639	0.205	131	0	0.4	0.3	7.103	A

2044 10k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	11.47	B

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
D11	2044 10k DM	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	749	100.000
B		ONE HOUR	✓	325	100.000
C		ONE HOUR	✓	598	100.000
D		ONE HOUR	✓	295	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	102	647	0
	B	109	0	216	0
	C	410	188	0	0
	D	64	109	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	4	0
	C	0	3	0	0
	D	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.80	17.12	3.8	C	687	1031
B	0.37	5.90	0.6	A	298	447
C	0.37	3.27	0.6	A	549	823
D	0.65	20.16	1.8	C	271	406

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	564	141	313	1119	0.504	560	437	0.0	1.0	6.398	A
B	245	61	575	1120	0.219	244	299	0.0	0.3	4.104	A
C	450	113	82	1784	0.252	449	736	0.0	0.3	2.693	A
D	222	56	531	619	0.359	220	0	0.0	0.6	8.971	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	673	168	376	1082	0.622	671	523	1.0	1.6	8.696	A
B	292	73	689	1056	0.277	292	358	0.3	0.4	4.709	A
C	538	134	98	1773	0.303	537	883	0.3	0.4	2.912	A
D	265	66	635	570	0.465	264	0	0.6	0.9	11.720	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	825	206	458	1034	0.797	817	640	1.6	3.6	15.972	C
B	358	89	838	973	0.368	357	437	0.4	0.6	5.841	A
C	658	165	120	1758	0.374	658	1076	0.4	0.6	3.269	A
D	325	81	778	503	0.646	321	0	0.9	1.7	19.445	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	825	206	461	1033	0.799	824	642	3.6	3.8	17.125	C
B	358	89	846	968	0.370	358	439	0.6	0.6	5.896	A
C	658	165	120	1758	0.374	658	1084	0.6	0.6	3.272	A
D	325	81	778	503	0.646	325	0	1.7	1.8	20.163	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	673	168	380	1080	0.623	682	526	3.8	1.7	9.215	A
B	292	73	700	1050	0.278	293	361	0.6	0.4	4.763	A
C	538	134	98	1773	0.303	538	895	0.6	0.4	2.916	A
D	265	66	636	569	0.466	269	0	1.8	0.9	12.111	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	564	141	317	1117	0.505	567	440	1.7	1.0	6.572	A
B	245	61	582	1116	0.219	245	301	0.4	0.3	4.139	A
C	450	113	82	1784	0.252	451	745	0.4	0.3	2.702	A
D	222	56	533	618	0.359	223	0	0.9	0.6	9.154	A

2044 10k DM, 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		A, B, C, D	7.25	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
D12	2044 10k DM	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	572	100.000
B		ONE HOUR	✓	550	100.000
C		ONE HOUR	✓	620	100.000
D		ONE HOUR	✓	173	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	123	449	0
	B	144	0	406	0
	C	252	368	0	0
	D	24	83	66	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	1	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.65	10.42	1.8	B	525	787
B	0.53	6.66	1.1	A	505	757
C	0.39	3.38	0.6	A	569	853
D	0.40	12.51	0.7	B	159	238

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	431	108	387	1079	0.399	428	315	0.0	0.7	5.506	A
B	414	104	385	1249	0.332	412	430	0.0	0.5	4.293	A
C	467	117	108	1783	0.262	465	689	0.0	0.4	2.729	A
D	130	33	573	604	0.216	129	0	0.0	0.3	7.571	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	514	129	464	1035	0.497	513	377	0.7	1.0	6.876	A
B	494	124	462	1205	0.410	494	515	0.5	0.7	5.053	A
C	557	139	129	1769	0.315	557	826	0.4	0.5	2.971	A
D	156	39	686	551	0.282	155	0	0.3	0.4	9.087	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	630	157	568	976	0.645	627	462	1.0	1.8	10.218	B
B	606	151	564	1147	0.528	604	630	0.7	1.1	6.604	A
C	683	171	158	1749	0.390	682	1010	0.5	0.6	3.372	A
D	190	48	840	479	0.398	189	0	0.4	0.6	12.400	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	630	157	569	975	0.646	630	462	1.8	1.8	10.415	B
B	606	151	567	1146	0.529	606	632	1.1	1.1	6.663	A
C	683	171	159	1749	0.390	683	1014	0.6	0.6	3.376	A
D	190	48	841	478	0.398	190	0	0.6	0.7	12.506	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	514	129	466	1034	0.497	517	378	1.8	1.0	7.010	A
B	494	124	466	1203	0.411	496	518	1.1	0.7	5.104	A
C	557	139	130	1768	0.315	558	832	0.6	0.5	2.976	A
D	156	39	688	550	0.283	157	0	0.7	0.4	9.174	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	431	108	390	1078	0.400	432	317	1.0	0.7	5.587	A
B	414	104	389	1247	0.332	415	433	0.7	0.5	4.331	A
C	467	117	109	1783	0.262	467	695	0.5	0.4	2.739	A
D	130	33	576	602	0.216	131	0	0.4	0.3	7.642	A

2044 10k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	21.16	C

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
D13	2044 10k DS	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	848	100.000
B		ONE HOUR	✓	325	100.000
C		ONE HOUR	✓	515	100.000
D		ONE HOUR	✓	295	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	105	743	0
	B	99	0	226	0
	C	330	185	0	0
	D	58	109	128	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	3	2	0
	B	1	0	3	0
	C	1	2	0	0
	D	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.92	39.43	9.6	E	778	1167
B	0.40	6.62	0.7	A	298	447
C	0.32	3.02	0.5	A	473	709
D	0.59	16.03	1.4	C	271	406

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	638	160	316	1095	0.583	633	365	0.0	1.4	7.705	A
B	245	61	650	1074	0.228	244	299	0.0	0.3	4.327	A
C	388	97	74	1781	0.218	387	819	0.0	0.3	2.578	A
D	222	56	461	651	0.341	220	0	0.0	0.5	8.323	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	762	191	378	1059	0.720	758	437	1.4	2.5	11.776	B
B	292	73	779	1001	0.292	292	358	0.3	0.4	5.072	A
C	463	116	89	1772	0.261	463	982	0.3	0.4	2.750	A
D	265	66	552	608	0.436	264	0	0.5	0.8	10.445	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	934	233	462	1012	0.923	911	535	2.5	8.2	30.371	D
B	358	89	938	911	0.393	357	435	0.4	0.6	6.489	A
C	567	142	109	1758	0.323	567	1186	0.4	0.5	3.019	A
D	325	81	675	549	0.591	322	0	0.8	1.4	15.680	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	934	233	465	1010	0.924	928	536	8.2	9.6	39.426	E
B	358	89	954	901	0.397	358	439	0.6	0.7	6.623	A
C	567	142	109	1758	0.323	567	1203	0.5	0.5	3.022	A
D	325	81	676	549	0.592	325	0	1.4	1.4	16.029	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	762	191	382	1058	0.721	790	439	9.6	2.7	14.680	B
B	292	73	808	984	0.297	293	363	0.7	0.4	5.216	A
C	463	116	89	1771	0.261	463	1012	0.5	0.4	2.755	A
D	265	66	553	607	0.437	268	0	1.4	0.8	10.681	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	638	160	319	1093	0.584	644	367	2.7	1.4	8.094	A
B	245	61	661	1068	0.229	245	302	0.4	0.3	4.376	A
C	388	97	75	1781	0.218	388	831	0.4	0.3	2.586	A
D	222	56	463	650	0.342	223	0	0.8	0.5	8.460	A

2044 10k DS, 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		A, B, C, D	8.72	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
D14	2044 10k DS	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	645	100.000
B		ONE HOUR	✓	550	100.000
C		ONE HOUR	✓	566	100.000
D		ONE HOUR	✓	173	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	123	522	0
	B	90	0	460	0
	C	198	368	0	0
	D	15	83	75	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	0
	B	0	0	1	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.74	14.26	2.7	B	592	888
B	0.56	7.42	1.2	A	505	757
C	0.35	3.09	0.5	A	519	779
D	0.36	10.48	0.5	B	159	238

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	486	121	394	1067	0.455	482	227	0.0	0.8	6.127	A
B	414	104	446	1211	0.342	412	430	0.0	0.5	4.495	A
C	426	107	67	1811	0.235	425	791	0.0	0.3	2.595	A
D	130	33	492	641	0.203	129	0	0.0	0.3	7.017	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	580	145	472	1022	0.567	578	272	0.8	1.3	8.069	A
B	494	124	535	1160	0.426	494	515	0.5	0.7	5.395	A
C	509	127	81	1802	0.282	508	948	0.3	0.4	2.783	A
D	156	39	589	596	0.261	155	0	0.3	0.3	8.156	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	710	178	578	962	0.738	705	333	1.3	2.7	13.689	B
B	606	151	652	1093	0.554	604	630	0.7	1.2	7.327	A
C	623	156	99	1789	0.348	623	1157	0.4	0.5	3.083	A
D	190	48	721	534	0.357	190	0	0.3	0.5	10.424	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	710	178	579	962	0.739	710	334	2.7	2.7	14.259	B
B	606	151	657	1090	0.555	606	632	1.2	1.2	7.422	A
C	623	156	99	1789	0.348	623	1163	0.5	0.5	3.086	A
D	190	48	722	534	0.357	190	0	0.5	0.5	10.481	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	580	145	474	1021	0.568	585	273	2.7	1.3	8.362	A
B	494	124	542	1156	0.428	496	518	1.2	0.8	5.469	A
C	509	127	81	1801	0.282	509	957	0.5	0.4	2.789	A
D	156	39	591	595	0.261	156	0	0.5	0.4	8.210	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	486	121	397	1065	0.456	488	228	1.3	0.8	6.253	A
B	414	104	451	1208	0.343	415	433	0.8	0.5	4.546	A
C	426	107	68	1810	0.235	426	798	0.4	0.3	2.603	A
D	130	33	494	641	0.203	131	0	0.4	0.3	7.068	A

J8 – A20 Ashford Road / Otterpool Lane

LinSig Modelling Results

Otterpool_Report_Output

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2037 DS AM	2037 DS AM	AM PEAK	08:00 - 09:00	130/130	54.6	23.36
2	2037 DS PM	2037 DS PM	AM PEAK	17:00 - 18:00	128/128	56.4	21.33
3	2044 8.5k DS AM	2044 8.5k DS AM	AM PEAK	08:00 - 09:00	130/130	45.0	28.81
4	2044 8.5k DS PM	2044 8.5k DS PM	AM PEAK	17:00 - 18:00	128/128	29.4	29.07
5	2044 10k DS AM	2044 10k DS AM	AM PEAK	08:00 - 09:00	130/130	52.9	26.60
6	2044 10k DS PM	2044 10k DS PM	AM PEAK	17:00 - 18:00	128/128	26.1	30.30

Scenario 1: '2037 DS AM' (FG1: '2037 DS AM', Plan 1: 'AM PEAK')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: A20 Ashford Rd/ B2067 Otterpool Ln	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**58.2%**	**-**	**-**
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**57.2%**	**-**	**-**
1/1	A20 Ashford Rd Westbound Left Ahead	U	N/A	N/A	C1:A		1	69	15	84	-	-	438	1762	1762	949	46.2%	438	438
1/2	A20 Ashford Rd Westbound Ahead Right	O	N/A	N/A	C1:A		1	69	15	84	-	-	163	2065	2065	1112	14.7%	163	163
2/1	Access to zone Left Ahead Right	O	N/A	N/A	C1:B		1	25	91	116	-	-	218	1904	1904	381	57.2%	218	218
3/1	Barrow Hill/Ashford Rd (N) Left Ahead	U	N/A	N/A	C1:C		1	69	15	84	-	-	317	1899	1899	1023	31.0%	317	317
3/2	Barrow Hill/Ashford Rd (N) Right Ahead	O	N/A	N/A	C1:C		1	69	15	84	-	-	296	1986	1986	961	30.8%	296	296
4/1	Access to zone	U	N/A	N/A	-		-	-	-	-	-	-	156	Inf	Inf	Inf	0.0%	156	156
5/1	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	337	Inf	Inf	Inf	0.0%	337	337
5/2	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	270	Inf	Inf	Inf	0.0%	270	270
6/1	Barrow Hill Cottages Ahead Right Left	O	N/A	N/A	C1:D		1	23	92	115	-	-	51	1800	1800	290	17.6%	51	51
7/1	Barrow Hill Cottages North Exit	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C1:E		1	7	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C1:F		1	6	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**58.2%**	**-**	**-**
1/2+1/1	A20 Ashford Rd Westbound Ahead Left	U	N/A	N/A	C2:A		1	26	34	60	-	-	324	2065:1762	2065	278+278	58.2 : 58.2%	324	324
2/1	B2067 Otterpool Ln Left Right	U	N/A	N/A	C2:B		1	34	123	27	-	-	291	1904	1904	513	56.8%	291	291
3/1	A20 Ahsford Rd Eastbound Ahead	U	N/A	N/A	C2:D		1	82	36	118	-	-	447	1899	1899	1212	36.9%	447	447
3/2	A20 Ahsford Rd Eastbound Right	U	N/A	N/A	C2:C		1	28	90	118	-	-	252	1986	1986	443	56.9%	252	252
4/1	A20 Ashford Ln - East Exit	U	N/A	N/A	-		-	-	-	-	-	-	451	Inf	Inf	Inf	0.0%	451	451
5/1	B2067 Otterpool Ln South Exit	U	N/A	N/A	-		-	-	-	-	-	-	262	Inf	Inf	Inf	0.0%	262	262
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:E		1	6	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: A20 Ashford Rd/ B2067 Otterpool Ln	**243**	**0**	**1**	**19.1**	**4.0**	**0.2**	**23.4**	**-**	**2062.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**58.2%**	**27.1**	**-**
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	**243**	**0**	**1**	**7.4**	**1.7**	**0.2**	**9.3**	**-**	**1069.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**57.2%**	**11.3**	**-**
1/1	-	-	-	1.1	0.4	-	1.5	12.3	283.9	0.6	6.2	10.2	0.4	10.6	-	0.00	46.2%	2.0	-
1/2	1	0	0	0.0	0.1	0.0	0.1	2.0	1.6	0.0	0.0	0.0	0.1	0.1	-	0.00	14.7%	0.1	-
2/1	148	0	1	2.8	0.7	0.0	3.6	58.7	331.4	1.5	6.2	7.1	0.7	7.7	-	0.00	57.2%	4.2	-
3/1	-	-	-	1.5	0.2	-	1.7	19.2	175.6	0.6	5.1	6.3	0.2	6.6	-	0.00	31.0%	2.0	-
3/2	54	0	0	1.3	0.2	0.2	1.7	20.9	199.7	0.7	4.8	5.8	0.2	6.0	-	0.00	30.8%	2.1	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	40	0	0	0.6	0.1	0.0	0.7	52.8	76.9	1.5	1.5	1.5	0.1	1.7	-	0.00	17.6%	0.9	-
7/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	**0**	**0**	**0**	**11.8**	**2.3**	**0.0**	**14.1**	**-**	**993.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**58.2%**	**15.9**	**-**
1/2+1/1	-	-	-	4.0	0.7	-	4.7	52.3	279.1	0.9	4.5	5.1	0.7	5.8	-	0.00	58.2 : 58.2%	5.2	-
2/1	-	-	-	3.3	0.7	-	4.0	49.1	250.7	0.9	7.5	9.1	0.7	9.7	-	0.00	56.8%	4.4	-
3/1	-	-	-	0.8	0.3	-	1.1	8.9	213.0	0.5	5.7	7.6	0.3	7.9	-	0.00	36.9%	1.5	-
3/2	-	-	-	3.6	0.7	-	4.3	61.1	250.4	1.0	8.4	9.0	0.7	9.7	-	0.00	56.9%	4.7	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 - 14/1099 PRC for Signalled Lanes (%): 57.2 Total Delay for Signalled Lanes (pcuHr): 9.30 Cycle Time (s): 130
C2 - 14/1099 PRC for Signalled Lanes (%): 54.6 Total Delay for Signalled Lanes (pcuHr): 14.06 Cycle Time (s): 130
PRC Over All Lanes (%): 54.6 Total Delay Over All Lanes(pcuHr): 23.36

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	0	10	1	40	51
	B	0	0	10	101	213	324
	C	1	4	0	0	286	291
	D	1	149	0	0	68	218
	E	19	298	242	54	0	613
	Tot.	21	451	262	156	607	1497

Traffic Flows, Difference

Difference :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 2: '2037 DS PM' (FG2: '2037 DS PM', Plan 1: 'AM PEAK')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: A20 Ashford Rd/ B2067 Otterpool Ln	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**57.6%**	-	-
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**51.6%**	-	-
1/1	A20 Ashford Rd Westbound Left Ahead	U	N/A	N/A	C1:A		1	72	15	87	-	-	391	1762	1762	1005	38.9%	391	391
1/2	A20 Ashford Rd Westbound Ahead Right	O	N/A	N/A	C1:A		1	72	15	87	-	-	195	2065	2065	1178	16.6%	195	195
2/1	Access to zone Left Ahead Right	O	N/A	N/A	C1:B		1	20	94	114	-	-	161	1904	1904	312	51.6%	161	161
3/1	Barrow Hill/Ashford Rd (N) Left Ahead	U	N/A	N/A	C1:C		1	72	15	87	-	-	329	1899	1899	1083	30.4%	329	329
3/2	Barrow Hill/Ashford Rd (N) Right Ahead	O	N/A	N/A	C1:C		1	72	15	87	-	-	324	1986	1986	1052	30.8%	324	324
4/1	Access to zone	U	N/A	N/A	-		-	-	-	-	-	-	200	Inf	Inf	Inf	0.0%	200	200
5/1	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	286	Inf	Inf	Inf	0.0%	286	286
5/2	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	276	Inf	Inf	Inf	0.0%	276	276
6/1	Barrow Hill Cottages Ahead Right Left	O	N/A	N/A	C1:D		1	18	95	113	-	-	67	1800	1800	267	25.1%	67	67
7/1	Barrow Hill Cottages North Exit	U	N/A	N/A	-		-	-	-	-	-	-	76	Inf	Inf	Inf	0.0%	76	76
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C1:E		1	7	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C1:F		1	6	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**57.6%**	-	-
1/2+1/1	A20 Ashford Rd Westbound Ahead Left	U	N/A	N/A	C2:A		1	32	28	60	-	-	373	2065:1762	2065	326+328	57.1 : 57.1%	373	373
2/1	B2067 Otterpool Ln Left Right	U	N/A	N/A	C2:B		1	26	123	21	-	-	231	1904	1904	402	57.5%	231	231
3/1	A20 Ahsford Rd Eastbound Ahead	U	N/A	N/A	C2:D		1	88	30	118	-	-	370	1899	1899	1320	28.0%	370	370
3/2	A20 Ahsford Rd Eastbound Right	U	N/A	N/A	C2:C		1	28	90	118	-	-	259	1986	1986	450	57.6%	259	259
4/1	A20 Ashford Ln - East Exit	U	N/A	N/A	-		-	-	-	-	-	-	384	Inf	Inf	Inf	0.0%	384	384
5/1	B2067 Otterpool Ln South Exit	U	N/A	N/A	-		-	-	-	-	-	-	263	Inf	Inf	Inf	0.0%	263	263
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:E		1	6	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: A20 Ashford Rd/ B2067 Otterpool Ln	**219**	**0**	**1**	**17.3**	**3.8**	**0.2**	**21.3**	**-**	**1867.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**57.6%**	**24.8**	**-**
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	**219**	**0**	**1**	**6.3**	**1.6**	**0.2**	**8.1**	**-**	**939.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**51.6%**	**9.8**	**-**
1/1	-	-	-	0.6	0.3	-	1.0	8.8	206.4	0.5	4.7	7.3	0.3	7.6	-	0.00	38.9%	1.3	-
1/2	9	0	0	0.0	0.1	0.0	0.1	2.6	16.1	0.1	0.2	0.2	0.1	0.3	-	0.00	16.6%	0.2	-
2/1	106	0	1	2.2	0.5	0.1	2.8	62.4	245.4	1.5	4.7	5.2	0.5	5.7	-	0.00	51.6%	3.2	-
3/1	-	-	-	1.3	0.2	-	1.5	16.7	169.6	0.5	4.8	6.0	0.2	6.2	-	0.00	30.4%	1.8	-
3/2	67	0	0	1.3	0.2	0.1	1.6	18.0	210.1	0.6	4.8	5.8	0.2	6.1	-	0.00	30.8%	2.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	37	0	0	0.9	0.2	0.0	1.1	57.5	92.1	1.4	2.0	2.1	0.2	2.3	-	0.00	25.1%	1.2	-
7/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	**0**	**0**	**0**	**11.0**	**2.2**	**0.0**	**13.2**	**-**	**927.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**57.6%**	**14.9**	**-**
1/2+1/1	-	-	-	4.1	0.7	-	4.7	45.5	306.0	0.8	4.8	5.5	0.7	6.2	-	0.00	57.1 : 57.1%	5.3	-
2/1	-	-	-	2.9	0.7	-	3.6	55.8	205.7	0.9	6.4	7.3	0.7	8.0	-	0.00	57.5%	4.0	-
3/1	-	-	-	0.3	0.2	-	0.5	5.2	157.9	0.4	2.4	5.5	0.2	5.7	-	0.00	28.0%	0.8	-
3/2	-	-	-	3.7	0.7	-	4.4	61.1	258.3	1.0	8.6	9.2	0.7	9.9	-	0.00	57.6%	4.9	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 - 14/1099	PRC for Signalled Lanes (%):	74.3	Total Delay for Signalled Lanes (pcuHr):	8.11	Cycle Time (s):	128
C2 - 14/1099	PRC for Signalled Lanes (%):	56.4	Total Delay for Signalled Lanes (pcuHr):	13.22	Cycle Time (s):	128
	PRC Over All Lanes (%):	56.4	Total Delay Over All Lanes(pcuHr):	21.33		

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	24	0	2	28	37	91
	B	0	0	4	105	264	373
	C	9	14	0	0	208	231
	D	1	107	0	0	53	161
	E	66	263	257	67	0	653
	Tot.	100	384	263	200	562	1509

Traffic Flows, Difference

Difference :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	-24	0	0	0	0	-24
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	-24	0	0	0	0	-24

Scenario 3: '2044 8.5k DS AM' (FG3: '2044 8.5k DS AM', Plan 1: 'AM PEAK')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: A20 Ashford Rd/ B2067 Otterpool Ln	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**62.1%**	-	-
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**60.7%**	-	-
1/1	A20 Ashford Rd Westbound Left Ahead	U	N/A	N/A	C1:A		1	60	15	75	-	-	470	1762	1762	827	56.8%	470	470
1/2	A20 Ashford Rd Westbound Ahead Right	O	N/A	N/A	C1:A		1	60	15	75	-	-	163	2065	2065	969	16.8%	163	163
2/1	Access to zone Left Ahead Right	O	N/A	N/A	C1:B		1	34	82	116	-	-	308	1904	1904	507	60.7%	308	308
3/1	Barrow Hill/Ashford Rd (N) Left Ahead	U	N/A	N/A	C1:C		1	60	15	75	-	-	380	1899	1899	891	42.6%	380	380
3/2	Barrow Hill/Ashford Rd (N) Right Ahead	O	N/A	N/A	C1:C		1	60	15	75	-	-	289	1986	1986	860	33.6%	289	289
4/1	Access to zone	U	N/A	N/A	-		-	-	-	-	-	-	136	Inf	Inf	Inf	0.0%	136	136
5/1	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	383	Inf	Inf	Inf	0.0%	383	383
5/2	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	316	Inf	Inf	Inf	0.0%	316	316
6/1	Barrow Hill Cottages Ahead Right Left	O	N/A	N/A	C1:D		1	32	83	115	-	-	114	1800	1800	423	26.9%	114	114
7/1	Barrow Hill Cottages North Exit	U	N/A	N/A	-		-	-	-	-	-	-	64	Inf	Inf	Inf	0.0%	64	64
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C1:E		1	7	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C1:F		1	6	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**62.1%**	-	-
1/2+1/1	A20 Ashford Rd Westbound Ahead Left	U	N/A	N/A	C2:A		1	21	37	58	-	-	300	2065:1762	2065	242+242	62.1 : 62.1%	300	300
2/1	B2067 Otterpool Ln Left Right	U	N/A	N/A	C2:B		1	38	122	30	-	-	349	1904	1904	571	61.1%	349	349
3/1	A20 Ahsford Rd Eastbound Ahead	U	N/A	N/A	C2:D		1	78	39	117	-	-	549	1899	1899	1154	47.6%	549	549
3/2	A20 Ahsford Rd Eastbound Right	U	N/A	N/A	C2:C		1	29	88	117	-	-	276	1986	1986	458	60.2%	276	276
4/1	A20 Ashford Ln - East Exit	U	N/A	N/A	-		-	-	-	-	-	-	555	Inf	Inf	Inf	0.0%	555	555
5/1	B2067 Otterpool Ln South Exit	U	N/A	N/A	-		-	-	-	-	-	-	286	Inf	Inf	Inf	0.0%	286	286
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:E		1	6	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: A20 Ashford Rd/ B2067 Otterpool Ln	**348**	**0**	**2**	**23.3**	**5.1**	**0.4**	**28.8**	**-**	**2556.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**62.1%**	**33.5**	**-**
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	**348**	**0**	**2**	**10.2**	**2.3**	**0.4**	**13.0**	**-**	**1429.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**60.7%**	**15.6**	**-**
1/1	-	-	-	1.3	0.7	-	1.9	14.9	328.4	0.7	6.5	11.8	0.7	12.5	-	0.00	56.8%	2.5	-
1/2	13	0	0	0.0	0.1	0.1	0.2	3.9	21.2	0.1	0.3	0.3	0.1	0.4	-	0.00	16.8%	0.2	-
2/1	214	0	2	3.6	0.8	0.1	4.5	52.2	460.5	1.5	8.0	9.7	0.8	10.4	-	0.00	60.7%	5.3	-
3/1	-	-	-	2.4	0.4	-	2.8	26.4	251.4	0.7	7.1	9.1	0.4	9.4	-	0.00	42.6%	3.2	-
3/2	42	0	0	1.7	0.3	0.2	2.1	26.6	212.7	0.7	5.4	6.4	0.3	6.7	-	0.00	33.6%	2.5	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	79	0	0	1.2	0.2	0.0	1.4	45.4	155.3	1.4	3.0	3.3	0.2	3.4	-	0.00	26.9%	1.7	-
7/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	**0**	**0**	**0**	**13.1**	**2.8**	**0.0**	**15.9**	**-**	**1126.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**62.1%**	**17.9**	**-**
1/2+1/1	-	-	-	4.1	0.8	-	4.9	58.4	270.0	0.9	4.4	4.9	0.8	5.7	-	0.00	62.1 : 62.1%	5.4	-
2/1	-	-	-	3.8	0.8	-	4.6	47.0	298.0	0.9	8.6	10.8	0.8	11.5	-	0.00	61.1%	5.1	-
3/1	-	-	-	1.3	0.5	-	1.8	11.5	286.2	0.5	7.0	10.2	0.5	10.7	-	0.00	47.6%	2.3	-
3/2	-	-	-	3.9	0.8	-	4.7	61.0	272.6	1.0	8.9	9.8	0.8	10.6	-	0.00	60.2%	5.2	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 - 14/1099	PRC for Signalled Lanes (%):	48.2	Total Delay for Signalled Lanes (pcuHr):	12.95	Cycle Time (s):	130
C2 - 14/1099	PRC for Signalled Lanes (%):	45.0	Total Delay for Signalled Lanes (pcuHr):	15.86	Cycle Time (s):	130
	PRC Over All Lanes (%):	45.0	Total Delay Over All Lanes(pcuHr):	28.81		

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	28	7	79	114
	B	0	0	10	87	203	300
	C	13	6	0	0	330	349
	D	5	215	1	0	87	308
	E	46	334	247	42	0	669
	Tot.	64	555	286	136	699	1740

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 4: '2044 8.5k DS PM' (FG4: '2044 8.5k DS PM', Plan 1: 'AM PEAK')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: A20 Ashford Rd/ B2067 Otterpool Ln	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**69.6%**	-	-
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**60.6%**	-	-
1/1	A20 Ashford Rd Westbound Left Ahead	U	N/A	N/A	C1:A		1	70	15	85	-	-	472	1762	1762	977	48.3%	472	472
1/2	A20 Ashford Rd Westbound Ahead Right	O	N/A	N/A	C1:A		1	70	15	85	-	-	232	2065	2065	1140	20.3%	232	232
2/1	Access to zone Left Ahead Right	O	N/A	N/A	C1:B		1	22	92	114	-	-	183	1904	1904	302	60.6%	183	183
3/1	Barrow Hill/Ashford Rd (N) Left Ahead	U	N/A	N/A	C1:C		1	70	15	85	-	-	437	1899	1899	1053	41.5%	437	437
3/2	Barrow Hill/Ashford Rd (N) Right Ahead	O	N/A	N/A	C1:C		1	70	15	85	-	-	395	1986	1986	923	42.8%	395	395
4/1	Access to zone	U	N/A	N/A	-		-	-	-	-	-	-	298	Inf	Inf	Inf	0.0%	298	298
5/1	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	319	Inf	Inf	Inf	0.0%	319	319
5/2	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	323	Inf	Inf	Inf	0.0%	323	323
6/1	Barrow Hill Cottages Ahead Right Left	O	N/A	N/A	C1:D		1	20	93	113	-	-	121	1800	1800	295	41.0%	121	121
7/1	Barrow Hill Cottages North Exit	U	N/A	N/A	-		-	-	-	-	-	-	149	Inf	Inf	Inf	0.0%	149	149
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C1:E		1	7	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C1:F		1	6	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**69.6%**	-	-
1/2+1/1	A20 Ashford Rd Westbound Ahead Left	U	N/A	N/A	C2:A		1	29	34	63	-	-	414	2065:1762	2065	305+305	67.9 : 67.9%	414	414
2/1	B2067 Otterpool Ln Left Right	U	N/A	N/A	C2:B		1	29	126	27	-	-	310	1904	1904	446	69.5%	310	310
3/1	A20 Ahsford Rd Eastbound Ahead	U	N/A	N/A	C2:D		1	85	36	121	-	-	438	1899	1899	1276	34.3%	438	438
3/2	A20 Ahsford Rd Eastbound Right	U	N/A	N/A	C2:C		1	28	93	121	-	-	313	1986	1986	450	69.6%	313	313
4/1	A20 Ashford Ln - East Exit	U	N/A	N/A	-		-	-	-	-	-	-	454	Inf	Inf	Inf	0.0%	454	454
5/1	B2067 Otterpool Ln South Exit	U	N/A	N/A	-		-	-	-	-	-	-	317	Inf	Inf	Inf	0.0%	317	317
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:E		1	6	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: A20 Ashford Rd/ B2067 Otterpool Ln	**294**	**0**	**1**	**22.6**	**6.0**	**0.5**	**29.1**	**-**	**2462.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.6%**	**33.6**	**-**
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	**294**	**0**	**1**	**8.4**	**2.4**	**0.5**	**11.3**	**-**	**1291.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**60.6%**	**13.7**	**-**
1/1	-	-	-	0.6	0.5	-	1.1	8.1	265.8	0.6	3.2	9.4	0.5	9.9	-	0.00	48.3%	1.5	-
1/2	25	0	0	0.0	0.1	0.1	0.2	3.8	36.6	0.2	0.3	0.4	0.1	0.5	-	0.00	20.3%	0.3	-
2/1	120	0	1	2.5	0.8	0.1	3.4	66.1	285.5	1.6	5.2	6.0	0.8	6.8	-	0.00	60.6%	3.9	-
3/1	-	-	-	2.0	0.4	-	2.4	19.4	252.6	0.6	6.7	9.0	0.4	9.3	-	0.00	41.5%	2.8	-
3/2	91	0	0	1.7	0.4	0.2	2.4	21.5	295.7	0.7	6.0	7.8	0.4	8.2	-	0.00	42.8%	2.9	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	58	0	0	1.6	0.3	0.0	2.0	58.4	155.0	1.3	3.5	3.8	0.3	4.2	-	0.00	41.0%	2.2	-
7/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	**0**	**0**	**0**	**14.2**	**3.6**	**0.0**	**17.7**	**-**	**1171.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.6%**	**19.9**	**-**
1/2+1/1	-	-	-	4.8	1.0	-	5.9	51.2	359.8	0.9	5.5	6.8	1.0	7.8	-	0.00	67.9 : 67.9%	6.5	-
2/1	-	-	-	3.9	1.1	-	5.0	57.8	283.4	0.9	8.3	10.1	1.1	11.2	-	0.00	69.5%	5.5	-
3/1	-	-	-	0.7	0.3	-	0.9	7.6	216.1	0.5	4.4	7.6	0.3	7.9	-	0.00	34.3%	1.3	-
3/2	-	-	-	4.8	1.1	-	5.9	68.4	312.3	1.0	10.5	11.1	1.1	12.2	-	0.00	69.6%	6.5	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 - 14/1099	PRC for Signalled Lanes (%):	48.5	Total Delay for Signalled Lanes (pcuHr):	11.34	Cycle Time (s):	128
C2 - 14/1099	PRC for Signalled Lanes (%):	29.4	Total Delay for Signalled Lanes (pcuHr):	17.73	Cycle Time (s):	128
	PRC Over All Lanes (%):	29.4	Total Delay Over All Lanes(pcuHr):	29.07		

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	45	0	9	54	58	166
	B	0	0	4	152	258	414
	C	25	16	0	1	268	310
	D	4	121	0	0	58	183
	E	120	317	304	91	0	832
	Tot.	194	454	317	298	642	1905

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	-45	0	0	0	0	-45
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	-45	0	0	0	0	-45

Scenario 5: '2044 10k DS AM' (FG5: '2044 10k DS AM', Plan 1: 'AM PEAK')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: A20 Ashford Rd/ B2067 Otterpool Ln	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**58.9%**	-	-
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**58.7%**	-	-
1/1	A20 Ashford Rd Westbound Left Ahead	U	N/A	N/A	C1:A		1	59	15	74	-	-	434	1762	1762	813	53.4%	434	434
1/2	A20 Ashford Rd Westbound Ahead Right	O	N/A	N/A	C1:A		1	59	15	74	-	-	165	2065	2065	953	17.3%	165	165
2/1	Access to zone Left Ahead Right	O	N/A	N/A	C1:B		1	35	81	116	-	-	305	1904	1904	520	58.7%	305	305
3/1	Barrow Hill/Ashford Rd (N) Left Ahead	U	N/A	N/A	C1:C		1	59	15	74	-	-	334	1899	1899	876	38.1%	334	334
3/2	Barrow Hill/Ashford Rd (N) Right Ahead	O	N/A	N/A	C1:C		1	59	15	74	-	-	268	1986	1986	862	31.1%	268	268
4/1	Access to zone	U	N/A	N/A	-		-	-	-	-	-	-	142	Inf	Inf	Inf	0.0%	142	142
5/1	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	343	Inf	Inf	Inf	0.0%	343	343
5/2	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	313	Inf	Inf	Inf	0.0%	313	313
6/1	Barrow Hill Cottages Ahead Right Left	O	N/A	N/A	C1:D		1	33	82	115	-	-	114	1800	1800	446	25.6%	114	114
7/1	Barrow Hill Cottages North Exit	U	N/A	N/A	-		-	-	-	-	-	-	62	Inf	Inf	Inf	0.0%	62	62
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C1:E		1	7	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C1:F		1	6	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**58.9%**	-	-
1/2+1/1	A20 Ashford Rd Westbound Ahead Left	U	N/A	N/A	C2:A		1	23	37	60	-	-	301	2065:1762	2065	255+257	58.9 : 58.9%	301	301
2/1	B2067 Otterpool Ln Left Right	U	N/A	N/A	C2:B		1	37	123	30	-	-	321	1904	1904	557	57.7%	321	321
3/1	A20 Ahsford Rd Eastbound Ahead	U	N/A	N/A	C2:D		1	79	39	118	-	-	505	1899	1899	1169	43.2%	505	505
3/2	A20 Ahsford Rd Eastbound Right	U	N/A	N/A	C2:C		1	28	90	118	-	-	255	1986	1986	443	57.6%	255	255
4/1	A20 Ashford Ln - East Exit	U	N/A	N/A	-		-	-	-	-	-	-	513	Inf	Inf	Inf	0.0%	513	513
5/1	B2067 Otterpool Ln South Exit	U	N/A	N/A	-		-	-	-	-	-	-	270	Inf	Inf	Inf	0.0%	270	270
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:E		1	6	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: A20 Ashford Rd/ B2067 Otterpool Ln	**348**	**0**	**2**	**21.7**	**4.5**	**0.4**	**26.6**	**-**	**2371.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**58.9%**	**30.9**	**-**
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	**348**	**0**	**2**	**9.5**	**2.1**	**0.4**	**11.9**	**-**	**1338.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**58.7%**	**14.4**	**-**
1/1	-	-	-	1.1	0.6	-	1.6	13.5	293.3	0.7	5.9	10.5	0.6	11.1	-	0.00	53.4%	2.2	-
1/2	15	0	0	0.0	0.1	0.1	0.2	4.0	24.4	0.1	0.3	0.3	0.1	0.5	-	0.00	17.3%	0.2	-
2/1	212	0	2	3.4	0.7	0.1	4.3	50.7	452.1	1.5	7.8	9.5	0.7	10.2	-	0.00	58.7%	5.1	-
3/1	-	-	-	2.1	0.3	-	2.4	26.2	215.8	0.6	6.3	7.8	0.3	8.1	-	0.00	38.1%	2.8	-
3/2	44	0	0	1.6	0.2	0.2	2.0	26.8	201.1	0.8	5.1	6.0	0.2	6.2	-	0.00	31.1%	2.4	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	77	0	0	1.2	0.2	0.0	1.4	44.1	151.6	1.3	3.0	3.2	0.2	3.4	-	0.00	25.6%	1.7	-
7/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	**0**	**0**	**0**	**12.2**	**2.4**	**0.0**	**14.7**	**-**	**1033.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**58.9%**	**16.6**	**-**
1/2+1/1	-	-	-	3.9	0.7	-	4.6	55.4	265.1	0.9	4.4	4.8	0.7	5.5	-	0.00	58.9 : 58.9%	5.1	-
2/1	-	-	-	3.5	0.7	-	4.2	46.8	271.6	0.8	8.0	9.8	0.7	10.5	-	0.00	57.7%	4.7	-
3/1	-	-	-	1.1	0.4	-	1.5	10.6	245.1	0.5	6.8	8.8	0.4	9.1	-	0.00	43.2%	1.9	-
3/2	-	-	-	3.7	0.7	-	4.4	61.7	251.6	1.0	8.1	9.1	0.7	9.8	-	0.00	57.6%	4.8	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 - 14/1099	PRC for Signalled Lanes (%):	53.4	Total Delay for Signalled Lanes (pcuHr):	11.94	Cycle Time (s):	130
C2 - 14/1099	PRC for Signalled Lanes (%):	52.9	Total Delay for Signalled Lanes (pcuHr):	14.66	Cycle Time (s):	130
	PRC Over All Lanes (%):	52.9	Total Delay Over All Lanes(pcuHr):	26.60		

Traffic Flows, Desired
Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	0	30	7	77	114
	B	0	0	15	91	195	301
	C	15	8	0	0	298	321
	D	5	213	1	0	86	305
	E	42	292	224	44	0	602
	Tot.	62	513	270	142	656	1643

Traffic Flows, Difference
Difference :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 6: '2044 10k DS PM' (FG6: '2044 10k DS PM', Plan 1: 'AM PEAK')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: A20 Ashford Rd/ B2067 Otterpool Ln	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**71.3%**	-	-
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**60.9%**	-	-
1/1	A20 Ashford Rd Westbound Left Ahead	U	N/A	N/A	C1:A		1	68	15	83	-	-	467	1762	1762	950	49.2%	467	467
1/2	A20 Ashford Rd Westbound Ahead Right	O	N/A	N/A	C1:A		1	68	15	83	-	-	242	2065	2065	1113	21.7%	242	242
2/1	Access to zone Left Ahead Right	O	N/A	N/A	C1:B		1	24	90	114	-	-	184	1904	1904	302	60.9%	184	184
3/1	Barrow Hill/Ashford Rd (N) Left Ahead	U	N/A	N/A	C1:C		1	68	15	83	-	-	416	1899	1899	1024	40.6%	416	416
3/2	Barrow Hill/Ashford Rd (N) Right Ahead	O	N/A	N/A	C1:C		1	68	15	83	-	-	391	1986	1986	881	44.4%	391	391
4/1	Access to zone	U	N/A	N/A	-		-	-	-	-	-	-	330	Inf	Inf	Inf	0.0%	330	330
5/1	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	303	Inf	Inf	Inf	0.0%	303	303
5/2	A20 Ashford Rd West Exit	U	N/A	N/A	-		-	-	-	-	-	-	332	Inf	Inf	Inf	0.0%	332	332
6/1	Barrow Hill Cottages Ahead Right Left	O	N/A	N/A	C1:D		1	22	91	113	-	-	142	1800	1800	323	43.9%	142	142
7/1	Barrow Hill Cottages North Exit	U	N/A	N/A	-		-	-	-	-	-	-	147	Inf	Inf	Inf	0.0%	147	147
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C1:E		1	7	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	N/A	-	C1:F		1	6	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**71.3%**	-	-
1/2+1/1	A20 Ashford Rd Westbound Ahead Left	U	N/A	N/A	C2:A		1	29	34	63	-	-	432	2065:1762	2065	305+305	70.9 : 70.9%	432	432
2/1	B2067 Otterpool Ln Left Right	U	N/A	N/A	C2:B		1	30	125	27	-	-	329	1904	1904	461	71.3%	329	329
3/1	A20 Ahsford Rd Eastbound Ahead	U	N/A	N/A	C2:D		1	84	36	120	-	-	421	1899	1899	1261	33.4%	421	421
3/2	A20 Ahsford Rd Eastbound Right	U	N/A	N/A	C2:C		1	27	93	120	-	-	309	1986	1986	434	71.1%	309	309
4/1	A20 Ashford Ln - East Exit	U	N/A	N/A	-		-	-	-	-	-	-	458	Inf	Inf	Inf	0.0%	458	458
5/1	B2067 Otterpool Ln South Exit	U	N/A	N/A	-		-	-	-	-	-	-	324	Inf	Inf	Inf	0.0%	324	324
Ped Link: P1	Unnamed Ped Link	-	N/A	-	C2:E		1	6	-	-	-	-	0	-	-	0	0.0%	0	0

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: A20 Ashford Rd/ B2067 Otterpool Ln	**298**	**0**	**1**	**23.4**	**6.4**	**0.5**	**30.3**	**-**	**2464.8**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**71.3%**	**34.8**	**-**
J1: A20 Ashford Rd - Otterpool Ln (14/1099)	**298**	**0**	**1**	**8.8**	**2.5**	**0.5**	**11.8**	**-**	**1268.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**60.9%**	**14.1**	**-**
1/1	-	-	-	0.6	0.5	-	1.1	8.4	261.3	0.6	3.4	9.2	0.5	9.7	-	0.00	49.2%	1.6	-
1/2	26	0	0	0.0	0.1	0.1	0.3	3.9	38.5	0.2	0.3	0.4	0.1	0.6	-	0.00	21.7%	0.3	-
2/1	122	0	1	2.4	0.8	0.2	3.4	65.9	288.3	1.6	5.2	6.1	0.8	6.8	-	0.00	60.9%	3.9	-
3/1	-	-	-	2.0	0.3	-	2.4	20.4	243.8	0.6	6.6	8.7	0.3	9.0	-	0.00	40.6%	2.8	-
3/2	92	0	0	1.8	0.4	0.2	2.5	23.0	310.9	0.8	6.2	8.0	0.4	8.4	-	0.00	44.4%	3.1	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
6/1	58	0	0	1.8	0.4	0.0	2.2	56.6	125.4	0.9	4.1	4.5	0.4	4.8	-	0.00	43.9%	2.5	-
7/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-
J2: A20 Ashford Rd - Otterpool Ln (14/1099)	**0**	**0**	**0**	**14.6**	**3.9**	**0.0**	**18.5**	**-**	**1196.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**71.3%**	**20.7**	**-**
1/2+1/1	-	-	-	5.1	1.2	-	6.3	52.4	376.9	0.9	5.8	7.3	1.2	8.5	-	0.00	70.9 : 70.9%	7.0	-
2/1	-	-	-	4.1	1.2	-	5.3	57.8	300.7	0.9	8.7	10.7	1.2	11.9	-	0.00	71.3%	5.8	-
3/1	-	-	-	0.7	0.3	-	0.9	7.9	210.9	0.5	4.4	7.4	0.3	7.7	-	0.00	33.4%	1.3	-
3/2	-	-	-	4.8	1.2	-	6.0	70.0	308.1	1.0	10.5	11.0	1.2	12.2	-	0.00	71.1%	6.6	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	-	-

C1 - 14/1099 PRC for Signalled Lanes (%): 47.9 Total Delay for Signalled Lanes (pcuHr): 11.80 Cycle Time (s): 128
C2 - 14/1099 PRC for Signalled Lanes (%): 26.1 Total Delay for Signalled Lanes (pcuHr): 18.50 Cycle Time (s): 128
PRC Over All Lanes (%): 26.1 Total Delay Over All Lanes(pcuHr): 30.30

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	46	0	10	74	58	188
	B	0	2	15	163	254	434
	C	26	37	0	1	265	329
	D	3	123	0	0	58	184
	E	118	298	299	92	0	807
	Tot.	193	460	324	330	635	1942

Traffic Flows, Difference

Difference :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	-46	0	0	0	0	-46
	B	0	-2	0	0	0	-2
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	-46	-2	0	0	0	-48

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: J9 Otterpool Ln_Aldington Rd - UPDATED GEOMETRY.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J9 B2067 Otterpool Ln - Aldington Rd
Report generation date: 10/11/2021 16:49:15

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Stream B-C	D1	0.1	6.65	0.11	A	D2	0.1	7.15	0.11	A
Stream B-A		0.1	9.79	0.09	A		0.3	9.47	0.21	A
Stream C-AB		0.3	8.00	0.21	A		0.1	6.85	0.11	A
	2037 DM									
Stream B-C	D3	0.1	24.04	0.08	C	D4	0.3	8.61	0.23	A
Stream B-A		2.3	169.18	0.78	F		0.8	50.56	0.45	F
Stream C-AB		174.2	1023.26	1.41	F		129.4	742.77	1.32	F
	2037 DS									
Stream B-C	D5	0.5	9.09	0.35	A	D6	0.5	8.67	0.35	A
Stream B-A		0.3	13.99	0.25	B		0.2	12.45	0.19	B
Stream C-AB		0.7	10.89	0.42	B		0.5	9.60	0.34	A
	2044 8.5k DM									
Stream B-C	D7	0.0	14.89	0.04	B	D8	0.3	8.91	0.26	A
Stream B-A		1.8	131.12	0.70	F		0.8	47.87	0.45	E
Stream C-AB		169.6	991.12	1.40	F		123.9	713.69	1.31	F
	2044 8.5k DS									
Stream B-C	D9	0.8	10.70	0.44	B	D10	0.7	9.92	0.43	A
Stream B-A		0.4	15.73	0.28	C		0.3	14.89	0.22	B
Stream C-AB		0.9	11.77	0.46	B		1.2	13.22	0.54	B
	2044 10k DM									
Stream B-C		0.0	13.37	0.05	B		0.4	8.84	0.26	A

Stream B-A	D11	1.7	119.65	0.67	F	D12	0.7	45.10	0.44	E
Stream C-AB		165.8	970.89	1.40	F		119.3	689.53	1.30	F
	2044 10k DS									
Stream B-C	D13	1.0	11.89	0.49	B	D14	0.8	10.53	0.45	B
Stream B-A		0.4	17.07	0.29	C		0.3	17.15	0.25	C
Stream C-AB		1.0	12.30	0.50	B		2.3	19.70	0.69	C

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

File summary

File Description

Title	J9 Otterpool Park_Base Model
Location	B2067 Otterpool Ln - Aldington Rd
Site number	
Date	09/08/2017
Version	
Status	Base
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J9 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D3	2037 DM	AM	J9 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D5	2037 DS	AM	J9 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D7	2044 8.5k DM	AM	J9 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D9	2044 8.5k DS	AM	J9 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D11	2044 10k DM	AM	J9 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D13	2044 10k DS	AM	J9 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D14	2044 10k DS	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Aldington Road Eastbound		Major
B	B2067 Otterpool Lane		Minor
C	Aldington Road Westbound		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.17			55.0	✓	1.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	5.25	4.46	4.07	3.69	✓	1.00	32	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	486	0.088	0.222	0.140	0.317
B-C	682	0.104	0.262	-	-
C-B	606	0.233	0.233	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario	Time Period	Description	Traffic	Start time	Finish time	Time segment	Run

	name	name		profile type	(HH:mm)	(HH:mm)	length (min)	automatically
D1	2018	AM	J9 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	136	100.000
B		ONE HOUR	✓	98	100.000
C		ONE HOUR	✓	161	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	86	50
	B	35	0	63
	C	57	104	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	2
	B	3	0	5
	C	0	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.11	6.65	0.1	A	58	87
B-A	0.09	9.79	0.1	A	32	48
C-AB	0.21	8.00	0.3	A	97	146
C-A					51	76
A-B					79	118
A-C					46	69

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	47	12	624	0.076	47	0.0	0.1	6.239	A
B-A	26	7	427	0.062	26	0.0	0.1	8.965	A
C-AB	79	20	571	0.139	79	0.0	0.2	7.299	A
C-A	42	11			42				
A-B	65	16			65				

A-C	38	9			38				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	57	14	618	0.092	57	0.1	0.1	6.408	A
B-A	31	8	418	0.075	31	0.1	0.1	9.299	A
C-AB	95	24	569	0.167	95	0.2	0.2	7.585	A
C-A	50	12			50				
A-B	77	19			77				
A-C	45	11			45				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	69	17	611	0.114	69	0.1	0.1	6.647	A
B-A	39	10	406	0.095	38	0.1	0.1	9.787	A
C-AB	117	29	568	0.207	117	0.2	0.3	7.986	A
C-A	60	15			60				
A-B	95	24			95				
A-C	55	14			55				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	69	17	611	0.114	69	0.1	0.1	6.651	A
B-A	39	10	406	0.095	39	0.1	0.1	9.793	A
C-AB	117	29	568	0.207	117	0.3	0.3	7.996	A
C-A	60	15			60				
A-B	95	24			95				
A-C	55	14			55				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	57	14	618	0.092	57	0.1	0.1	6.415	A
B-A	31	8	418	0.075	32	0.1	0.1	9.309	A
C-AB	95	24	569	0.167	95	0.3	0.2	7.599	A
C-A	50	12			50				
A-B	77	19			77				
A-C	45	11			45				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	47	12	624	0.076	48	0.1	0.1	6.249	A
B-A	26	7	427	0.062	26	0.1	0.1	8.983	A
C-AB	79	20	571	0.139	79	0.2	0.2	7.321	A
C-A	42	11			42				
A-B	65	16			65				
A-C	38	9			38				

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	75	100.000
B		ONE HOUR	✓	145	100.000
C		ONE HOUR	✓	117	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	29	46
	B	91	0	54
	C	56	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	2
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.11	7.15	0.1	A	50	74
B-A	0.21	9.47	0.3	A	84	125
C-AB	0.11	6.85	0.1	A	56	85
C-A					51	76
A-B					27	40
A-C					42	63

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	582	0.070	40	0.0	0.1	6.643	A
B-A	69	17	496	0.138	68	0.0	0.2	8.390	A
C-AB	46	12	596	0.077	46	0.0	0.1	6.539	A
C-A	42	10			42				
A-B	22	5			22				
A-C	35	9			35				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	574	0.085	48	0.1	0.1	6.845	A
B-A	82	20	490	0.167	82	0.2	0.2	8.819	A
C-AB	55	14	595	0.093	55	0.1	0.1	6.671	A
C-A	50	12			50				
A-B	26	7			26				
A-C	41	10			41				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	59	15	563	0.106	59	0.1	0.1	7.143	A
B-A	100	25	480	0.209	100	0.2	0.3	9.460	A
C-AB	68	17	594	0.115	68	0.1	0.1	6.844	A
C-A	61	15			61				
A-B	32	8			32				
A-C	51	13			51				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	59	15	563	0.106	59	0.1	0.1	7.148	A
B-A	100	25	480	0.209	100	0.3	0.3	9.472	A
C-AB	68	17	594	0.115	68	0.1	0.1	6.850	A
C-A	61	15			61				
A-B	32	8			32				
A-C	51	13			51				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	574	0.085	49	0.1	0.1	6.854	A
B-A	82	20	490	0.167	82	0.3	0.2	8.839	A
C-AB	55	14	595	0.093	55	0.1	0.1	6.677	A
C-A	50	12			50				
A-B	26	7			26				
A-C	41	10			41				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	582	0.070	41	0.1	0.1	6.655	A
B-A	69	17	496	0.138	69	0.2	0.2	8.421	A
C-AB	46	12	596	0.077	46	0.1	0.1	6.552	A
C-A	42	10			42				
A-B	22	5			22				
A-C	35	9			35				

2037 DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		788.22	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2037 DM	AM	J9 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	167	100.000
B		ONE HOUR	✓	76	100.000
C		ONE HOUR	✓	761	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	122	45
	B	61	0	15
	C	61	700	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	2	0
	B	0	0	0
	C	7	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	24.04	0.1	C	14	21
B-A	0.78	169.18	2.3	F	56	84
C-AB	1.41	1023.26	174.2	F	697	1045
C-A					2	3
A-B					112	168
A-C					41	62

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	553	0.020	11	0.0	0.0	6.646	A
B-A	46	11	335	0.137	45	0.0	0.2	12.417	B
C-AB	568	142	603	0.942	534	0.0	8.4	42.791	E
C-A	5	1			5				
A-B	92	23			92				
A-C	34	8			34				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	538	0.025	13	0.0	0.0	6.858	A
B-A	55	14	279	0.196	55	0.2	0.2	16.001	C
C-AB	684	171	602	1.137	593	8.4	31.2	137.314	F
C-A	0	0			0				
A-B	110	27			110				
A-C	40	10			40				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	17	4	491	0.034	16	0.0	0.0	7.587	A
B-A	67	17	186	0.361	66	0.2	0.5	29.655	D
C-AB	838	209	594	1.412	593	31.2	92.5	387.798	F
C-A	0	0			0				
A-B	134	34			134				
A-C	50	12			50				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	17	4	310	0.053	16	0.0	0.1	12.279	B
B-A	67	17	98	0.684	63	0.5	1.6	92.542	F
C-AB	838	209	594	1.412	593	92.5	153.6	751.088	F
C-A	0	0			0				
A-B	134	34			134				
A-C	50	12			50				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	163	0.083	13	0.1	0.1	24.037	C
B-A	55	14	71	0.776	52	1.6	2.3	169.178	F
C-AB	684	171	602	1.136	602	153.6	174.2	988.746	F
C-A	0	0			0				
A-B	110	27			110				
A-C	40	10			40				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	351	0.032	12	0.1	0.0	10.608	B
B-A	46	11	85	0.541	50	2.3	1.4	108.655	F
C-AB	568	142	603	0.942	603	174.2	165.4	1023.262	F
C-A	5	1			5				
A-B	92	23			92				
A-C	34	8			34				

2037 DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		536.33	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2037 DM	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	121	100.000
B		ONE HOUR	✓	165	100.000
C		ONE HOUR	✓	726	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	94	27
	B	54	0	111
	C	50	676	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	0
	B	0	0	0
	C	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	8.61	0.3	A	102	153
B-A	0.45	50.56	0.8	F	50	74
C-AB	1.32	742.77	129.4	F	664	995
C-A					3	4
A-B					86	129
A-C					25	37

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	650	0.129	83	0.0	0.1	6.339	A
B-A	41	10	302	0.135	40	0.0	0.2	13.713	B
C-AB	539	135	606	0.888	515	0.0	5.9	34.102	D
C-A	8	2			8				
A-B	71	18			71				
A-C	20	5			20				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	100	25	636	0.157	100	0.1	0.2	6.713	A
B-A	49	12	259	0.187	48	0.2	0.2	17.030	C
C-AB	653	163	611	1.069	592	5.9	21.0	98.757	F
C-A	0	0			0				
A-B	85	21			85				
A-C	24	6			24				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	122	31	599	0.204	122	0.2	0.3	7.547	A
B-A	59	15	192	0.310	59	0.2	0.4	26.905	D
C-AB	799	200	605	1.322	603	21.0	70.0	285.209	F
C-A	0	0			0				
A-B	103	26			103				
A-C	30	7			30				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	122	31	540	0.226	122	0.3	0.3	8.610	A
B-A	59	15	131	0.454	58	0.4	0.8	48.502	E
C-AB	799	200	605	1.322	604	70.0	118.8	570.369	F
C-A	0	0			0				
A-B	103	26			103				
A-C	30	7			30				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	100	25	558	0.179	100	0.3	0.2	7.859	A
B-A	49	12	120	0.403	49	0.8	0.7	50.563	F
C-AB	653	163	611	1.069	610	118.8	129.4	742.774	F
C-A	0	0			0				
A-B	85	21			85				
A-C	24	6			24				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	606	0.138	84	0.2	0.2	6.903	A
B-A	41	10	143	0.285	42	0.7	0.4	36.044	E
C-AB	539	135	606	0.888	607	129.4	112.3	727.746	F
C-A	8	2			8				
A-B	71	18			71				
A-C	20	5			20				

2037 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 DS	AM	J9 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	171	100.000
B		ONE HOUR	✓	266	100.000
C		ONE HOUR	✓	257	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	109	62
	B	76	0	190
	C	50	207	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	2	2
	B	4	0	1
	C	2	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.35	9.09	0.5	A	174	262
B-A	0.25	13.99	0.3	B	70	105
C-AB	0.42	10.89	0.7	B	196	294
C-A					40	60
A-B					100	150
A-C					57	85

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	143	36	639	0.224	142	0.0	0.3	7.226	A
B-A	57	14	384	0.149	57	0.0	0.2	10.970	B
C-AB	159	40	569	0.279	157	0.0	0.4	8.706	A
C-A	35	9			35				
A-B	82	21			82				
A-C	47	12			47				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	171	43	626	0.273	170	0.3	0.4	7.896	A
B-A	68	17	367	0.186	68	0.2	0.2	12.043	B
C-AB	191	48	568	0.337	191	0.4	0.5	9.526	A
C-A	40	10			40				
A-B	98	24			98				
A-C	56	14			56				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	209	52	606	0.345	209	0.4	0.5	9.052	A
B-A	84	21	341	0.245	83	0.2	0.3	13.929	B
C-AB	238	59	568	0.418	237	0.5	0.7	10.839	B
C-A	45	11			45				
A-B	120	30			120				
A-C	68	17			68				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	209	52	605	0.346	209	0.5	0.5	9.088	A
B-A	84	21	341	0.245	84	0.3	0.3	13.987	B
C-AB	238	59	568	0.418	238	0.7	0.7	10.893	B
C-A	45	11			45				
A-B	120	30			120				
A-C	68	17			68				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	171	43	625	0.273	171	0.5	0.4	7.937	A
B-A	68	17	366	0.187	69	0.3	0.2	12.110	B
C-AB	191	48	568	0.337	192	0.7	0.5	9.595	A
C-A	40	10			40				
A-B	98	24			98				
A-C	56	14			56				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	143	36	638	0.224	143	0.4	0.3	7.282	A
B-A	57	14	383	0.149	57	0.2	0.2	11.054	B
C-AB	159	40	569	0.279	159	0.5	0.4	8.793	A
C-A	35	9			35				
A-B	82	21			82				
A-C	47	12			47				

2037 DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 DS	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	124	100.000
B		ONE HOUR	✓	267	100.000
C		ONE HOUR	✓	217	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	59	65
	B	61	0	206
	C	46	171	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	2	2
	B	2	0	0
	C	0	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.35	8.67	0.5	A	189	284
B-A	0.19	12.45	0.2	B	56	84
C-AB	0.34	9.60	0.5	A	161	241
C-A					38	58
A-B					54	81
A-C					60	89

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	155	39	667	0.233	154	0.0	0.3	7.000	A
B-A	46	11	394	0.116	45	0.0	0.1	10.297	B
C-AB	131	33	570	0.229	129	0.0	0.3	8.159	A
C-A	33	8			33				
A-B	44	11			44				
A-C	49	12			49				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	185	46	657	0.282	185	0.3	0.4	7.618	A
B-A	55	14	379	0.145	55	0.1	0.2	11.083	B
C-AB	157	39	569	0.276	157	0.3	0.4	8.717	A
C-A	38	10			38				
A-B	53	13			53				
A-C	58	15			58				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	227	57	642	0.353	226	0.4	0.5	8.643	A
B-A	67	17	357	0.188	67	0.2	0.2	12.415	B
C-AB	194	49	569	0.341	194	0.4	0.5	9.575	A
C-A	44	11			44				
A-B	65	16			65				
A-C	72	18			72				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	227	57	642	0.353	227	0.5	0.5	8.673	A
B-A	67	17	356	0.188	67	0.2	0.2	12.446	B
C-AB	194	49	569	0.342	194	0.5	0.5	9.605	A
C-A	44	11			44				
A-B	65	16			65				
A-C	72	18			72				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	185	46	657	0.282	186	0.5	0.4	7.652	A
B-A	55	14	379	0.145	55	0.2	0.2	11.120	B
C-AB	157	39	569	0.276	158	0.5	0.4	8.762	A
C-A	38	10			38				
A-B	53	13			53				
A-C	58	15			58				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	155	39	666	0.233	155	0.4	0.3	7.051	A
B-A	46	11	394	0.117	46	0.2	0.1	10.352	B
C-AB	131	33	570	0.229	131	0.4	0.3	8.215	A
C-A	33	8			33				
A-B	44	11			44				
A-C	49	12			49				

2044 8.5k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		760.16	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2044 8.5k DM	AM	J9 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	172	100.000
B		ONE HOUR	✓	71	100.000
C		ONE HOUR	✓	758	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	127	45
	B	61	0	10
	C	64	694	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	0
	B	0	0	0
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	14.89	0.0	B	9	14
B-A	0.70	131.12	1.8	F	56	84
C-AB	1.40	991.12	169.6	F	694	1040
C-A					2	3
A-B					117	175
A-C					41	62

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	542	0.014	7	0.0	0.0	6.734	A
B-A	46	11	341	0.135	45	0.0	0.2	12.147	B
C-AB	565	141	604	0.936	533	0.0	8.0	41.560	E
C-A	6	1			6				
A-B	96	24			96				
A-C	34	8			34				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	2	528	0.017	9	0.0	0.0	6.933	A
B-A	55	14	285	0.192	55	0.2	0.2	15.571	C
C-AB	681	170	604	1.129	593	8.0	30.0	132.446	F
C-A	0	0			0				
A-B	114	29			114				
A-C	40	10			40				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	484	0.023	11	0.0	0.0	7.603	A
B-A	67	17	193	0.349	66	0.2	0.5	28.198	D
C-AB	835	209	595	1.403	594	30.0	90.1	376.218	F
C-A	0	0			0				
A-B	140	35			140				
A-C	50	12			50				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	335	0.033	11	0.0	0.0	11.097	B
B-A	67	17	105	0.639	64	0.5	1.4	80.571	F
C-AB	835	209	595	1.403	595	90.1	150.1	731.602	F
C-A	0	0			0				
A-B	140	35			140				
A-C	50	12			50				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	2	251	0.036	9	0.0	0.0	14.887	B
B-A	55	14	79	0.696	53	1.4	1.8	131.115	F
C-AB	681	170	604	1.129	603	150.1	169.6	961.815	F
C-A	0	0			0				
A-B	114	29			114				
A-C	40	10			40				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	398	0.019	8	0.0	0.0	9.226	A
B-A	46	11	95	0.486	49	1.8	1.1	82.564	F
C-AB	565	141	604	0.935	604	169.6	159.8	991.116	F
C-A	6	1			6				
A-B	96	24			96				
A-C	34	8			34				

2044 8.5k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		504.05	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2044 8.5k DM	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	123	100.000
B		ONE HOUR	✓	184	100.000
C		ONE HOUR	✓	721	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	96	27
	B	55	0	129
	C	51	670	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	2	0
	B	0	0	0
	C	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.26	8.91	0.3	A	118	178
B-A	0.45	47.87	0.8	E	50	76
C-AB	1.31	713.69	123.9	F	659	988
C-A					3	4
A-B					88	132
A-C					25	37

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	655	0.148	96	0.0	0.2	6.439	A
B-A	41	10	300	0.138	41	0.0	0.2	13.856	B
C-AB	534	134	606	0.881	512	0.0	5.7	33.119	D
C-A	9	2			9				
A-B	72	18			72				
A-C	20	5			20				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	640	0.181	116	0.2	0.2	6.870	A
B-A	49	12	258	0.192	49	0.2	0.2	17.205	C
C-AB	648	162	612	1.060	592	5.7	19.9	94.487	F
C-A	0	0			0				
A-B	86	22			86				
A-C	24	6			24				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	142	36	602	0.236	142	0.2	0.3	7.824	A
B-A	61	15	192	0.315	60	0.2	0.4	27.039	D
C-AB	794	198	605	1.311	604	19.9	67.4	273.897	F
C-A	0	0			0				
A-B	106	26			106				
A-C	30	7			30				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	142	36	546	0.260	142	0.3	0.3	8.912	A
B-A	61	15	134	0.452	59	0.4	0.8	47.409	E
C-AB	794	198	605	1.311	605	67.4	114.6	549.719	F
C-A	0	0			0				
A-B	106	26			106				
A-C	30	7			30				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	568	0.204	116	0.3	0.3	7.983	A
B-A	49	12	125	0.394	50	0.8	0.7	47.868	E
C-AB	648	162	612	1.060	611	114.6	123.9	713.695	F
C-A	0	0			0				
A-B	86	22			86				
A-C	24	6			24				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	613	0.158	97	0.3	0.2	6.978	A
B-A	41	10	149	0.278	43	0.7	0.4	34.096	D
C-AB	534	134	606	0.881	608	123.9	105.6	692.119	F
C-A	9	2			9				
A-B	72	18			72				
A-C	20	5			20				

2044 8.5k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		8.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 8.5k DS	AM	J9 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	180	100.000
B		ONE HOUR	✓	315	100.000
C		ONE HOUR	✓	280	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	115	65
	B	79	0	236
	C	52	228	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	2
	B	4	0	2
	C	4	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.44	10.70	0.8	B	217	325
B-A	0.28	15.73	0.4	C	72	109
C-AB	0.46	11.77	0.9	B	217	325
C-A					40	60
A-B					106	158
A-C					60	89

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	178	44	636	0.279	176	0.0	0.4	7.807	A
B-A	59	15	370	0.161	59	0.0	0.2	11.552	B
C-AB	175	44	569	0.308	174	0.0	0.4	9.060	A
C-A	35	9			35				
A-B	87	22			87				
A-C	49	12			49				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	212	53	621	0.342	212	0.4	0.5	8.784	A
B-A	71	18	349	0.204	71	0.2	0.3	12.940	B
C-AB	212	53	569	0.372	211	0.4	0.6	10.050	B
C-A	40	10			40				
A-B	103	26			103				
A-C	58	15			58				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	260	65	597	0.435	259	0.5	0.8	10.622	B
B-A	87	22	316	0.275	87	0.3	0.4	15.623	C
C-AB	264	66	570	0.463	262	0.6	0.9	11.689	B
C-A	45	11			45				
A-B	127	32			127				
A-C	72	18			72				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	260	65	596	0.436	260	0.8	0.8	10.702	B
B-A	87	22	316	0.275	87	0.4	0.4	15.725	C
C-AB	264	66	570	0.463	264	0.9	0.9	11.771	B
C-A	45	11			45				
A-B	127	32			127				
A-C	72	18			72				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	212	53	620	0.342	213	0.8	0.5	8.864	A
B-A	71	18	348	0.204	71	0.4	0.3	13.044	B
C-AB	212	53	569	0.372	213	0.9	0.6	10.148	B
C-A	40	10			40				
A-B	103	26			103				
A-C	58	15			58				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	178	44	635	0.280	178	0.5	0.4	7.894	A
B-A	59	15	369	0.161	60	0.3	0.2	11.660	B
C-AB	175	44	569	0.308	176	0.6	0.5	9.173	A
C-A	35	9			35				
A-B	87	22			87				
A-C	49	12			49				

2044 8.5k DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		9.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2044 8.5k DS	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	128	100.000
B		ONE HOUR	✓	307	100.000
C		ONE HOUR	✓	325	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	63	65
	B	61	0	246
	C	54	271	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	3	0
	B	2	0	1
	C	0	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.43	9.92	0.7	A	226	339
B-A	0.22	14.89	0.3	B	56	84
C-AB	0.54	13.22	1.2	B	259	389
C-A					39	58
A-B					58	87
A-C					60	89

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	185	46	664	0.279	184	0.0	0.4	7.467	A
B-A	46	11	364	0.126	45	0.0	0.1	11.276	B
C-AB	209	52	581	0.360	207	0.0	0.6	9.573	A
C-A	35	9			35				
A-B	47	12			47				
A-C	49	12			49				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	221	55	653	0.339	221	0.4	0.5	8.320	A
B-A	55	14	342	0.160	55	0.1	0.2	12.510	B
C-AB	253	63	583	0.434	252	0.6	0.8	10.848	B
C-A	39	10			39				
A-B	57	14			57				
A-C	58	15			58				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	271	68	634	0.427	270	0.5	0.7	9.858	A
B-A	67	17	310	0.217	67	0.2	0.3	14.806	B
C-AB	316	79	588	0.537	314	0.8	1.2	13.073	B
C-A	42	11			42				
A-B	69	17			69				
A-C	72	18			72				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	271	68	634	0.427	271	0.7	0.7	9.916	A
B-A	67	17	309	0.217	67	0.3	0.3	14.886	B
C-AB	316	79	588	0.537	316	1.2	1.2	13.220	B
C-A	42	11			42				
A-B	69	17			69				
A-C	72	18			72				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	221	55	652	0.339	222	0.7	0.5	8.389	A
B-A	55	14	341	0.161	55	0.3	0.2	12.594	B
C-AB	253	63	583	0.434	255	1.2	0.8	11.011	B
C-A	39	10			39				
A-B	57	14			57				
A-C	58	15			58				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	185	46	663	0.279	186	0.5	0.4	7.542	A
B-A	46	11	363	0.127	46	0.2	0.1	11.371	B
C-AB	209	52	581	0.361	210	0.8	0.6	9.735	A
C-A	35	9			35				
A-B	47	12			47				
A-C	49	12			49				

2044 10k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		740.89	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2044 10k DM	AM	J9 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	169	100.000
B		ONE HOUR	✓	77	100.000
C		ONE HOUR	✓	752	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	125	44
	B	62	0	15
	C	60	692	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	0
	B	0	0	0
	C	7	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	13.37	0.0	B	14	21
B-A	0.67	119.65	1.7	F	57	85
C-AB	1.40	970.89	165.8	F	688	1032
C-A					2	3
A-B					115	172
A-C					40	61

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	552	0.020	11	0.0	0.0	6.655	A
B-A	47	12	337	0.138	46	0.0	0.2	12.338	B
C-AB	560	140	601	0.932	529	0.0	7.8	41.050	E
C-A	6	1			6				
A-B	94	24			94				
A-C	33	8			33				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	538	0.025	13	0.0	0.0	6.866	A
B-A	56	14	283	0.197	55	0.2	0.2	15.798	C
C-AB	676	169	601	1.125	591	7.8	29.2	129.832	F
C-A	0	0			0				
A-B	112	28			112				
A-C	40	10			40				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	17	4	493	0.034	16	0.0	0.0	7.559	A
B-A	68	17	193	0.354	67	0.2	0.5	28.404	D
C-AB	828	207	593	1.397	592	29.2	88.2	369.141	F
C-A	0	0			0				
A-B	138	34			138				
A-C	48	12			48				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	17	4	348	0.047	16	0.0	0.0	10.848	B
B-A	68	17	108	0.633	65	0.5	1.4	77.999	F
C-AB	828	207	593	1.397	593	88.2	147.0	719.330	F
C-A	0	0			0				
A-B	138	34			138				
A-C	48	12			48				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	283	0.048	13	0.0	0.0	13.366	B
B-A	56	14	83	0.672	55	1.4	1.7	119.646	F
C-AB	676	169	601	1.124	601	147.0	165.8	945.144	F
C-A	0	0			0				
A-B	112	28			112				
A-C	40	10			40				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	420	0.027	11	0.0	0.0	8.822	A
B-A	47	12	99	0.470	49	1.7	1.0	75.276	F
C-AB	560	140	601	0.932	602	165.8	155.4	970.890	F
C-A	6	1			6				
A-B	94	24			94				
A-C	33	8			33				

2044 10k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		485.01	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 10k DM	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	121	100.000
B		ONE HOUR	✓	188	100.000
C		ONE HOUR	✓	716	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	95	26
	B	55	0	133
	C	50	666	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	0
	B	0	0	0
	C	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.26	8.84	0.4	A	122	183
B-A	0.44	45.10	0.7	E	50	76
C-AB	1.30	689.53	119.3	F	654	981
C-A					3	4
A-B					87	131
A-C					24	36

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	100	25	656	0.153	99	0.0	0.2	6.456	A
B-A	41	10	301	0.138	41	0.0	0.2	13.825	B
C-AB	530	133	606	0.875	508	0.0	5.5	32.395	D
C-A	9	2			9				
A-B	72	18			72				
A-C	20	5			20				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	120	30	641	0.186	119	0.2	0.2	6.895	A
B-A	49	12	259	0.191	49	0.2	0.2	17.116	C
C-AB	644	161	611	1.053	590	5.5	18.9	91.166	F
C-A	0	0			0				
A-B	85	21			85				
A-C	23	6			23				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	146	37	604	0.242	146	0.2	0.3	7.851	A
B-A	61	15	194	0.312	60	0.2	0.4	26.577	D
C-AB	788	197	605	1.302	603	18.9	65.1	264.682	F
C-A	0	0			0				
A-B	105	26			105				
A-C	29	7			29				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	146	37	553	0.265	146	0.3	0.4	8.840	A
B-A	61	15	138	0.439	59	0.4	0.7	45.096	E
C-AB	788	197	605	1.302	605	65.1	111.0	532.588	F
C-A	0	0			0				
A-B	105	26			105				
A-C	29	7			29				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	120	30	577	0.207	120	0.4	0.3	7.890	A
B-A	49	12	131	0.378	50	0.7	0.6	44.642	E
C-AB	644	161	611	1.053	611	111.0	119.3	689.531	F
C-A	0	0			0				
A-B	85	21			85				
A-C	23	6			23				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	100	25	619	0.162	100	0.3	0.2	6.946	A
B-A	41	10	156	0.266	42	0.6	0.4	32.068	D
C-AB	530	133	606	0.875	607	119.3	100.1	662.571	F
C-A	9	2			9				
A-B	72	18			72				
A-C	20	5			20				

2044 10k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		9.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2044 10k DS	AM	J9 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	177	100.000
B		ONE HOUR	✓	346	100.000
C		ONE HOUR	✓	301	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	113	64
	B	80	0	266
	C	51	250	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	2	2
	B	4	0	2
	C	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.49	11.89	1.0	B	244	366
B-A	0.29	17.07	0.4	C	73	110
C-AB	0.50	12.30	1.0	B	238	357
C-A					38	57
A-B					104	156
A-C					59	88

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	200	50	638	0.314	198	0.0	0.5	8.152	A
B-A	60	15	361	0.167	59	0.0	0.2	11.917	B
C-AB	192	48	581	0.331	190	0.0	0.5	9.167	A
C-A	34	9			34				
A-B	85	21			85				
A-C	48	12			48				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	239	60	622	0.384	238	0.5	0.6	9.360	A
B-A	72	18	337	0.213	72	0.2	0.3	13.549	B
C-AB	232	58	581	0.400	231	0.5	0.7	10.286	B
C-A	38	10			38				
A-B	102	25			102				
A-C	58	14			58				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	293	73	596	0.491	292	0.6	0.9	11.769	B
B-A	88	22	300	0.294	88	0.3	0.4	16.919	C
C-AB	289	72	582	0.497	288	0.7	1.0	12.194	B
C-A	42	11			42				
A-B	124	31			124				
A-C	70	18			70				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	293	73	595	0.492	293	0.9	1.0	11.894	B
B-A	88	22	299	0.295	88	0.4	0.4	17.071	C
C-AB	289	72	582	0.497	289	1.0	1.0	12.301	B
C-A	42	11			42				
A-B	124	31			124				
A-C	70	18			70				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	239	60	622	0.385	240	1.0	0.6	9.478	A
B-A	72	18	336	0.214	72	0.4	0.3	13.683	B
C-AB	232	58	581	0.400	233	1.0	0.7	10.404	B
C-A	38	10			38				
A-B	102	25			102				
A-C	58	14			58				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	200	50	637	0.314	201	0.6	0.5	8.263	A
B-A	60	15	360	0.167	61	0.3	0.2	12.049	B
C-AB	192	48	581	0.331	193	0.7	0.5	9.297	A
C-A	34	9			34				
A-B	85	21			85				
A-C	48	12			48				

2044 10k DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		13.05	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2044 10k DS	PM	J9 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	128	100.000
B		ONE HOUR	✓	321	100.000
C		ONE HOUR	✓	403	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	64	64
	B	63	0	258
	C	49	354	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	2
	B	2	0	1
	C	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.45	10.53	0.8	B	237	355
B-A	0.25	17.15	0.3	C	58	87
C-AB	0.69	19.70	2.3	C	341	511
C-A					29	43
A-B					59	88
A-C					59	88

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	194	49	662	0.293	193	0.0	0.4	7.642	A
B-A	47	12	345	0.137	47	0.0	0.2	12.045	B
C-AB	275	69	589	0.466	271	0.0	0.9	11.220	B
C-A	29	7			29				
A-B	48	12			48				
A-C	48	12			48				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	232	58	649	0.357	231	0.4	0.5	8.613	A
B-A	57	14	319	0.178	56	0.2	0.2	13.697	B
C-AB	332	83	592	0.561	331	0.9	1.3	13.702	B
C-A	30	8			30				
A-B	58	14			58				
A-C	58	14			58				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	284	71	627	0.453	283	0.5	0.8	10.412	B
B-A	69	17	281	0.247	69	0.2	0.3	16.974	C
C-AB	416	104	599	0.695	412	1.3	2.3	18.984	C
C-A	28	7			28				
A-B	70	18			70				
A-C	70	18			70				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	284	71	626	0.454	284	0.8	0.8	10.529	B
B-A	69	17	279	0.248	69	0.3	0.3	17.148	C
C-AB	416	104	599	0.695	416	2.3	2.3	19.698	C
C-A	28	7			28				
A-B	70	18			70				
A-C	70	18			70				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	232	58	648	0.358	233	0.8	0.6	8.696	A
B-A	57	14	317	0.179	57	0.3	0.2	13.865	B
C-AB	332	83	592	0.561	336	2.3	1.4	14.299	B
C-A	30	8			30				
A-B	58	14			58				
A-C	58	14			58				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	194	49	661	0.294	195	0.6	0.4	7.731	A
B-A	47	12	343	0.138	48	0.2	0.2	12.189	B
C-AB	275	69	589	0.467	276	1.4	0.9	11.603	B
C-A	29	7			29				
A-B	48	12			48				
A-C	48	12			48				

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: J10 Aldington Rd_Stone St - UPDATED GEOMETRY.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J10 Aldington Rd - Stone St
Report generation date: 10/11/2021 16:51:23

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Stream B-C	D1	0.1	7.27	0.09	A	D2	0.1	8.24	0.11	A
Stream B-A		0.4	10.86	0.28	B		0.9	14.02	0.47	B
Stream C-AB		0.0	5.97	0.01	A		0.0	5.41	0.03	A
	2037 DM									
Stream B-C	D3	0.8	10.66	0.44	B	D4	0.6	9.71	0.39	A
Stream B-A		0.4	16.50	0.30	C		0.3	16.70	0.22	C
Stream C-AB		0.3	3.92	0.12	A		1.0	4.82	0.32	A
	2037 DS									
Stream B-C	D5	0.4	8.23	0.26	A	D6	0.7	10.45	0.41	B
Stream B-A		0.4	17.59	0.28	C		0.2	15.74	0.19	C
Stream C-AB		1.8	11.67	0.58	B		0.6	7.48	0.32	A
	2044 8.5k DM									
Stream B-C	D7	0.8	10.82	0.45	B	D8	0.6	9.66	0.38	A
Stream B-A		0.4	16.11	0.29	C		0.3	16.69	0.23	C
Stream C-AB		0.1	3.76	0.05	A		0.9	4.75	0.30	A
	2044 8.5k DS									
Stream B-C	D9	0.4	8.41	0.28	A	D10	1.2	14.21	0.55	B
Stream B-A		0.4	20.75	0.27	C		0.4	18.43	0.27	C
Stream C-AB		3.8	19.59	0.75	C		0.6	6.56	0.28	A
	2044 10k DM									
Stream B-C	D11	0.7	10.46	0.42	B	D12	0.6	9.58	0.37	A
Stream B-A		0.5	16.50	0.32	C		0.3	16.79	0.22	C

Stream C-AB		0.2	3.93	0.11	A		1.0	4.89	0.32	A
	2044 10k DS									
Stream B-C	D13	0.4	8.73	0.27	A	D14	1.3	15.67	0.57	C
Stream B-A		0.4	20.38	0.31	C		0.9	23.85	0.47	C
Stream C-AB		4.2	20.98	0.77	C		0.6	6.44	0.28	A

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

File summary

File Description

Title	J10 Otterpool Park_Base Model
Location	Aldington Rd - Stone St
Site number	
Date	09/08/2017
Version	
Status	Base
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J10 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D3	2037 DM	AM	J10 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D5	2037 DS	AM	J10 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D7	2044 8.5k DM	AM	J10 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D9	2044 8.5k DS	AM	J10 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D11	2044 10k DM	AM	J10 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D13	2044 10k DS	AM	J10 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D14	2044 10k DS	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Aldington Road Eastbound		Major
B	Stone Street		Minor
C	Aldington Road Westbound		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			113.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	5.29	3.65	2.81	2.29	✓	1.00	15	43

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	530	0.096	0.244	0.153	0.348
B-C	665	0.102	0.258	-	-
C-B	639	0.248	0.248	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario	Time Period	Description	Traffic	Start time	Finish time	Time segment	Run

	name	name		profile type	(HH:mm)	(HH:mm)	length (min)	automatically
D1	2018	AM	J10 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	310	100.000
B		ONE HOUR	✓	157	100.000
C		ONE HOUR	✓	80	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	169	141
	B	115	0	42
	C	74	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	2
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.09	7.27	0.1	A	39	58
B-A	0.28	10.86	0.4	B	106	158
C-AB	0.01	5.97	0.0	A	6	9
C-A					67	101
A-B					155	233
A-C					129	194

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	32	8	582	0.054	31	0.0	0.1	6.538	A
B-A	87	22	481	0.180	86	0.0	0.2	9.087	A
C-AB	5	1	619	0.008	5	0.0	0.0	5.861	A
C-A	55	14			55				
A-B	127	32			127				

A-C	106	27			106				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	9	566	0.067	38	0.1	0.1	6.819	A
B-A	103	26	471	0.219	103	0.2	0.3	9.770	A
C-AB	6	2	616	0.010	6	0.0	0.0	5.906	A
C-A	66	16			66				
A-B	152	38			152				
A-C	127	32			127				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	12	542	0.085	46	0.1	0.1	7.264	A
B-A	127	32	458	0.276	126	0.3	0.4	10.839	B
C-AB	8	2	611	0.012	8	0.0	0.0	5.967	A
C-A	80	20			80				
A-B	186	47			186				
A-C	155	39			155				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	12	541	0.085	46	0.1	0.1	7.268	A
B-A	127	32	458	0.276	127	0.4	0.4	10.864	B
C-AB	8	2	611	0.012	8	0.0	0.0	5.967	A
C-A	80	20			80				
A-B	186	47			186				
A-C	155	39			155				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	9	565	0.067	38	0.1	0.1	6.827	A
B-A	103	26	471	0.219	104	0.4	0.3	9.802	A
C-AB	6	2	616	0.010	6	0.0	0.0	5.908	A
C-A	66	16			66				
A-B	152	38			152				
A-C	127	32			127				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	32	8	581	0.054	32	0.1	0.1	6.554	A
B-A	87	22	481	0.180	87	0.3	0.2	9.138	A
C-AB	5	1	619	0.008	5	0.0	0.0	5.864	A
C-A	55	14			55				
A-B	127	32			127				
A-C	106	27			106				

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	137	100.000
B		ONE HOUR	✓	254	100.000
C		ONE HOUR	✓	140	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	83	54
	B	204	0	50
	C	127	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	2
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.11	8.24	0.1	A	46	69
B-A	0.47	14.02	0.9	B	187	281
C-AB	0.03	5.41	0.0	A	14	22
C-A					114	171
A-B					76	114
A-C					50	74

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	9	561	0.067	37	0.0	0.1	6.877	A
B-A	154	38	499	0.308	152	0.0	0.4	10.329	B
C-AB	11	3	677	0.017	11	0.0	0.0	5.409	A
C-A	94	24			94				
A-B	62	16			62				
A-C	41	10			41				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	45	11	535	0.084	45	0.1	0.1	7.341	A
B-A	183	46	492	0.373	183	0.4	0.6	11.633	B
C-AB	14	4	684	0.021	14	0.0	0.0	5.369	A
C-A	112	28			112				
A-B	75	19			75				
A-C	49	12			49				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	55	14	493	0.112	55	0.1	0.1	8.211	A
B-A	225	56	481	0.467	224	0.6	0.9	13.907	B
C-AB	18	4	695	0.026	18	0.0	0.0	5.315	A
C-A	136	34			136				
A-B	91	23			91				
A-C	59	15			59				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	55	14	492	0.112	55	0.1	0.1	8.236	A
B-A	225	56	481	0.467	225	0.9	0.9	14.018	B
C-AB	18	4	695	0.026	18	0.0	0.0	5.318	A
C-A	136	34			136				
A-B	91	23			91				
A-C	59	15			59				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	45	11	534	0.084	45	0.1	0.1	7.365	A
B-A	183	46	492	0.373	184	0.9	0.6	11.760	B
C-AB	14	4	684	0.021	14	0.0	0.0	5.370	A
C-A	112	28			112				
A-B	75	19			75				
A-C	49	12			49				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	9	559	0.067	38	0.1	0.1	6.905	A
B-A	154	38	499	0.308	154	0.6	0.5	10.471	B
C-AB	11	3	677	0.017	11	0.0	0.0	5.409	A
C-A	94	23			94				
A-B	62	16			62				
A-C	41	10			41				

2037 DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2037 DM	AM	J10 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	60	100.000
B		ONE HOUR	✓	323	100.000
C		ONE HOUR	✓	766	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	59
	B	85	0	238
	C	730	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	8	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.44	10.66	0.8	B	218	328
B-A	0.30	16.50	0.4	C	78	117
C-AB	0.12	3.92	0.3	A	94	141
C-A					609	913
A-B					0.92	1
A-C					54	81

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	179	45	640	0.280	178	0.0	0.4	7.767	A
B-A	64	16	374	0.171	63	0.0	0.2	11.563	B
C-AB	62	15	982	0.063	61	0.0	0.1	3.908	A
C-A	515	129			515				
A-B	0.75	0.19			0.75				
A-C	44	11			44				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	214	53	625	0.342	213	0.4	0.5	8.728	A
B-A	76	19	349	0.219	76	0.2	0.3	13.160	B
C-AB	87	22	1050	0.083	86	0.1	0.2	3.738	A
C-A	602	150			602				
A-B	0.90	0.22			0.90				
A-C	53	13			53				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	262	66	600	0.437	261	0.5	0.8	10.582	B
B-A	94	23	312	0.300	93	0.3	0.4	16.389	C
C-AB	134	34	1143	0.117	134	0.2	0.3	3.564	A
C-A	709	177			709				
A-B	1	0.28			1				
A-C	65	16			65				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	262	66	600	0.437	262	0.8	0.8	10.664	B
B-A	94	23	312	0.300	94	0.4	0.4	16.501	C
C-AB	134	34	1143	0.118	134	0.3	0.3	3.570	A
C-A	709	177			709				
A-B	1	0.28			1				
A-C	65	16			65				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	214	53	625	0.343	215	0.8	0.5	8.807	A
B-A	76	19	349	0.219	77	0.4	0.3	13.263	B
C-AB	87	22	1050	0.083	87	0.3	0.2	3.749	A
C-A	602	150			602				
A-B	0.90	0.22			0.90				
A-C	53	13			53				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	179	45	639	0.280	180	0.5	0.4	7.849	A
B-A	64	16	373	0.171	64	0.3	0.2	11.659	B
C-AB	62	15	982	0.063	62	0.2	0.1	3.916	A
C-A	515	129			515				
A-B	0.75	0.19			0.75				
A-C	44	11			44				

2037 DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2037 DM	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	130	100.000
B		ONE HOUR	✓	269	100.000
C		ONE HOUR	✓	788	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	2	128
	B	55	0	214
	C	690	98	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	0
	B	11	0	0
	C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.39	9.71	0.6	A	196	295
B-A	0.22	16.70	0.3	C	50	76
C-AB	0.32	4.82	1.0	A	248	372
C-A					475	713
A-B					2	3
A-C					117	176

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	40	640	0.252	160	0.0	0.3	7.471	A
B-A	41	10	340	0.122	41	0.0	0.1	12.029	B
C-AB	163	41	949	0.172	161	0.0	0.4	4.569	A
C-A	430	108			430				
A-B	2	0.38			2				
A-C	96	24			96				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	192	48	628	0.306	192	0.3	0.4	8.252	A
B-A	49	12	314	0.158	49	0.1	0.2	13.596	B
C-AB	229	57	1013	0.226	228	0.4	0.6	4.595	A
C-A	480	120			480				
A-B	2	0.45			2				
A-C	115	29			115				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	236	59	607	0.388	235	0.4	0.6	9.661	A
B-A	61	15	276	0.219	60	0.2	0.3	16.617	C
C-AB	351	88	1101	0.319	349	0.6	1.0	4.803	A
C-A	517	129			517				
A-B	2	0.55			2				
A-C	141	35			141				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	236	59	606	0.389	236	0.6	0.6	9.710	A
B-A	61	15	276	0.219	61	0.3	0.3	16.698	C
C-AB	352	88	1102	0.319	352	1.0	1.0	4.823	A
C-A	516	129			516				
A-B	2	0.55			2				
A-C	141	35			141				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	192	48	627	0.307	193	0.6	0.4	8.308	A
B-A	49	12	313	0.158	50	0.3	0.2	13.678	B
C-AB	230	57	1014	0.227	231	1.0	0.6	4.624	A
C-A	479	120			479				
A-B	2	0.45			2				
A-C	115	29			115				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	40	640	0.252	162	0.4	0.3	7.531	A
B-A	41	10	339	0.122	42	0.2	0.1	12.112	B
C-AB	164	41	950	0.173	165	0.6	0.4	4.599	A
C-A	429	107			429				
A-B	2	0.38			2				
A-C	96	24			96				

2037 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 DS	AM	J10 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	250	100.000
B		ONE HOUR	✓	214	100.000
C		ONE HOUR	✓	490	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	19	231
	B	74	0	140
	C	235	255	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	0
	B	11	0	0
	C	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.26	8.23	0.4	A	128	193
B-A	0.28	17.59	0.4	C	68	102
C-AB	0.58	11.67	1.8	B	338	508
C-A					111	167
A-B					17	26
A-C					212	318

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	105	26	647	0.163	105	0.0	0.2	6.632	A
B-A	56	14	349	0.159	55	0.0	0.2	12.200	B
C-AB	256	64	706	0.363	253	0.0	0.7	7.927	A
C-A	113	28			113				
A-B	14	4			14				
A-C	174	43			174				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	126	31	626	0.201	126	0.2	0.2	7.193	A
B-A	67	17	323	0.206	66	0.2	0.3	13.992	B
C-AB	325	81	722	0.450	324	0.7	1.0	9.057	A
C-A	115	29			115				
A-B	17	4			17				
A-C	208	52			208				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	154	39	592	0.260	154	0.2	0.3	8.204	A
B-A	81	20	287	0.284	81	0.3	0.4	17.445	C
C-AB	432	108	744	0.582	430	1.0	1.7	11.467	B
C-A	107	27			107				
A-B	21	5			21				
A-C	254	64			254				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	154	39	591	0.261	154	0.3	0.4	8.235	A
B-A	81	20	286	0.285	81	0.4	0.4	17.588	C
C-AB	433	108	744	0.582	433	1.7	1.8	11.666	B
C-A	106	27			106				
A-B	21	5			21				
A-C	254	64			254				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	126	31	625	0.201	126	0.4	0.3	7.227	A
B-A	67	17	322	0.206	67	0.4	0.3	14.134	B
C-AB	326	82	723	0.451	329	1.8	1.0	9.237	A
C-A	114	29			114				
A-B	17	4			17				
A-C	208	52			208				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	105	26	646	0.163	106	0.3	0.2	6.672	A
B-A	56	14	348	0.160	56	0.3	0.2	12.327	B
C-AB	257	64	707	0.364	259	1.0	0.7	8.071	A
C-A	112	28			112				
A-B	14	4			14				
A-C	174	43			174				

2037 DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 DS	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	264	100.000
B		ONE HOUR	✓	267	100.000
C		ONE HOUR	✓	331	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	48	216
	B	50	0	217
	C	186	145	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	2	0
	B	20	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.41	10.45	0.7	B	199	299
B-A	0.19	15.74	0.2	C	46	69
C-AB	0.32	7.48	0.6	A	178	267
C-A					125	188
A-B					44	66
A-C					198	297

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	163	41	622	0.263	162	0.0	0.4	7.803	A
B-A	38	9	335	0.112	37	0.0	0.1	12.058	B
C-AB	137	34	684	0.201	136	0.0	0.3	6.559	A
C-A	112	28			112				
A-B	36	9			36				
A-C	163	41			163				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	195	49	607	0.322	195	0.4	0.5	8.727	A
B-A	45	11	315	0.143	45	0.1	0.2	13.321	B
C-AB	172	43	694	0.248	172	0.3	0.4	6.895	A
C-A	125	31			125				
A-B	43	11			43				
A-C	194	49			194				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	239	60	584	0.409	238	0.5	0.7	10.390	B
B-A	55	14	284	0.194	55	0.2	0.2	15.674	C
C-AB	225	56	708	0.318	224	0.4	0.6	7.455	A
C-A	139	35			139				
A-B	53	13			53				
A-C	238	59			238				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	239	60	583	0.410	239	0.7	0.7	10.447	B
B-A	55	14	284	0.194	55	0.2	0.2	15.737	C
C-AB	225	56	708	0.318	225	0.6	0.6	7.475	A
C-A	139	35			139				
A-B	53	13			53				
A-C	238	59			238				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	195	49	606	0.322	196	0.7	0.5	8.789	A
B-A	45	11	314	0.143	45	0.2	0.2	13.387	B
C-AB	172	43	694	0.248	173	0.6	0.4	6.927	A
C-A	125	31			125				
A-B	43	11			43				
A-C	194	49			194				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	163	41	621	0.263	164	0.5	0.4	7.876	A
B-A	38	9	335	0.112	38	0.2	0.1	12.132	B
C-AB	138	34	684	0.201	138	0.4	0.3	6.598	A
C-A	112	28			112				
A-B	36	9			36				
A-C	163	41			163				

2044 8.5k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2044 8.5k DM	AM	J10 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	55	100.000
B		ONE HOUR	✓	330	100.000
C		ONE HOUR	✓	745	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	1	54
	B	82	0	248
	C	731	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	0
	B	9	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.45	10.82	0.8	B	228	341
B-A	0.29	16.11	0.4	C	75	113
C-AB	0.05	3.76	0.1	A	37	55
C-A					647	971
A-B					0.92	1
A-C					50	74

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	187	47	643	0.290	185	0.0	0.4	7.838	A
B-A	62	15	374	0.165	61	0.0	0.2	11.472	B
C-AB	24	6	983	0.024	24	0.0	0.0	3.751	A
C-A	537	134			537				
A-B	0.75	0.19			0.75				
A-C	41	10			41				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	223	56	629	0.354	222	0.4	0.5	8.831	A
B-A	74	18	350	0.210	73	0.2	0.3	12.982	B
C-AB	34	8	1051	0.032	34	0.0	0.0	3.536	A
C-A	636	159			636				
A-B	0.90	0.22			0.90				
A-C	49	12			49				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	273	68	606	0.450	272	0.5	0.8	10.739	B
B-A	90	23	314	0.288	90	0.3	0.4	16.015	C
C-AB	52	13	1145	0.046	52	0.0	0.1	3.292	A
C-A	768	192			768				
A-B	1	0.28			1				
A-C	59	15			59				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	273	68	606	0.451	273	0.8	0.8	10.821	B
B-A	90	23	314	0.288	90	0.4	0.4	16.112	C
C-AB	52	13	1145	0.046	52	0.1	0.1	3.295	A
C-A	768	192			768				
A-B	1	0.28			1				
A-C	59	15			59				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	223	56	629	0.355	224	0.8	0.6	8.916	A
B-A	74	18	350	0.211	74	0.4	0.3	13.071	B
C-AB	34	8	1051	0.032	34	0.1	0.0	3.545	A
C-A	636	159			636				
A-B	0.90	0.22			0.90				
A-C	49	12			49				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	187	47	642	0.291	187	0.6	0.4	7.925	A
B-A	62	15	374	0.165	62	0.3	0.2	11.562	B
C-AB	24	6	983	0.024	24	0.0	0.0	3.758	A
C-A	537	134			537				
A-B	0.75	0.19			0.75				
A-C	41	10			41				

2044 8.5k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2044 8.5k DM	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	148	100.000
B		ONE HOUR	✓	263	100.000
C		ONE HOUR	✓	776	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	2	146
	B	58	0	205
	C	683	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	10	0	0
	C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.38	9.66	0.6	A	188	282
B-A	0.23	16.69	0.3	C	53	80
C-AB	0.30	4.75	0.9	A	234	351
C-A					478	717
A-B					2	3
A-C					134	201

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	154	39	635	0.243	153	0.0	0.3	7.450	A
B-A	44	11	344	0.127	43	0.0	0.1	11.960	B
C-AB	154	38	943	0.163	152	0.0	0.4	4.552	A
C-A	430	108			430				
A-B	2	0.38			2				
A-C	110	27			110				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	184	46	621	0.297	184	0.3	0.4	8.224	A
B-A	52	13	318	0.164	52	0.1	0.2	13.545	B
C-AB	216	54	1006	0.215	215	0.4	0.5	4.560	A
C-A	482	120			482				
A-B	2	0.45			2				
A-C	131	33			131				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	226	56	599	0.377	225	0.4	0.6	9.621	A
B-A	64	16	280	0.228	63	0.2	0.3	16.605	C
C-AB	331	83	1093	0.303	329	0.5	0.9	4.726	A
C-A	524	131			524				
A-B	2	0.55			2				
A-C	161	40			161				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	226	56	598	0.377	226	0.6	0.6	9.663	A
B-A	64	16	280	0.228	64	0.3	0.3	16.688	C
C-AB	332	83	1094	0.303	332	0.9	0.9	4.746	A
C-A	523	131			523				
A-B	2	0.55			2				
A-C	161	40			161				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	184	46	621	0.297	185	0.6	0.4	8.277	A
B-A	52	13	317	0.164	53	0.3	0.2	13.627	B
C-AB	217	54	1007	0.215	218	0.9	0.6	4.587	A
C-A	481	120			481				
A-B	2	0.45			2				
A-C	131	33			131				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	154	39	634	0.243	155	0.4	0.3	7.510	A
B-A	44	11	343	0.127	44	0.2	0.1	12.044	B
C-AB	155	39	944	0.164	156	0.6	0.4	4.579	A
C-A	429	107			429				
A-B	2	0.38			2				
A-C	110	27			110				

2044 8.5k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		11.01	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 8.5k DS	AM	J10 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	298	100.000
B		ONE HOUR	✓	206	100.000
C		ONE HOUR	✓	587	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	25	273
	B	58	0	148
	C	274	313	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	12	0
	B	14	0	0
	C	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.28	8.41	0.4	A	136	204
B-A	0.27	20.75	0.4	C	53	80
C-AB	0.75	19.59	3.8	C	445	667
C-A					94	141
A-B					23	34
A-C					251	376

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	111	28	602	0.185	111	0.0	0.2	7.314	A
B-A	44	11	310	0.141	43	0.0	0.2	13.437	B
C-AB	331	83	718	0.461	327	0.0	1.0	9.150	A
C-A	111	28			111				
A-B	19	5			19				
A-C	206	51			206				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	581	0.229	133	0.2	0.3	8.019	A
B-A	52	13	280	0.186	52	0.2	0.2	15.764	C
C-AB	425	106	736	0.577	422	1.0	1.7	11.467	B
C-A	103	26			103				
A-B	22	6			22				
A-C	245	61			245				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	163	41	592	0.275	163	0.3	0.4	8.379	A
B-A	64	16	239	0.267	63	0.2	0.4	20.434	C
C-AB	574	144	763	0.753	566	1.7	3.6	18.213	C
C-A	72	18			72				
A-B	28	7			28				
A-C	301	75			301				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	163	41	591	0.276	163	0.4	0.4	8.411	A
B-A	64	16	237	0.269	64	0.4	0.4	20.749	C
C-AB	578	144	765	0.755	577	3.6	3.8	19.587	C
C-A	69	17			69				
A-B	28	7			28				
A-C	301	75			301				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	627	0.212	133	0.4	0.3	7.297	A
B-A	52	13	278	0.187	53	0.4	0.2	15.995	C
C-AB	428	107	740	0.579	436	3.8	1.8	12.267	B
C-A	99	25			99				
A-B	22	6			22				
A-C	245	61			245				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	111	28	649	0.172	112	0.3	0.2	6.697	A
B-A	44	11	309	0.141	44	0.2	0.2	13.592	B
C-AB	333	83	719	0.463	336	1.8	1.1	9.488	A
C-A	109	27			109				
A-B	19	5			19				
A-C	206	51			206				

2044 8.5k DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2044 8.5k DS	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	302	100.000
B		ONE HOUR	✓	346	100.000
C		ONE HOUR	✓	397	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	75	227
	B	64	0	282
	C	278	119	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	13	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.55	14.21	1.2	B	259	388
B-A	0.27	18.43	0.4	C	59	88
C-AB	0.28	6.56	0.6	A	169	253
C-A					195	293
A-B					69	103
A-C					208	312

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	212	53	613	0.346	210	0.0	0.5	8.897	A
B-A	48	12	341	0.141	48	0.0	0.2	12.229	B
C-AB	126	31	725	0.174	125	0.0	0.3	5.996	A
C-A	173	43			173				
A-B	56	14			56				
A-C	171	43			171				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	254	63	594	0.427	253	0.5	0.7	10.524	B
B-A	58	14	313	0.184	57	0.2	0.2	14.078	B
C-AB	162	40	743	0.218	161	0.3	0.4	6.194	A
C-A	195	49			195				
A-B	67	17			67				
A-C	204	51			204				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	310	78	564	0.550	309	0.7	1.2	13.993	B
B-A	70	18	267	0.264	70	0.2	0.3	18.248	C
C-AB	218	55	769	0.284	218	0.4	0.6	6.541	A
C-A	219	55			219				
A-B	83	21			83				
A-C	250	62			250				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	310	78	563	0.551	310	1.2	1.2	14.212	B
B-A	70	18	266	0.265	70	0.3	0.4	18.427	C
C-AB	219	55	769	0.284	219	0.6	0.6	6.557	A
C-A	218	55			218				
A-B	83	21			83				
A-C	250	62			250				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	254	63	593	0.427	255	1.2	0.8	10.710	B
B-A	58	14	312	0.185	58	0.4	0.2	14.216	B
C-AB	162	40	743	0.218	163	0.6	0.4	6.217	A
C-A	195	49			195				
A-B	67	17			67				
A-C	204	51			204				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	212	53	612	0.347	213	0.8	0.5	9.044	A
B-A	48	12	340	0.142	48	0.2	0.2	12.343	B
C-AB	126	32	725	0.174	127	0.4	0.3	6.028	A
C-A	172	43			172				
A-B	56	14			56				
A-C	171	43			171				

2044 10k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2044 10k DM	AM	J10 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	59	100.000
B		ONE HOUR	✓	318	100.000
C		ONE HOUR	✓	746	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	58
	B	93	0	225
	C	713	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	8	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.42	10.46	0.7	B	206	310
B-A	0.32	16.50	0.5	C	85	128
C-AB	0.11	3.93	0.2	A	84	126
C-A					600	901
A-B					0.92	1
A-C					53	80

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	169	42	635	0.267	168	0.0	0.4	7.683	A
B-A	70	18	380	0.184	69	0.0	0.2	11.542	B
C-AB	55	14	974	0.057	55	0.0	0.1	3.916	A
C-A	506	127			506				
A-B	0.75	0.19			0.75				
A-C	44	11			44				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	202	51	620	0.326	202	0.4	0.5	8.605	A
B-A	84	21	357	0.234	83	0.2	0.3	13.151	B
C-AB	78	19	1040	0.075	77	0.1	0.1	3.741	A
C-A	593	148			593				
A-B	0.90	0.22			0.90				
A-C	52	13			52				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	248	62	593	0.418	247	0.5	0.7	10.382	B
B-A	102	26	321	0.319	102	0.3	0.5	16.385	C
C-AB	119	30	1131	0.105	119	0.1	0.2	3.554	A
C-A	702	176			702				
A-B	1	0.28			1				
A-C	64	16			64				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	248	62	592	0.419	248	0.7	0.7	10.456	B
B-A	102	26	321	0.319	102	0.5	0.5	16.498	C
C-AB	119	30	1131	0.106	119	0.2	0.2	3.562	A
C-A	702	175			702				
A-B	1	0.28			1				
A-C	64	16			64				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	202	51	669	0.302	203	0.7	0.4	7.743	A
B-A	84	21	359	0.233	84	0.5	0.3	13.146	B
C-AB	78	19	1040	0.075	78	0.2	0.1	3.748	A
C-A	593	148			593				
A-B	0.90	0.22			0.90				
A-C	52	13			52				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	169	42	686	0.247	170	0.4	0.3	6.983	A
B-A	70	18	381	0.184	70	0.3	0.2	11.588	B
C-AB	56	14	974	0.057	56	0.1	0.1	3.925	A
C-A	506	127			506				
A-B	0.75	0.19			0.75				
A-C	44	11			44				

2044 10k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 10k DM	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	151	100.000
B		ONE HOUR	✓	253	100.000
C		ONE HOUR	✓	778	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	2	149
	B	56	0	197
	C	679	99	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	11	0	1
	C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.37	9.58	0.6	A	181	271
B-A	0.22	16.79	0.3	C	51	77
C-AB	0.32	4.89	1.0	A	248	372
C-A					466	699
A-B					2	3
A-C					137	205

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	629	0.236	147	0.0	0.3	7.458	A
B-A	42	11	339	0.124	42	0.0	0.1	12.069	B
C-AB	163	41	941	0.173	162	0.0	0.4	4.618	A
C-A	423	106			423				
A-B	2	0.38			2				
A-C	112	28			112				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	177	44	615	0.288	177	0.3	0.4	8.204	A
B-A	50	13	314	0.161	50	0.1	0.2	13.658	B
C-AB	229	57	1003	0.228	228	0.4	0.6	4.650	A
C-A	471	118			471				
A-B	2	0.45			2				
A-C	134	33			134				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	217	54	593	0.366	216	0.4	0.6	9.540	A
B-A	62	15	276	0.223	61	0.2	0.3	16.711	C
C-AB	350	88	1090	0.321	348	0.6	1.0	4.870	A
C-A	507	127			507				
A-B	2	0.55			2				
A-C	164	41			164				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	217	54	592	0.366	217	0.6	0.6	9.583	A
B-A	62	15	276	0.223	62	0.3	0.3	16.791	C
C-AB	351	88	1091	0.322	351	1.0	1.0	4.893	A
C-A	506	126			506				
A-B	2	0.55			2				
A-C	164	41			164				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	177	44	615	0.288	178	0.6	0.4	8.255	A
B-A	50	13	313	0.161	51	0.3	0.2	13.740	B
C-AB	230	57	1004	0.229	231	1.0	0.6	4.683	A
C-A	470	117			470				
A-B	2	0.45			2				
A-C	134	33			134				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	628	0.236	149	0.4	0.3	7.517	A
B-A	42	11	339	0.124	42	0.2	0.1	12.150	B
C-AB	164	41	942	0.174	165	0.6	0.4	4.651	A
C-A	421	105			421				
A-B	2	0.38			2				
A-C	112	28			112				

2044 10k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		11.49	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2044 10k DS	AM	J10 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	327	100.000
B		ONE HOUR	✓	213	100.000
C		ONE HOUR	✓	595	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	34	293
	B	71	0	142
	C	282	313	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	9	0
	B	4	0	0
	C	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.27	8.73	0.4	A	130	195
B-A	0.31	20.38	0.4	C	65	98
C-AB	0.77	20.98	4.2	C	452	679
C-A					94	140
A-B					31	47
A-C					269	403

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	107	27	637	0.168	106	0.0	0.2	6.770	A
B-A	53	13	338	0.158	53	0.0	0.2	12.568	B
C-AB	335	84	717	0.467	331	0.0	1.1	9.257	A
C-A	113	28			113				
A-B	26	6			26				
A-C	221	55			221				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	128	32	613	0.208	127	0.2	0.3	7.418	A
B-A	64	16	304	0.210	64	0.2	0.3	14.933	B
C-AB	431	108	736	0.586	429	1.1	1.7	11.732	B
C-A	104	26			104				
A-B	31	8			31				
A-C	263	66			263				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	156	39	571	0.274	156	0.3	0.4	8.672	A
B-A	78	20	257	0.304	78	0.3	0.4	20.012	C
C-AB	586	146	762	0.769	577	1.7	3.9	19.261	C
C-A	69	17			69				
A-B	37	9			37				
A-C	323	81			323				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	156	39	569	0.275	156	0.4	0.4	8.726	A
B-A	78	20	255	0.307	78	0.4	0.4	20.379	C
C-AB	590	147	765	0.771	589	3.9	4.2	20.977	C
C-A	65	16			65				
A-B	37	9			37				
A-C	323	81			323				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	128	32	611	0.209	128	0.4	0.3	7.465	A
B-A	64	16	301	0.212	64	0.4	0.3	15.240	C
C-AB	435	109	740	0.589	444	4.2	1.9	12.669	B
C-A	100	25			100				
A-B	31	8			31				
A-C	263	66			263				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	107	27	636	0.168	107	0.3	0.2	6.814	A
B-A	53	13	337	0.159	54	0.3	0.2	12.743	B
C-AB	337	84	719	0.469	340	1.9	1.1	9.621	A
C-A	111	28			111				
A-B	26	6			26				
A-C	221	55			221				

2044 10k DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2044 10k DS	PM	J10 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	312	100.000
B		ONE HOUR	✓	396	100.000
C		ONE HOUR	✓	415	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	73	239
	B	121	0	275
	C	299	116	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	0
	B	7	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.57	15.67	1.3	C	252	379
B-A	0.47	23.85	0.9	C	111	167
C-AB	0.28	6.44	0.6	A	170	255
C-A					211	316
A-B					67	100
A-C					219	329

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	207	52	626	0.331	205	0.0	0.5	8.515	A
B-A	91	23	369	0.247	90	0.0	0.3	12.837	B
C-AB	126	31	734	0.172	125	0.0	0.3	5.911	A
C-A	186	47			186				
A-B	55	14			55				
A-C	180	45			180				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	247	62	593	0.417	246	0.5	0.7	10.362	B
B-A	109	27	337	0.322	108	0.3	0.5	15.662	C
C-AB	163	41	754	0.216	162	0.3	0.4	6.092	A
C-A	211	53			211				
A-B	66	16			66				
A-C	215	54			215				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	303	76	535	0.566	301	0.7	1.3	15.239	C
B-A	133	33	285	0.467	132	0.5	0.8	23.228	C
C-AB	221	55	782	0.283	221	0.4	0.6	6.416	A
C-A	236	59			236				
A-B	80	20			80				
A-C	263	66			263				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	303	76	532	0.569	303	1.3	1.3	15.669	C
B-A	133	33	284	0.469	133	0.8	0.9	23.854	C
C-AB	222	55	783	0.283	222	0.6	0.6	6.435	A
C-A	235	59			235				
A-B	80	20			80				
A-C	263	66			263				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	247	62	590	0.419	249	1.3	0.7	10.625	B
B-A	109	27	336	0.324	110	0.9	0.5	16.037	C
C-AB	163	41	754	0.216	164	0.6	0.4	6.116	A
C-A	210	53			210				
A-B	66	16			66				
A-C	215	54			215				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	207	52	624	0.332	208	0.7	0.5	8.670	A
B-A	91	23	368	0.247	92	0.5	0.3	13.057	B
C-AB	126	32	734	0.172	127	0.4	0.3	5.940	A
C-A	186	46			186				
A-B	55	14			55				
A-C	180	45			180				

J11 – A20 Ashford Road / A261 Hythe Road

LinSig Modelling Results

Full Input Data And Results

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2037 DS AM	2037 DS AM	Network Control Plan 1	08:00 - 09:00	68	11.4	23.79
2	2037 DS PM	2037 DS PM	Network Control Plan 1	17:00 - 18:00	76	6.3	26.17
3	Arcadis 2044 With Link Road AM Peak	Arcadis 2044 With Link Road AM Peak	Network Control Plan 1	08:00 - 09:00	68	4.7	29.16
4	Arcadis 2044 With Link Road PM Peak	Arcadis 2044 With Link Road KCC PM Peak	Network Control Plan 1	17:00 - 18:00	76	2.5	30.80
5	2044 10k DS AM	2044 10k DS AM	Network Control Plan 1	08:00 - 09:00	68	5.4	28.48
6	2044 10K DS PM	2044 10K DS PM	Network Control Plan 1	17:00 - 18:00	76	3.7	29.49

Scenario 1: '2037 DS AM' (FG1: '2037 DS AM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**	**-**	**-**	**-**	**80.8%**	**23.8**	**-**	**-**
A20 / A261 Newingreen	**-**	**-**	**-**	**-**	**-**	**-**	**80.8%**	**23.8**	**-**	**-**
1/1	A20 Ashford Rd SB Left	U	33	655	1952	976	67.1%	3.3	18.4	10.3
1/3+1/2	A20 Ashford Rd SB Right Ahead	U	11	455	1879:1980	332+349	75.7 : 58.4%	4.3	34.1	5.5
2/2+2/1	A20 Ashford Rd EB Left Right Ahead	U	7:22	378	1906:1874	212+315	71.8 : 71.8%	3.2	30.7	5.3
3/1+3/2	Stone St Ahead Left Right	U	10	458	1939:1971	289+294	78.6 : 78.6%	5.2	41.1	5.9
4/2+4/1	A261 Hythe Rd Right Ahead Left	U	20	844	1851:1860	521+524	80.8 : 80.8%	7.0	29.8	9.1
5/1	A20 Ashford Rd SB Exit	U	-	621	Inf	Inf	0.0%	0.0	0.0	0.0
5/2	A20 Ashford Rd SB Exit	U	-	725	Inf	Inf	0.0%	0.0	0.0	0.0
6/1	A20 Ashford Rd EB Exit Ahead	U	49	393	1980	1456	27.0%	0.2	1.9	0.6
7/1	Stone St Exit	U	-	225	Inf	Inf	0.0%	0.0	0.0	0.0
8/1	A261 Hythe Rd Exit	U	-	826	Inf	Inf	0.0%	0.0	0.0	0.0
9/1	Ahead	U	49	378	1980	1456	26.0%	0.5	4.6	2.5
10/1		U	-	393	Inf	Inf	0.0%	0.0	0.0	0.0
Ped Link: P1	Unnamed Ped Link	-	6	0	-	0	0.0%	-	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 11.4 Total Delay for Signalled Lanes (pcuHr): 23.10 Cycle Time (s): 68
C1 Stream: 2 PRC for Signalled Lanes (%): 233.4 Total Delay for Signalled Lanes (pcuHr): 0.70 Cycle Time (s): 68
PRC Over All Lanes (%): 11.4 Total Delay Over All Lanes(pcuHr): 23.79

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	655	204	251	1110
	B	748	0	0	96	844
	C	372	40	0	46	458
	D	226	131	21	0	378
	Tot.	1346	826	225	393	2790

Traffic Flows, Difference

Difference :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 2: '2037 DS PM' (FG2: '2037 DS PM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**	**-**	**-**	**-**	**84.7%**	**26.2**	**-**	**-**
A20 / A261 Newingreen	**-**	**-**	**-**	**-**	**-**	**-**	**84.7%**	**26.2**	**-**	**-**
1/1	A20 Ashford Rd SB Left	U	43	835	1952	1130	73.9%	4.1	17.8	14.2
1/3+1/2	A20 Ashford Rd SB Right Ahead	U	20	678	1879:1980	519+307	82.0 : 82.0%	6.9	36.4	10.6
2/2+2/1	A20 Ashford Rd EB Left Right Ahead	U	8:32	257	1884:1874	206+105	82.6 : 82.6%	3.9	54.1	5.6
3/1+3/2	Stone St Ahead Left Right	U	7	211	1896:1983	200+209	51.6 : 51.7%	2.4	41.3	2.7
4/2+4/1	A261 Hythe Rd Right Ahead Left	U	21	816	1851:1882	478+485	84.7 : 84.7%	8.2	36.3	10.5
5/1	A20 Ashford Rd SB Exit	U	-	361	Inf	Inf	0.0%	0.0	0.0	0.0
5/2	A20 Ashford Rd SB Exit	U	-	552	Inf	Inf	0.0%	0.0	0.0	0.0
6/1	A20 Ashford Rd EB Exit Ahead	U	57	622	1980	1511	41.2%	0.4	2.2	1.2
7/1	Stone St Exit	U	-	286	Inf	Inf	0.0%	0.0	0.0	0.0
8/1	A261 Hythe Rd Exit	U	-	976	Inf	Inf	0.0%	0.0	0.0	0.0
9/1	Ahead	U	57	257	1980	1511	17.0%	0.3	3.9	1.5
10/1		U	-	622	Inf	Inf	0.0%	0.0	0.0	0.0
Ped Link: P1	Unnamed Ped Link	-	6	0	-	0	0.0%	-	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 6.3 Total Delay for Signalled Lanes (pcuHr): 25.51 Cycle Time (s): 76
C1 Stream: 2 PRC for Signalled Lanes (%): 118.6 Total Delay for Signalled Lanes (pcuHr): 0.66 Cycle Time (s): 76
PRC Over All Lanes (%): 6.3 Total Delay Over All Lanes(pcuHr): 26.17

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	835	252	426	1513
	B	663	0	0	153	816
	C	163	5	0	43	211
	D	87	136	34	0	257
	Tot.	913	976	286	622	2797

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 3: 'Arcadis 2044 With Link Road AM Peak' (FG3: 'Arcadis 2044 With Link Road AM Peak', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**	**-**	**-**	**-**	**86.0%**	**29.2**	**-**	**-**
A20 / A261 Newingreen	**-**	**-**	**-**	**-**	**-**	**-**	**86.0%**	**29.2**	**-**	**-**
1/1	A20 Ashford Rd SB Left	U	32	663	1952	947	70.0%	3.7	19.9	10.9
1/3+1/2	A20 Ashford Rd SB Right Ahead	U	10	451	1879:1980	304+307	84.9 : 62.9%	4.8	38.2	6.1
2/2+2/1	A20 Ashford Rd EB Left Right Ahead	U	7:21	414	1911:1874	212+275	85.0 : 85.0%	4.9	42.7	6.7
3/1+3/2	Stone St Ahead Left Right	U	11	527	1944:1972	305+308	86.0 : 86.0%	6.8	46.3	7.6
4/2+4/1	A261 Hythe Rd Right Ahead Left	U	20	897	1851:1861	521+525	85.8 : 85.8%	8.2	33.1	10.5
5/1	A20 Ashford Rd SB Exit	U	-	678	Inf	Inf	0.0%	0.0	0.0	0.0
5/2	A20 Ashford Rd SB Exit	U	-	786	Inf	Inf	0.0%	0.0	0.0	0.0
6/1	A20 Ashford Rd EB Exit Ahead	U	49	409	1980	1456	28.1%	0.2	2.0	0.6
7/1	Stone St Exit	U	-	215	Inf	Inf	0.0%	0.0	0.0	0.0
8/1	A261 Hythe Rd Exit	U	-	864	Inf	Inf	0.0%	0.0	0.0	0.0
9/1	Ahead	U	49	414	1980	1456	28.4%	0.5	4.7	2.7
10/1		U	-	409	Inf	Inf	0.0%	0.0	0.0	0.0
Ped Link: P1	Unnamed Ped Link	-	6	0	-	0	0.0%	-	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 4.7 Total Delay for Signalled Lanes (pcuHr): 28.39 Cycle Time (s): 68
C1 Stream: 2 PRC for Signalled Lanes (%): 216.5 Total Delay for Signalled Lanes (pcuHr): 0.77 Cycle Time (s): 68
PRC Over All Lanes (%): 4.7 Total Delay Over All Lanes(pcuHr): 29.16

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	663	193	258	1114
	B	793	0	0	104	897
	C	437	43	0	47	527
	D	234	158	22	0	414
	Tot.	1464	864	215	409	2952

Traffic Flows, Difference

Difference :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 4: 'Arcadis 2044 With Link Road PM Peak' (FG4: 'Arcadis 2044 With Link Road KCC PM Peak', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**	**-**	**-**	**-**	**87.8%**	**30.8**	**-**	**-**
A20 / A261 Newingreen	**-**	**-**	**-**	**-**	**-**	**-**	**87.8%**	**30.8**	**-**	**-**
1/1	A20 Ashford Rd SB Left	U	42	882	1952	1104	79.9%	5.2	21.0	16.6
1/3+1/2	A20 Ashford Rd SB Right Ahead	U	19	742	1879:1980	494+351	87.8 : 87.8%	8.7	42.2	12.0
2/2+2/1	A20 Ashford Rd EB Left Right Ahead	U	9:32	272	1880:1874	225+84	87.8 : 87.8%	4.9	65.3	7.2
3/1+3/2	Stone St Ahead Left Right	U	7	201	1888:1967	199+207	49.3 : 49.7%	2.3	40.9	2.5
4/2+4/1	A261 Hythe Rd Right Ahead Left	U	21	842	1851:1902	477+491	87.0 : 87.0%	9.0	38.4	11.4
5/1	A20 Ashford Rd SB Exit	U	-	300	Inf	Inf	0.0%	0.0	0.0	0.0
5/2	A20 Ashford Rd SB Exit	U	-	532	Inf	Inf	0.0%	0.0	0.0	0.0
6/1	A20 Ashford Rd EB Exit Ahead	U	57	696	1980	1511	46.1%	0.5	2.4	1.3
7/1	Stone St Exit	U	-	350	Inf	Inf	0.0%	0.0	0.0	0.0
8/1	A261 Hythe Rd Exit	U	-	1061	Inf	Inf	0.0%	0.0	0.0	0.0
9/1	Ahead	U	57	272	1980	1511	18.0%	0.3	3.9	1.6
10/1		U	-	696	Inf	Inf	0.0%	0.0	0.0	0.0
Ped Link: P1	Unnamed Ped Link	-	6	0	-	0	0.0%	-	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 2.5 Total Delay for Signalled Lanes (pcuHr): 30.04 Cycle Time (s): 76
C1 Stream: 2 PRC for Signalled Lanes (%): 95.4 Total Delay for Signalled Lanes (pcuHr): 0.76 Cycle Time (s): 76
PRC Over All Lanes (%): 2.5 Total Delay Over All Lanes(pcuHr): 30.80

Traffic Flows, Desired

Desired Flow :

		Destination				
Origin		A	B	C	D	Tot.
	A	0	882	308	434	1624
	B	625	0	0	217	842
	C	133	23	0	45	201
	D	74	156	42	0	272
	Tot.	832	1061	350	696	2939

Traffic Flows, Difference

Difference :

		Destination				
Origin		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 5: '2044 10k DS AM' (FG5: '2044 10k DS AM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**	**-**	**-**	**-**	**85.4%**	**28.5**	**-**	**-**
A20 / A261 Newingreen	**-**	**-**	**-**	**-**	**-**	**-**	**85.4%**	**28.5**	**-**	**-**
1/1	A20 Ashford Rd SB Left	U	32	663	1952	947	70.0%	3.7	19.9	10.9
1/3+1/2	A20 Ashford Rd SB Right Ahead	U	10	450	1879:1980	304+298	85.2 : 64.1%	4.9	38.8	6.2
2/2+2/1	A20 Ashford Rd EB Left Right Ahead	U	7:21	415	1912:1874	212+285	83.6 : 83.6%	4.7	40.5	6.4
3/1+3/2	Stone St Ahead Left Right	U	11	519	1943:1973	305+308	84.7 : 84.7%	6.5	44.8	7.3
4/2+4/1	A261 Hythe Rd Right Ahead Left	U	20	886	1851:1858	518+520	85.4 : 85.4%	8.1	32.8	10.3
5/1	A20 Ashford Rd SB Exit	U	-	679	Inf	Inf	0.0%	0.0	0.0	0.0
5/2	A20 Ashford Rd SB Exit	U	-	780	Inf	Inf	0.0%	0.0	0.0	0.0
6/1	A20 Ashford Rd EB Exit Ahead	U	49	401	1980	1456	27.5%	0.2	2.0	0.6
7/1	Stone St Exit	U	-	212	Inf	Inf	0.0%	0.0	0.0	0.0
8/1	A261 Hythe Rd Exit	U	-	861	Inf	Inf	0.0%	0.0	0.0	0.0
9/1	Ahead	U	49	415	1980	1456	28.5%	0.5	4.7	2.7
10/1		U	-	401	Inf	Inf	0.0%	0.0	0.0	0.0
Ped Link: P1	Unnamed Ped Link	-	6	0	-	0	0.0%	-	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 5.4 Total Delay for Signalled Lanes (pcuHr): 27.71 Cycle Time (s): 68
C1 Stream: 2 PRC for Signalled Lanes (%): 215.7 Total Delay for Signalled Lanes (pcuHr): 0.77 Cycle Time (s): 68
PRC Over All Lanes (%): 5.4 Total Delay Over All Lanes(pcuHr): 28.48

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	663	191	259	1113
	B	791	0	0	95	886
	C	430	42	0	47	519
	D	238	156	21	0	415
	Tot.	1459	861	212	401	2933

Traffic Flows, Difference

Difference :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 6: '2044 10K DS PM' (FG6: '2044 10K DS PM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**	**-**	**-**	**-**	**86.8%**	**29.5**	**-**	**-**
A20 / A261 Newingreen	**-**	**-**	**-**	**-**	**-**	**-**	**86.8%**	**29.5**	**-**	**-**
1/1	A20 Ashford Rd SB Left	U	42	876	1952	1104	79.3%	5.0	20.8	16.2
1/3+1/2	A20 Ashford Rd SB Right Ahead	U	19	732	1879:1980	494+355	86.2 : 86.2%	8.2	40.3	11.5
2/2+2/1	A20 Ashford Rd EB Left Right Ahead	U	9:32	267	1878:1874	225+86	85.7 : 85.7%	4.5	60.2	6.6
3/1+3/2	Stone St Ahead Left Right	U	7	192	1886:1971	199+207	47.3 : 47.2%	2.2	40.4	2.4
4/2+4/1	A261 Hythe Rd Right Ahead Left	U	21	839	1851:1903	477+490	86.8 : 86.8%	8.9	38.1	11.3
5/1	A20 Ashford Rd SB Exit	U	-	294	Inf	Inf	0.0%	0.0	0.0	0.0
5/2	A20 Ashford Rd SB Exit	U	-	532	Inf	Inf	0.0%	0.0	0.0	0.0
6/1	A20 Ashford Rd EB Exit Ahead	U	57	688	1980	1511	45.5%	0.5	2.4	1.2
7/1	Stone St Exit	U	-	348	Inf	Inf	0.0%	0.0	0.0	0.0
8/1	A261 Hythe Rd Exit	U	-	1044	Inf	Inf	0.0%	0.0	0.0	0.0
9/1	Ahead	U	57	267	1980	1511	17.7%	0.3	3.9	1.6
10/1		U	-	688	Inf	Inf	0.0%	0.0	0.0	0.0
Ped Link: P1	Unnamed Ped Link	-	6	0	-	0	0.0%	-	-	-

C1 Stream: 1 PRC for Signalled Lanes (%): 3.7 Total Delay for Signalled Lanes (pcuHr): 28.75 Cycle Time (s): 76
C1 Stream: 2 PRC for Signalled Lanes (%): 97.7 Total Delay for Signalled Lanes (pcuHr): 0.74 Cycle Time (s): 76
PRC Over All Lanes (%): 3.7 Total Delay Over All Lanes(pcuHr): 29.49

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	876	306	426	1608
	B	621	0	0	218	839
	C	131	17	0	44	192
	D	74	151	42	0	267
	Tot.	826	1044	348	688	2906

Traffic Flows, Difference

Difference :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

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Filename: J12 Aldington Rd_Lympne Hill - Updated Geometry.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J12 Aldington Rd - Lympne Hill
Report generation date: 10/11/2021 16:53:46

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Stream B-C	D1	0.6	7.98	0.36	A	D2	0.2	5.91	0.14	A
Stream B-A		0.0	9.96	0.03	A		0.0	9.04	0.01	A
Stream C-AB		0.3	7.52	0.21	A		0.9	10.62	0.46	B
	2037 DM									
Stream B-C	D3	1.3	14.91	0.57	B	D4	0.6	11.74	0.39	B
Stream B-A		0.2	15.12	0.14	C		0.1	17.74	0.10	C
Stream C-AB		1.0	13.17	0.48	B		2.8	28.33	0.73	D
	2037 DS									
Stream B-C	D5	1.6	13.97	0.62	B	D6	0.8	9.59	0.46	A
Stream B-A		0.1	12.94	0.12	B		0.1	11.71	0.07	B
Stream C-AB		1.7	15.43	0.62	C		2.7	21.54	0.73	C
	2044 8.5k DM									
Stream B-C	D7	1.3	14.98	0.57	B	D8	0.7	11.77	0.40	B
Stream B-A		0.2	15.00	0.14	B		0.1	17.81	0.11	C
Stream C-AB		1.0	13.08	0.49	B		3.0	29.52	0.74	D
	2044 8.5k DS									
Stream B-C	D9	3.1	22.07	0.76	C	D10	1.1	11.42	0.54	B
Stream B-A		0.2	18.46	0.17	C		0.1	14.12	0.09	B
Stream C-AB		2.6	20.74	0.72	C		7.9	55.13	0.91	F
	2044 10k DM									
Stream B-C		1.3	14.83	0.57	B		0.6	11.73	0.40	B

Stream B-A	D11	0.2	14.66	0.13	B	D12	0.1	17.62	0.10	C
Stream C-AB		0.9	12.48	0.45	B		2.8	28.63	0.73	D
	2044 10k DS									
Stream B-C	D13	3.1	22.45	0.77	C	D14	1.2	11.97	0.56	B
Stream B-A		0.2	19.03	0.17	C		0.1	14.49	0.09	B
Stream C-AB		2.9	22.21	0.74	C		8.5	58.37	0.92	F

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

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

File summary

File Description

Title	J12 Otterpool Park_Base Model
Location	Aldington Rd - Lympne Hill
Site number	
Date	09/08/2017
Version	
Status	Base
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J12 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D3	2037 DM	AM	J12 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D5	2037 DS	AM	J12 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D7	2044 8.5k DM	AM	J12 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D9	2044 8.5k DS	AM	J12 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D11	2044 10k DM	AM	J12 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D13	2044 10k DS	AM	J12 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓

D14	2044 10k DS	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Aldington Road Westbound		Major
B	Lympne Hill		Minor
C	Aldington Road Eastbound		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			50.6	✓	1.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	9.22	5.27	3.51	2.68	✓	2.00	34	32

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	513	0.093	0.236	0.149	0.337
B-C	724	0.111	0.280	-	-
C-B	603	0.234	0.234	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario	Time Period	Description	Traffic	Start time	Finish time	Time segment	Run

	name	name		profile type	(HH:mm)	(HH:mm)	length (min)	automatically
D1	2018	AM	J12 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	46	100.000
B		ONE HOUR	✓	241	100.000
C		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	4	42
	B	11	0	230
	C	69	113	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	25	2
	B	18	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.36	7.98	0.6	A	211	317
B-A	0.03	9.96	0.0	A	10	15
C-AB	0.21	7.52	0.3	A	106	159
C-A					61	92
A-B					4	6
A-C					39	58

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	173	43	711	0.244	172	0.0	0.3	6.673	A
B-A	8	2	396	0.021	8	0.0	0.0	9.286	A
C-AB	86	22	602	0.143	85	0.0	0.2	6.957	A
C-A	51	13			51				
A-B	3	0.75			3				

A-C	32	8			32				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	207	52	708	0.292	206	0.3	0.4	7.174	A
B-A	10	2	387	0.026	10	0.0	0.0	9.547	A
C-AB	103	26	604	0.171	103	0.2	0.2	7.190	A
C-A	60	15			60				
A-B	4	1			4				
A-C	38	9			38				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	253	63	704	0.360	253	0.4	0.6	7.962	A
B-A	12	3	373	0.032	12	0.0	0.0	9.961	A
C-AB	128	32	607	0.211	128	0.2	0.3	7.506	A
C-A	73	18			73				
A-B	4	1			4				
A-C	46	12			46				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	253	63	704	0.360	253	0.6	0.6	7.982	A
B-A	12	3	373	0.032	12	0.0	0.0	9.964	A
C-AB	128	32	607	0.211	128	0.3	0.3	7.515	A
C-A	73	18			73				
A-B	4	1			4				
A-C	46	12			46				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	207	52	708	0.292	207	0.6	0.4	7.199	A
B-A	10	2	387	0.026	10	0.0	0.0	9.553	A
C-AB	103	26	604	0.171	104	0.3	0.2	7.203	A
C-A	60	15			60				
A-B	4	1			4				
A-C	38	9			38				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	173	43	711	0.244	174	0.4	0.3	6.707	A
B-A	8	2	395	0.021	8	0.0	0.0	9.299	A
C-AB	86	22	602	0.143	86	0.2	0.2	6.978	A
C-A	51	13			51				
A-B	3	0.75			3				
A-C	32	8			32				

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	40	100.000
B		ONE HOUR	✓	89	100.000
C		ONE HOUR	✓	309	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	35
	B	2	0	87
	C	63	246	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	1
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.14	5.91	0.2	A	80	120
B-A	0.01	9.04	0.0	A	2	3
C-AB	0.46	10.62	0.9	B	235	352
C-A					49	73
A-B					5	7
A-C					32	48

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	708	0.092	65	0.0	0.1	5.592	A
B-A	2	0.38	437	0.003	1	0.0	0.0	8.273	A
C-AB	190	47	611	0.311	188	0.0	0.5	8.476	A
C-A	43	11			43				
A-B	4	0.94			4				
A-C	26	7			26				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	78	20	707	0.111	78	0.1	0.1	5.726	A
B-A	2	0.45	421	0.004	2	0.0	0.0	8.582	A
C-AB	229	57	616	0.372	228	0.5	0.6	9.280	A
C-A	49	12			49				
A-B	4	1			4				
A-C	31	8			31				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	704	0.136	96	0.1	0.2	5.911	A
B-A	2	0.55	401	0.006	2	0.0	0.0	9.037	A
C-AB	285	71	625	0.457	284	0.6	0.9	10.552	B
C-A	55	14			55				
A-B	6	1			6				
A-C	39	10			39				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	704	0.136	96	0.2	0.2	5.913	A
B-A	2	0.55	400	0.006	2	0.0	0.0	9.044	A
C-AB	285	71	625	0.457	285	0.9	0.9	10.616	B
C-A	55	14			55				
A-B	6	1			6				
A-C	39	10			39				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	78	20	707	0.111	78	0.2	0.1	5.731	A
B-A	2	0.45	421	0.004	2	0.0	0.0	8.595	A
C-AB	229	57	616	0.372	230	0.9	0.6	9.356	A
C-A	49	12			49				
A-B	4	1			4				
A-C	31	8			31				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	708	0.092	66	0.1	0.1	5.600	A
B-A	2	0.38	436	0.003	2	0.0	0.0	8.289	A
C-AB	190	47	611	0.311	190	0.6	0.5	8.574	A
C-A	43	11			43				
A-B	4	0.94			4				
A-C	26	7			26				

2037 DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2037 DM	AM	J12 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	448	100.000
B		ONE HOUR	✓	320	100.000
C		ONE HOUR	✓	300	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	10	438
	B	34	0	286
	C	87	213	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	10	3
	B	0	0	1
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.57	14.91	1.3	B	262	394
B-A	0.14	15.12	0.2	C	31	47
C-AB	0.48	13.17	1.0	B	209	313
C-A					67	100
A-B					9	14
A-C					402	603

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	215	54	608	0.354	213	0.0	0.5	9.078	A
B-A	26	6	366	0.070	25	0.0	0.1	10.543	B
C-AB	167	42	542	0.307	165	0.0	0.5	9.499	A
C-A	59	15			59				
A-B	8	2			8				
A-C	330	82			330				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	257	64	586	0.439	256	0.5	0.8	10.876	B
B-A	31	8	332	0.092	30	0.1	0.1	11.952	B
C-AB	203	51	536	0.378	202	0.5	0.6	10.769	B
C-A	67	17			67				
A-B	9	2			9				
A-C	394	98			394				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	315	79	556	0.566	313	0.8	1.3	14.683	B
B-A	37	9	277	0.135	37	0.1	0.2	15.025	C
C-AB	257	64	531	0.484	256	0.6	1.0	13.039	B
C-A	73	18			73				
A-B	11	3			11				
A-C	482	121			482				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	315	79	556	0.566	315	1.3	1.3	14.913	B
B-A	37	9	275	0.136	37	0.2	0.2	15.121	C
C-AB	257	64	531	0.484	257	1.0	1.0	13.173	B
C-A	73	18			73				
A-B	11	3			11				
A-C	482	121			482				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	257	64	586	0.439	259	1.3	0.8	11.070	B
B-A	31	8	330	0.093	31	0.2	0.1	12.024	B
C-AB	203	51	536	0.378	204	1.0	0.7	10.909	B
C-A	67	17			67				
A-B	9	2			9				
A-C	394	98			394				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	215	54	607	0.354	216	0.8	0.6	9.225	A
B-A	26	6	365	0.070	26	0.1	0.1	10.602	B
C-AB	167	42	542	0.307	167	0.7	0.5	9.630	A
C-A	59	15			59				
A-B	8	2			8				
A-C	330	82			330				

2037 DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		9.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2037 DM	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	671	100.000
B		ONE HOUR	✓	200	100.000
C		ONE HOUR	✓	333	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	63	608
	B	21	0	179
	C	50	283	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	2
	B	0	0	1
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.39	11.74	0.6	B	164	246
B-A	0.10	17.74	0.1	C	19	29
C-AB	0.73	28.33	2.8	D	276	415
C-A					29	44
A-B					58	87
A-C					558	837

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	135	34	572	0.236	134	0.0	0.3	8.187	A
B-A	16	4	323	0.049	16	0.0	0.1	11.714	B
C-AB	220	55	500	0.441	217	0.0	0.8	12.620	B
C-A	30	8			30				
A-B	47	12			47				
A-C	458	114			458				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	40	544	0.296	160	0.3	0.4	9.381	A
B-A	19	5	283	0.067	19	0.1	0.1	13.618	B
C-AB	268	67	485	0.553	266	0.8	1.3	16.385	C
C-A	31	8			31				
A-B	57	14			57				
A-C	547	137			547				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	197	49	504	0.391	196	0.4	0.6	11.672	B
B-A	23	6	228	0.102	23	0.1	0.1	17.560	C
C-AB	341	85	468	0.729	335	1.3	2.6	26.433	D
C-A	26	6			26				
A-B	69	17			69				
A-C	669	167			669				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	197	49	504	0.391	197	0.6	0.6	11.745	B
B-A	23	6	226	0.102	23	0.1	0.1	17.742	C
C-AB	341	85	468	0.729	340	2.6	2.8	28.327	D
C-A	26	6			26				
A-B	69	17			69				
A-C	669	167			669				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	40	543	0.296	162	0.6	0.4	9.455	A
B-A	19	5	281	0.067	19	0.1	0.1	13.778	B
C-AB	268	67	485	0.553	274	2.8	1.4	17.550	C
C-A	31	8			31				
A-B	57	14			57				
A-C	547	137			547				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	135	34	572	0.236	135	0.4	0.3	8.256	A
B-A	16	4	321	0.049	16	0.1	0.1	11.804	B
C-AB	220	55	500	0.441	222	1.4	0.8	13.097	B
C-A	30	8			30				
A-B	47	12			47				
A-C	458	114			458				

2037 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		12.66	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 DS	AM	J12 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	80	100.000
B		ONE HOUR	✓	412	100.000
C		ONE HOUR	✓	375	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	10	70
	B	34	0	378
	C	47	328	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	10	0
	B	0	0	1
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.62	13.97	1.6	B	347	520
B-A	0.12	12.94	0.1	B	31	47
C-AB	0.62	15.43	1.7	C	313	470
C-A					31	46
A-B					9	14
A-C					64	96

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	285	71	688	0.413	282	0.0	0.7	8.798	A
B-A	26	6	403	0.064	25	0.0	0.1	9.535	A
C-AB	253	63	604	0.419	250	0.0	0.7	10.106	B
C-A	29	7			29				
A-B	8	2			8				
A-C	53	13			53				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	340	85	682	0.498	339	0.7	1.0	10.441	B
B-A	31	8	371	0.082	30	0.1	0.1	10.578	B
C-AB	306	76	607	0.503	304	0.7	1.0	11.838	B
C-A	32	8			32				
A-B	9	2			9				
A-C	63	16			63				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	416	104	674	0.618	414	1.0	1.6	13.726	B
B-A	37	9	317	0.118	37	0.1	0.1	12.839	B
C-AB	381	95	615	0.620	379	1.0	1.6	15.128	C
C-A	32	8			32				
A-B	11	3			11				
A-C	77	19			77				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	416	104	674	0.618	416	1.6	1.6	13.965	B
B-A	37	9	316	0.119	37	0.1	0.1	12.937	B
C-AB	381	95	615	0.620	381	1.6	1.7	15.425	C
C-A	32	8			32				
A-B	11	3			11				
A-C	77	19			77				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	340	85	682	0.498	342	1.6	1.0	10.657	B
B-A	31	8	369	0.083	31	0.1	0.1	10.660	B
C-AB	306	76	607	0.503	308	1.7	1.1	12.126	B
C-A	32	8			32				
A-B	9	2			9				
A-C	63	16			63				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	285	71	688	0.414	286	1.0	0.7	8.974	A
B-A	26	6	401	0.064	26	0.1	0.1	9.606	A
C-AB	253	63	604	0.419	254	1.1	0.8	10.347	B
C-A	29	7			29				
A-B	8	2			8				
A-C	53	13			53				

2037 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		13.76	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 DS	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	108	100.000
B		ONE HOUR	✓	306	100.000
C		ONE HOUR	✓	424	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	63	45
	B	21	0	285
	C	44	380	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.46	9.59	0.8	A	262	392
B-A	0.07	11.71	0.1	B	19	29
C-AB	0.73	21.54	2.7	C	364	547
C-A					25	37
A-B					58	87
A-C					41	62

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	215	54	701	0.306	213	0.0	0.4	7.346	A
B-A	16	4	397	0.040	16	0.0	0.0	9.435	A
C-AB	294	74	600	0.490	290	0.0	1.0	11.473	B
C-A	25	6			25				
A-B	47	12			47				
A-C	34	8			34				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	256	64	696	0.368	256	0.4	0.6	8.161	A
B-A	19	5	370	0.051	19	0.0	0.1	10.236	B
C-AB	355	89	604	0.588	353	1.0	1.4	14.285	B
C-A	26	6			26				
A-B	57	14			57				
A-C	40	10			40				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	314	78	689	0.455	313	0.6	0.8	9.537	A
B-A	23	6	332	0.070	23	0.1	0.1	11.640	B
C-AB	444	111	611	0.727	439	1.4	2.6	20.555	C
C-A	23	6			23				
A-B	69	17			69				
A-C	50	12			50				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	314	78	689	0.455	314	0.8	0.8	9.588	A
B-A	23	6	331	0.070	23	0.1	0.1	11.706	B
C-AB	444	111	611	0.727	444	2.6	2.7	21.544	C
C-A	23	6			23				
A-B	69	17			69				
A-C	50	12			50				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	256	64	696	0.368	257	0.8	0.6	8.221	A
B-A	19	5	368	0.051	19	0.1	0.1	10.312	B
C-AB	355	89	604	0.588	360	2.7	1.5	15.058	C
C-A	26	6			26				
A-B	57	14			57				
A-C	40	10			40				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	215	54	701	0.306	215	0.6	0.4	7.422	A
B-A	16	4	395	0.040	16	0.1	0.0	9.501	A
C-AB	294	74	600	0.490	296	1.5	1.0	11.919	B
C-A	25	6			25				
A-B	47	12			47				
A-C	34	8			34				

2044 8.5k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2044 8.5k DM	AM	J12 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	418	100.000
B		ONE HOUR	✓	329	100.000
C		ONE HOUR	✓	306	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	10	408
	B	35	0	294
	C	88	218	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	4
	B	0	0	1
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.57	14.98	1.3	B	270	405
B-A	0.14	15.00	0.2	B	32	48
C-AB	0.49	13.08	1.0	B	214	321
C-A					67	101
A-B					9	14
A-C					374	562

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	221	55	613	0.361	219	0.0	0.6	9.091	A
B-A	26	7	370	0.071	26	0.0	0.1	10.472	B
C-AB	171	43	547	0.312	169	0.0	0.5	9.462	A
C-A	60	15			60				
A-B	8	2			8				
A-C	307	77			307				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	264	66	593	0.446	263	0.6	0.8	10.901	B
B-A	31	8	335	0.094	31	0.1	0.1	11.859	B
C-AB	208	52	542	0.383	207	0.5	0.6	10.716	B
C-A	68	17			68				
A-B	9	2			9				
A-C	367	92			367				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	324	81	564	0.574	322	0.8	1.3	14.735	B
B-A	39	10	280	0.138	38	0.1	0.2	14.898	B
C-AB	263	66	539	0.488	262	0.6	1.0	12.948	B
C-A	74	18			74				
A-B	11	3			11				
A-C	449	112			449				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	324	81	564	0.574	324	1.3	1.3	14.978	B
B-A	39	10	279	0.138	39	0.2	0.2	14.996	B
C-AB	263	66	539	0.488	263	1.0	1.0	13.080	B
C-A	74	18			74				
A-B	11	3			11				
A-C	449	112			449				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	264	66	592	0.446	266	1.3	0.8	11.103	B
B-A	31	8	334	0.094	32	0.2	0.1	11.934	B
C-AB	208	52	542	0.383	209	1.0	0.7	10.858	B
C-A	68	17			68				
A-B	9	2			9				
A-C	367	92			367				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	221	55	613	0.361	222	0.8	0.6	9.245	A
B-A	26	7	368	0.072	26	0.1	0.1	10.534	B
C-AB	171	43	547	0.312	171	0.7	0.5	9.595	A
C-A	60	15			60				
A-B	8	2			8				
A-C	307	77			307				

2044 8.5k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		9.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2044 8.5k DM	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	657	100.000
B		ONE HOUR	✓	205	100.000
C		ONE HOUR	✓	342	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	64	593
	B	22	0	183
	C	51	291	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	1
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.40	11.77	0.7	B	168	252
B-A	0.11	17.81	0.1	C	20	30
C-AB	0.74	29.52	3.0	D	285	427
C-A					29	43
A-B					59	88
A-C					544	816

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	575	0.240	137	0.0	0.3	8.197	A
B-A	17	4	323	0.051	16	0.0	0.1	11.718	B
C-AB	227	57	503	0.451	224	0.0	0.8	12.755	B
C-A	31	8			31				
A-B	48	12			48				
A-C	446	112			446				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	165	41	547	0.301	164	0.3	0.4	9.396	A
B-A	20	5	284	0.070	20	0.1	0.1	13.636	B
C-AB	276	69	489	0.565	274	0.8	1.3	16.676	C
C-A	31	8			31				
A-B	58	14			58				
A-C	533	133			533				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	507	0.397	201	0.4	0.6	11.699	B
B-A	24	6	228	0.106	24	0.1	0.1	17.611	C
C-AB	351	88	473	0.743	345	1.3	2.8	27.340	D
C-A	25	6			25				
A-B	70	18			70				
A-C	653	163			653				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	507	0.397	201	0.6	0.7	11.772	B
B-A	24	6	226	0.107	24	0.1	0.1	17.808	C
C-AB	351	88	473	0.743	351	2.8	3.0	29.523	D
C-A	25	6			25				
A-B	70	18			70				
A-C	653	163			653				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	165	41	546	0.301	165	0.7	0.4	9.469	A
B-A	20	5	281	0.070	20	0.1	0.1	13.808	B
C-AB	276	69	489	0.565	282	3.0	1.4	17.987	C
C-A	31	8			31				
A-B	58	14			58				
A-C	533	133			533				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	574	0.240	138	0.4	0.3	8.266	A
B-A	17	4	321	0.052	17	0.1	0.1	11.815	B
C-AB	227	57	503	0.451	229	1.4	0.9	13.267	B
C-A	31	8			31				
A-B	48	12			48				
A-C	446	112			446				

2044 8.5k DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		18.99	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 8.5k DS	AM	J12 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	84	100.000
B		ONE HOUR	✓	504	100.000
C		ONE HOUR	✓	425	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	9	75
	B	35	0	469
	C	45	380	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0

	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.76	22.07	3.1	C	430	646
B-A	0.17	18.46	0.2	C	32	48
C-AB	0.72	20.74	2.6	C	364	547
C-A					25	38
A-B					8	12
A-C					69	103

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	353	88	694	0.509	349	0.0	1.0	10.314	B
B-A	26	7	375	0.070	26	0.0	0.1	10.304	B
C-AB	294	74	605	0.486	290	0.0	0.9	11.317	B
C-A	26	6			26				
A-B	7	2			7				
A-C	56	14			56				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	422	105	688	0.613	420	1.0	1.5	13.313	B
B-A	31	8	327	0.096	31	0.1	0.1	12.173	B
C-AB	355	89	609	0.583	354	0.9	1.4	13.995	B
C-A	27	7			27				
A-B	8	2			8				
A-C	67	17			67				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	516	129	678	0.762	511	1.5	2.9	20.839	C
B-A	39	10	239	0.161	38	0.1	0.2	17.889	C
C-AB	444	111	617	0.719	440	1.4	2.5	19.859	C
C-A	24	6			24				
A-B	10	2			10				
A-C	83	21			83				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	516	129	678	0.762	516	2.9	3.1	22.067	C
B-A	39	10	233	0.165	39	0.2	0.2	18.463	C
C-AB	444	111	617	0.719	444	2.5	2.6	20.742	C
C-A	24	6			24				
A-B	10	2			10				

A-C	83	21			83				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	422	105	687	0.613	427	3.1	1.6	14.116	B
B-A	31	8	321	0.098	32	0.2	0.1	12.452	B
C-AB	355	89	609	0.583	360	2.6	1.5	14.704	B
C-A	27	7			27				
A-B	8	2			8				
A-C	67	17			67				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	353	88	694	0.509	355	1.6	1.1	10.702	B
B-A	26	7	371	0.071	26	0.1	0.1	10.441	B
C-AB	294	74	605	0.486	296	1.5	1.0	11.745	B
C-A	26	6			26				
A-B	7	2			7				
A-C	56	14			56				

2044 8.5k DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		31.62	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2044 8.5k DS	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	127	100.000
B		ONE HOUR	✓	355	100.000
C		ONE HOUR	✓	499	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	64	63
	B	22	0	333
	C	28	471	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0

	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.54	11.42	1.1	B	306	458
B-A	0.09	14.12	0.1	B	20	30
C-AB	0.91	55.13	7.9	F	448	672
C-A					10	15
A-B					59	88
A-C					58	87

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	251	63	697	0.360	248	0.0	0.6	7.993	A
B-A	17	4	369	0.045	16	0.0	0.0	10.190	B
C-AB	362	91	594	0.610	356	0.0	1.5	14.821	B
C-A	13	3			13				
A-B	48	12			48				
A-C	47	12			47				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	299	75	691	0.433	299	0.6	0.8	9.159	A
B-A	20	5	335	0.059	20	0.0	0.1	11.411	B
C-AB	437	109	595	0.734	433	1.5	2.6	21.632	C
C-A	12	3			12				
A-B	58	14			58				
A-C	57	14			57				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	367	92	682	0.538	365	0.8	1.1	11.306	B
B-A	24	6	285	0.085	24	0.1	0.1	13.817	B
C-AB	544	136	599	0.909	527	2.6	6.8	43.295	E
C-A	5	1			5				
A-B	70	18			70				
A-C	69	17			69				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	367	92	682	0.538	367	1.1	1.1	11.423	B
B-A	24	6	279	0.087	24	0.1	0.1	14.123	B
C-AB	544	136	599	0.909	540	6.8	7.9	55.125	F
C-A	5	1			5				
A-B	70	18			70				

A-C	69	17			69				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	299	75	690	0.434	301	1.1	0.8	9.277	A
B-A	20	5	327	0.061	20	0.1	0.1	11.743	B
C-AB	437	109	595	0.734	456	7.9	3.1	28.867	D
C-A	12	3			12				
A-B	58	14			58				
A-C	57	14			57				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	251	63	697	0.360	252	0.8	0.6	8.105	A
B-A	17	4	365	0.045	17	0.1	0.0	10.333	B
C-AB	362	91	594	0.610	368	3.1	1.7	16.359	C
C-A	13	3			13				
A-B	48	12			48				
A-C	47	12			47				

2044 10k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2044 10k DM	AM	J12 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	440	100.000
B		ONE HOUR	✓	323	100.000
C		ONE HOUR	✓	286	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	25	415
	B	34	0	289
	C	86	200	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	4
	B	0	0	1
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.57	14.83	1.3	B	265	398
B-A	0.13	14.66	0.2	B	31	47
C-AB	0.45	12.48	0.9	B	195	293
C-A					67	101
A-B					23	34
A-C					381	571

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	218	54	611	0.356	215	0.0	0.5	9.059	A
B-A	26	6	372	0.069	25	0.0	0.1	10.372	B
C-AB	156	39	541	0.288	154	0.0	0.4	9.264	A
C-A	59	15			59				
A-B	19	5			19				
A-C	312	78			312				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	260	65	590	0.440	259	0.5	0.8	10.844	B
B-A	31	8	338	0.090	30	0.1	0.1	11.697	B
C-AB	190	47	535	0.355	189	0.4	0.6	10.403	B
C-A	68	17			68				
A-B	22	6			22				
A-C	373	93			373				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	318	80	561	0.568	316	0.8	1.3	14.604	B
B-A	37	9	284	0.132	37	0.1	0.1	14.571	B
C-AB	240	60	528	0.454	238	0.6	0.9	12.380	B
C-A	75	19			75				
A-B	28	7			28				
A-C	457	114			457				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	318	80	561	0.568	318	1.3	1.3	14.832	B
B-A	37	9	283	0.132	37	0.1	0.2	14.657	B
C-AB	240	60	528	0.454	240	0.9	0.9	12.483	B
C-A	75	19			75				
A-B	28	7			28				
A-C	457	114			457				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	260	65	590	0.441	262	1.3	0.8	11.038	B
B-A	31	8	337	0.091	31	0.2	0.1	11.765	B
C-AB	190	47	535	0.355	191	0.9	0.6	10.516	B
C-A	68	17			68				
A-B	22	6			22				
A-C	373	93			373				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	218	54	610	0.356	219	0.8	0.6	9.210	A
B-A	26	6	371	0.069	26	0.1	0.1	10.427	B
C-AB	156	39	541	0.288	157	0.6	0.4	9.374	A
C-A	59	15			59				
A-B	19	5			19				
A-C	312	78			312				

2044 10k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		9.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 10k DM	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	659	100.000
B		ONE HOUR	✓	203	100.000
C		ONE HOUR	✓	337	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	63	596
	B	21	0	182
	C	50	287	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	1
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.40	11.73	0.6	B	167	251
B-A	0.10	17.62	0.1	C	19	29
C-AB	0.73	28.63	2.8	D	280	421
C-A					29	43
A-B					58	87
A-C					547	820

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	137	34	575	0.238	136	0.0	0.3	8.183	A
B-A	16	4	324	0.049	16	0.0	0.1	11.675	B
C-AB	224	56	502	0.445	220	0.0	0.8	12.654	B
C-A	30	8			30				
A-B	47	12			47				
A-C	449	112			449				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	164	41	547	0.299	163	0.3	0.4	9.373	A
B-A	19	5	284	0.066	19	0.1	0.1	13.556	B
C-AB	272	68	487	0.558	270	0.8	1.3	16.459	C
C-A	31	8			31				
A-B	57	14			57				
A-C	536	134			536				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	200	50	508	0.395	200	0.4	0.6	11.654	B
B-A	23	6	229	0.101	23	0.1	0.1	17.428	C
C-AB	346	86	471	0.734	340	1.3	2.7	26.656	D
C-A	25	6			25				
A-B	69	17			69				
A-C	656	164			656				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	200	50	507	0.395	200	0.6	0.6	11.726	B
B-A	23	6	227	0.102	23	0.1	0.1	17.624	C
C-AB	346	86	471	0.734	345	2.7	2.8	28.628	D
C-A	25	6			25				
A-B	69	17			69				
A-C	656	164			656				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	164	41	547	0.299	164	0.6	0.4	9.445	A
B-A	19	5	282	0.067	19	0.1	0.1	13.718	B
C-AB	272	68	487	0.558	278	2.8	1.4	17.663	C
C-A	31	8			31				
A-B	57	14			57				
A-C	536	134			536				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	137	34	574	0.239	137	0.4	0.3	8.251	A
B-A	16	4	322	0.049	16	0.1	0.1	11.765	B
C-AB	224	56	502	0.445	226	1.4	0.9	13.139	B
C-A	30	8			30				
A-B	47	12			47				
A-C	449	112			449				

2044 10k DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		19.50	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2044 10k DS	AM	J12 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	97	100.000
B		ONE HOUR	✓	503	100.000
C		ONE HOUR	✓	438	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	13	84
	B	34	0	469
	C	50	388	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0

	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.77	22.45	3.1	C	430	646
B-A	0.17	19.03	0.2	C	31	47
C-AB	0.74	22.21	2.9	C	375	562
C-A					27	41
A-B					12	18
A-C					77	116

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	353	88	692	0.510	349	0.0	1.0	10.364	B
B-A	26	6	371	0.069	25	0.0	0.1	10.420	B
C-AB	301	75	605	0.498	297	0.0	1.0	11.573	B
C-A	28	7			28				
A-B	10	2			10				
A-C	63	16			63				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	422	105	686	0.615	420	1.0	1.5	13.422	B
B-A	31	8	321	0.095	30	0.1	0.1	12.369	B
C-AB	365	91	610	0.598	363	1.0	1.5	14.484	B
C-A	29	7			29				
A-B	12	3			12				
A-C	76	19			76				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	516	129	675	0.765	511	1.5	3.0	21.159	C
B-A	37	9	232	0.161	37	0.1	0.2	18.399	C
C-AB	457	114	619	0.739	452	1.5	2.8	21.084	C
C-A	25	6			25				
A-B	14	4			14				
A-C	92	23			92				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	516	129	675	0.765	516	3.0	3.1	22.453	C
B-A	37	9	227	0.165	37	0.2	0.2	19.028	C
C-AB	457	114	619	0.739	457	2.8	2.9	22.208	C
C-A	25	6			25				
A-B	14	4			14				

A-C	92	23			92				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	422	105	685	0.615	427	3.1	1.7	14.261	B
B-A	31	8	315	0.097	31	0.2	0.1	12.674	B
C-AB	365	91	610	0.598	370	2.9	1.6	15.347	C
C-A	29	7			29				
A-B	12	3			12				
A-C	76	19			76				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	353	88	692	0.510	355	1.7	1.1	10.764	B
B-A	26	6	367	0.070	26	0.1	0.1	10.562	B
C-AB	301	75	605	0.498	304	1.6	1.1	12.050	B
C-A	28	7			28				
A-B	10	2			10				
A-C	63	16			63				

2044 10k DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		33.09	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2044 10k DS	PM	J12 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	133	100.000
B		ONE HOUR	✓	366	100.000
C		ONE HOUR	✓	504	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	63	70
	B	21	0	345
	C	30	474	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0

	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.56	11.97	1.2	B	317	475
B-A	0.09	14.49	0.1	B	19	29
C-AB	0.92	58.37	8.5	F	452	678
C-A					10	16
A-B					58	87
A-C					64	96

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	260	65	696	0.373	257	0.0	0.6	8.166	A
B-A	16	4	366	0.043	16	0.0	0.0	10.266	B
C-AB	365	91	594	0.615	359	0.0	1.6	14.991	B
C-A	14	4			14				
A-B	47	12			47				
A-C	53	13			53				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	310	78	690	0.450	309	0.6	0.8	9.439	A
B-A	19	5	330	0.057	19	0.0	0.1	11.549	B
C-AB	441	110	595	0.741	436	1.6	2.7	22.079	C
C-A	12	3			12				
A-B	57	14			57				
A-C	63	16			63				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	380	95	681	0.558	378	0.8	1.2	11.829	B
B-A	23	6	277	0.083	23	0.1	0.1	14.147	B
C-AB	550	137	599	0.917	532	2.7	7.2	45.021	E
C-A	5	1			5				
A-B	69	17			69				
A-C	77	19			77				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	380	95	680	0.558	380	1.2	1.2	11.969	B
B-A	23	6	272	0.085	23	0.1	0.1	14.489	B
C-AB	550	137	599	0.917	545	7.2	8.5	58.373	F
C-A	5	1			5				
A-B	69	17			69				

A-C	77	19			77				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	310	78	689	0.450	312	1.2	0.8	9.576	A
B-A	19	5	321	0.059	19	0.1	0.1	11.913	B
C-AB	441	110	595	0.741	462	8.5	3.2	30.372	D
C-A	12	3			12				
A-B	57	14			57				
A-C	63	16			63				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	260	65	696	0.373	261	0.8	0.6	8.292	A
B-A	16	4	362	0.044	16	0.1	0.0	10.414	B
C-AB	365	91	594	0.615	371	3.2	1.7	16.634	C
C-A	14	4			14				
A-B	47	12			47				
A-C	53	13			53				

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: J13 A261_Hythe Rd_Aldington Rd - Updated Geometry.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J13 A261 Hythe Rd - Aldington Rd
Report generation date: 10/11/2021 16:55:59

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Stream B-C	D1	0.1	12.09	0.05	B	D2	0.1	9.82	0.05	A
Stream B-A		0.6	14.94	0.36	B		0.4	13.32	0.26	B
Stream C-AB		0.0	7.56	0.03	A		0.1	6.76	0.06	A
	2037 DM									
Stream B-C	D3	0.0	0.00	0.00	A	D4	0.0	0.00	0.00	A
Stream B-A		0.9	23.73	0.47	C		0.4	16.68	0.27	C
Stream C-AB		0.0	13.53	0.01	B		0.0	0.00	0.00	A
	2037 DS									
Stream B-C	D5	0.0	0.00	0.00	A	D6	0.0	0.00	0.00	A
Stream B-A		0.9	36.03	0.47	E		0.7	36.06	0.42	E
Stream C-AB		0.0	13.57	0.01	B		0.0	0.00	0.00	A
	2044 8.5k DM									
Stream B-C	D7	0.0	0.00	0.00	A	D8	0.0	0.00	0.00	A
Stream B-A		0.9	25.96	0.49	D		0.4	17.44	0.28	C
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2044 8.5k DS									
Stream B-C	D9	0.0	0.00	0.00	A	D10	0.0	0.00	0.00	A
Stream B-A		1.0	43.89	0.52	E		0.6	38.01	0.37	E
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2044 10k DM									
Stream B-C		0.0	0.00	0.00	A		0.0	0.00	0.00	A

Stream B-A	D11	0.9	26.12	0.49	D	D12	0.4	17.14	0.27	C
Stream C-AB		0.1	8.61	0.04	A		0.0	0.00	0.00	A
	2044 10k DS									
Stream B-C	D13	0.0	0.00	0.00	A	D14	0.0	0.00	0.00	A
Stream B-A		1.1	44.96	0.54	E		0.6	38.40	0.38	E
Stream C-AB		0.0	9.03	0.01	A		0.0	0.00	0.00	A

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

File summary

File Description

Title	J13 Otterpool Park_Base Model
Location	A261 Hythe Road / Aldington Road
Site number	
Date	02/11/2017
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J13 Otterpool Park_AM PEAK	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓
D3	2037 DM	AM	J13 Otterpool Park_AM PEAK	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓
D5	2037 DS	AM	J13 Otterpool Park_AM PEAK	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓
D7	2044 8.5k DM	AM	J13 Otterpool Park_AM PEAK	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓
D9	2044 8.5k DS	AM	J13 Otterpool Park_AM PEAK	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓
D11	2044 10k DM	AM	J13 Otterpool Park_AM PEAK	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓
D13	2044 10k DS	AM	J13 Otterpool Park_AM PEAK	ONE HOUR	07:45	09:15	15	✓
D14	2044 10k DS	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hythe Road WB		Major
B	Aldington Rd		Minor
C	Hythe Road EB		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.92			100.0	✓	1.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	4.40	2.20	2.20	2.20	2.20		2.00	86	105

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	532	0.089	0.225	0.141	0.321
B-C	520	0.073	0.185	-	-
C-B	632	0.224	0.224	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario	Time Period	Description	Traffic	Start time	Finish time	Time segment	Run

	name	name		profile type	(HH:mm)	(HH:mm)	length (min)	automatically
D1	2018	AM	J13 Otterpool Park_AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	425	100.000
B		ONE HOUR	✓	138	100.000
C		ONE HOUR	✓	287	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	64	361
	B	124	0	14
	C	273	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	4
	B	1	0	24
	C	9	9	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	12.09	0.1	B	13	19
B-A	0.36	14.94	0.6	B	114	171
C-AB	0.03	7.56	0.0	A	13	20
C-A					250	375
A-B					59	88
A-C					331	497

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	352	0.030	10	0.0	0.0	10.526	B
B-A	93	23	425	0.220	92	0.0	0.3	10.791	B
C-AB	11	3	517	0.021	11	0.0	0.0	7.108	A
C-A	205	51			205				
A-B	48	12			48				

A-C	272	68			272				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	337	0.037	13	0.0	0.0	11.091	B
B-A	111	28	405	0.275	111	0.3	0.4	12.236	B
C-AB	13	3	506	0.025	13	0.0	0.0	7.293	A
C-A	245	61			245				
A-B	58	14			58				
A-C	325	81			325				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	15	4	314	0.049	15	0.0	0.1	12.071	B
B-A	137	34	377	0.362	136	0.4	0.6	14.851	B
C-AB	16	4	492	0.032	16	0.0	0.0	7.553	A
C-A	300	75			300				
A-B	70	18			70				
A-C	397	99			397				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	15	4	313	0.049	15	0.1	0.1	12.088	B
B-A	137	34	377	0.362	137	0.6	0.6	14.936	B
C-AB	16	4	492	0.032	16	0.0	0.0	7.556	A
C-A	300	75			300				
A-B	70	18			70				
A-C	397	99			397				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	337	0.037	13	0.1	0.0	11.113	B
B-A	111	28	405	0.275	112	0.6	0.4	12.326	B
C-AB	13	3	506	0.025	13	0.0	0.0	7.294	A
C-A	245	61			245				
A-B	58	14			58				
A-C	325	81			325				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	352	0.030	11	0.0	0.0	10.551	B
B-A	93	23	425	0.220	94	0.4	0.3	10.888	B
C-AB	11	3	517	0.021	11	0.0	0.0	7.108	A
C-A	205	51			205				
A-B	48	12			48				
A-C	272	68			272				

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	363	100.000
B		ONE HOUR	✓	106	100.000
C		ONE HOUR	✓	504	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	91	272
	B	87	0	19
	C	474	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	3	3
	B	0	0	14
	C	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	9.82	0.1	A	17	26
B-A	0.26	13.32	0.4	B	80	120
C-AB	0.06	6.76	0.1	A	29	43
C-A					434	651
A-B					84	125
A-C					250	374

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	4	419	0.034	14	0.0	0.0	8.894	A
B-A	65	16	417	0.157	65	0.0	0.2	10.187	B
C-AB	23	6	578	0.040	23	0.0	0.0	6.486	A
C-A	356	89			356				
A-B	69	17			69				
A-C	205	51			205				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	17	4	406	0.042	17	0.0	0.0	9.251	A
B-A	78	20	396	0.198	78	0.2	0.2	11.319	B
C-AB	28	7	572	0.049	28	0.0	0.1	6.611	A
C-A	425	106			425				
A-B	82	20			82				
A-C	245	61			245				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	21	5	388	0.054	21	0.0	0.1	9.813	A
B-A	96	24	366	0.262	95	0.2	0.3	13.282	B
C-AB	35	9	567	0.062	35	0.1	0.1	6.762	A
C-A	520	130			520				
A-B	100	25			100				
A-C	299	75			299				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	21	5	387	0.054	21	0.1	0.1	9.821	A
B-A	96	24	366	0.262	96	0.3	0.4	13.324	B
C-AB	35	9	567	0.062	35	0.1	0.1	6.763	A
C-A	520	130			520				
A-B	100	25			100				
A-C	299	75			299				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	17	4	406	0.042	17	0.1	0.0	9.263	A
B-A	78	20	396	0.198	79	0.4	0.3	11.364	B
C-AB	28	7	572	0.049	28	0.1	0.1	6.616	A
C-A	425	106			425				
A-B	82	20			82				
A-C	245	61			245				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	4	418	0.034	14	0.0	0.0	8.910	A
B-A	65	16	417	0.157	66	0.3	0.2	10.245	B
C-AB	23	6	578	0.040	23	0.1	0.0	6.493	A
C-A	356	89			356				
A-B	69	17			69				
A-C	205	51			205				

2037 DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2037 DM	AM	J13 Otterpool Park_AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	823	100.000
B		ONE HOUR	✓	121	100.000
C		ONE HOUR	✓	694	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	447	376
	B	121	0	0
	C	693	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	3	0
	B	0	0	0
	C	4	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.47	23.73	0.9	C	111	167
C-AB	0.01	13.53	0.0	B	1	2
C-A					636	954
A-B					410	615
A-C					345	518

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	385	0.000	0	0.0	0.0	0.000	A
B-A	91	23	365	0.250	90	0.0	0.3	13.028	B
C-AB	1	0.21	274	0.003	1	0.0	0.0	13.168	B
C-A	522	130			522				
A-B	337	84			337				
A-C	283	71			283				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	364	0.000	0	0.0	0.0	0.000	A
B-A	109	27	331	0.328	108	0.3	0.5	16.097	C
C-AB	1	0.26	273	0.004	1	0.0	0.0	13.364	B
C-A	623	156			623				
A-B	402	100			402				
A-C	338	85			338				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	333	0.000	0	0.0	0.0	0.000	A
B-A	133	33	285	0.468	132	0.5	0.8	23.325	C
C-AB	1	0.35	271	0.005	1	0.0	0.0	13.525	B
C-A	763	191			763				
A-B	492	123			492				
A-C	414	103			414				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	332	0.000	0	0.0	0.0	0.000	A
B-A	133	33	285	0.468	133	0.8	0.9	23.732	C
C-AB	1	0.35	268	0.005	1	0.0	0.0	13.526	B
C-A	763	191			763				
A-B	492	123			492				
A-C	414	103			414				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	363	0.000	0	0.0	0.0	0.000	A
B-A	109	27	331	0.328	110	0.9	0.5	16.395	C
C-AB	1	0.26	266	0.004	1	0.0	0.0	13.368	B
C-A	623	156			623				
A-B	402	100			402				
A-C	338	85			338				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	385	0.000	0	0.0	0.0	0.000	A
B-A	91	23	365	0.250	92	0.5	0.3	13.212	B
C-AB	1	0.21	271	0.003	1	0.0	0.0	13.171	B
C-A	522	130			522				
A-B	337	84			337				
A-C	283	71			283				

2037 DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2037 DM	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	798	100.000
B		ONE HOUR	✓	72	100.000
C		ONE HOUR	✓	914	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	671	127
	B	72	0	0
	C	914	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	2	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.27	16.68	0.4	C	66	99
C-AB	0.00	0.00	0.0	A	0	0
C-A					839	1258
A-B					616	924
A-C					117	175

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	416	0.000	0	0.0	0.0	0.000	A
B-A	54	14	372	0.146	54	0.0	0.2	11.281	B
C-AB	0	0	990	0.000	0	0.0	0.0	0.000	A
C-A	688	172			688				
A-B	505	126			505				
A-C	96	24			96				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	401	0.000	0	0.0	0.0	0.000	A
B-A	65	16	340	0.191	64	0.2	0.2	13.068	B
C-AB	0	0	936	0.000	0	0.0	0.0	0.000	A
C-A	822	205			822				
A-B	603	151			603				
A-C	114	29			114				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	380	0.000	0	0.0	0.0	0.000	A
B-A	79	20	295	0.269	79	0.2	0.4	16.604	C
C-AB	0	0	863	0.000	0	0.0	0.0	0.000	A
C-A	1006	252			1006				
A-B	739	185			739				
A-C	140	35			140				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	380	0.000	0	0.0	0.0	0.000	A
B-A	79	20	295	0.269	79	0.4	0.4	16.678	C
C-AB	0	0	863	0.000	0	0.0	0.0	0.000	A
C-A	1006	252			1006				
A-B	739	185			739				
A-C	140	35			140				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	401	0.000	0	0.0	0.0	0.000	A
B-A	65	16	340	0.191	65	0.4	0.2	13.141	B
C-AB	0	0	936	0.000	0	0.0	0.0	0.000	A
C-A	822	205			822				
A-B	603	151			603				
A-C	114	29			114				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	415	0.000	0	0.0	0.0	0.000	A
B-A	54	14	372	0.146	54	0.2	0.2	11.349	B
C-AB	0	0	990	0.000	0	0.0	0.0	0.000	A
C-A	688	172			688				
A-B	505	126			505				
A-C	96	24			96				

2037 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 DS	AM	J13 Otterpool Park_AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	908	100.000
B		ONE HOUR	✓	81	100.000
C		ONE HOUR	✓	801	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	79	829
	B	81	0	0
	C	800	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	2
	B	0	0	0
	C	3	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.47	36.03	0.9	E	74	111
C-AB	0.01	13.57	0.0	B	1	2
C-A					734	1101
A-B					72	109
A-C					761	1141

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	351	0.000	0	0.0	0.0	0.000	A
B-A	61	15	299	0.204	60	0.0	0.3	14.986	B
C-AB	1	0.22	272	0.003	1	0.0	0.0	13.289	B
C-A	602	151			602				
A-B	59	15			59				
A-C	624	156			624				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	322	0.000	0	0.0	0.0	0.000	A
B-A	73	18	253	0.288	72	0.3	0.4	19.869	C
C-AB	1	0.27	271	0.004	1	0.0	0.0	13.467	B
C-A	719	180			719				
A-B	71	18			71				
A-C	745	186			745				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	279	0.000	0	0.0	0.0	0.000	A
B-A	89	22	189	0.473	87	0.4	0.8	34.947	D
C-AB	1	0.36	271	0.005	1	0.0	0.0	13.566	B
C-A	880	220			880				
A-B	87	22			87				
A-C	913	228			913				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	278	0.000	0	0.0	0.0	0.000	A
B-A	89	22	189	0.473	89	0.8	0.9	36.031	E
C-AB	1	0.36	267	0.005	1	0.0	0.0	13.569	B
C-A	880	220			880				
A-B	87	22			87				
A-C	913	228			913				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	321	0.000	0	0.0	0.0	0.000	A
B-A	73	18	253	0.288	75	0.9	0.4	20.388	C
C-AB	1	0.27	263	0.004	1	0.0	0.0	13.470	B
C-A	719	180			719				
A-B	71	18			71				
A-C	745	186			745				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	350	0.000	0	0.0	0.0	0.000	A
B-A	61	15	299	0.204	62	0.4	0.3	15.186	C
C-AB	1	0.22	268	0.003	1	0.0	0.0	13.292	B
C-A	602	151			602				
A-B	59	15			59				
A-C	624	156			624				

2037 DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 DS	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	913	100.000
B		ONE HOUR	✓	65	100.000
C		ONE HOUR	✓	974	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	108	805
	B	65	0	0
	C	974	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.42	36.06	0.7	E	60	89
C-AB	0.00	0.00	0.0	A	0	0
C-A					894	1341
A-B					99	149
A-C					739	1108

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	356	0.000	0	0.0	0.0	0.000	A
B-A	49	12	287	0.170	48	0.0	0.2	15.010	C
C-AB	0	0	953	0.000	0	0.0	0.0	0.000	A
C-A	733	183			733				
A-B	81	20			81				
A-C	606	152			606				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	329	0.000	0	0.0	0.0	0.000	A
B-A	58	15	238	0.245	58	0.2	0.3	19.893	C
C-AB	0	0	892	0.000	0	0.0	0.0	0.000	A
C-A	876	219			876				
A-B	97	24			97				
A-C	724	181			724				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	287	0.000	0	0.0	0.0	0.000	A
B-A	72	18	171	0.418	70	0.3	0.7	35.169	E
C-AB	0	0	809	0.000	0	0.0	0.0	0.000	A
C-A	1072	268			1072				
A-B	119	30			119				
A-C	886	222			886				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	286	0.000	0	0.0	0.0	0.000	A
B-A	72	18	171	0.418	71	0.7	0.7	36.063	E
C-AB	0	0	809	0.000	0	0.0	0.0	0.000	A
C-A	1072	268			1072				
A-B	119	30			119				
A-C	886	222			886				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	328	0.000	0	0.0	0.0	0.000	A
B-A	58	15	238	0.245	60	0.7	0.3	20.313	C
C-AB	0	0	892	0.000	0	0.0	0.0	0.000	A
C-A	876	219			876				
A-B	97	24			97				
A-C	724	181			724				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	356	0.000	0	0.0	0.0	0.000	A
B-A	49	12	287	0.170	49	0.3	0.2	15.173	C
C-AB	0	0	953	0.000	0	0.0	0.0	0.000	A
C-A	733	183			733				
A-B	81	20			81				
A-C	606	152			606				

2044 8.5k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2044 8.5k DM	AM	J13 Otterpool Park_AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	851	100.000
B		ONE HOUR	✓	122	100.000
C		ONE HOUR	✓	698	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	417	434
	B	122	0	0
	C	698	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	0
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.49	25.96	0.9	D	112	168
C-AB	0.00	0.00	0.0	A	0	0
C-A					640	961
A-B					383	574
A-C					398	597

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	379	0.000	0	0.0	0.0	0.000	A
B-A	92	23	357	0.258	90	0.0	0.3	13.457	B
C-AB	0	0	971	0.000	0	0.0	0.0	0.000	A
C-A	525	131			525				
A-B	314	78			314				
A-C	327	82			327				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	356	0.000	0	0.0	0.0	0.000	A
B-A	110	27	321	0.341	109	0.3	0.5	16.894	C
C-AB	0	0	914	0.000	0	0.0	0.0	0.000	A
C-A	627	157			627				
A-B	375	94			375				
A-C	390	98			390				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	322	0.000	0	0.0	0.0	0.000	A
B-A	134	34	273	0.493	133	0.5	0.9	25.404	D
C-AB	0	0	835	0.000	0	0.0	0.0	0.000	A
C-A	769	192			769				
A-B	459	115			459				
A-C	478	119			478				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	322	0.000	0	0.0	0.0	0.000	A
B-A	134	34	273	0.493	134	0.9	0.9	25.957	D
C-AB	0	0	835	0.000	0	0.0	0.0	0.000	A
C-A	769	192			769				
A-B	459	115			459				
A-C	478	119			478				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	355	0.000	0	0.0	0.0	0.000	A
B-A	110	27	321	0.341	111	0.9	0.5	17.265	C
C-AB	0	0	914	0.000	0	0.0	0.0	0.000	A
C-A	627	157			627				
A-B	375	94			375				
A-C	390	98			390				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	378	0.000	0	0.0	0.0	0.000	A
B-A	92	23	357	0.258	93	0.5	0.4	13.668	B
C-AB	0	0	971	0.000	0	0.0	0.0	0.000	A
C-A	525	131			525				
A-B	314	78			314				
A-C	327	82			327				

2044 8.5k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2044 8.5k DM	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	808	100.000
B		ONE HOUR	✓	73	100.000
C		ONE HOUR	✓	938	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	657	151
	B	73	0	0
	C	938	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.28	17.44	0.4	C	67	100
C-AB	0.00	0.00	0.0	A	0	0
C-A					861	1291
A-B					603	904
A-C					139	208

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	413	0.000	0	0.0	0.0	0.000	A
B-A	55	14	366	0.150	54	0.0	0.2	11.514	B
C-AB	0	0	986	0.000	0	0.0	0.0	0.000	A
C-A	706	177			706				
A-B	495	124			495				
A-C	114	28			114				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	398	0.000	0	0.0	0.0	0.000	A
B-A	66	16	333	0.197	65	0.2	0.2	13.443	B
C-AB	0	0	932	0.000	0	0.0	0.0	0.000	A
C-A	843	211			843				
A-B	591	148			591				
A-C	136	34			136				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	376	0.000	0	0.0	0.0	0.000	A
B-A	80	20	287	0.280	80	0.2	0.4	17.354	C
C-AB	0	0	858	0.000	0	0.0	0.0	0.000	A
C-A	1033	258			1033				
A-B	723	181			723				
A-C	166	42			166				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	375	0.000	0	0.0	0.0	0.000	A
B-A	80	20	287	0.280	80	0.4	0.4	17.443	C
C-AB	0	0	858	0.000	0	0.0	0.0	0.000	A
C-A	1033	258			1033				
A-B	723	181			723				
A-C	166	42			166				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	398	0.000	0	0.0	0.0	0.000	A
B-A	66	16	333	0.197	66	0.4	0.2	13.527	B
C-AB	0	0	932	0.000	0	0.0	0.0	0.000	A
C-A	843	211			843				
A-B	591	148			591				
A-C	136	34			136				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	413	0.000	0	0.0	0.0	0.000	A
B-A	55	14	366	0.150	55	0.2	0.2	11.584	B
C-AB	0	0	986	0.000	0	0.0	0.0	0.000	A
C-A	706	177			706				
A-B	495	124			495				
A-C	114	28			114				

2044 8.5k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 8.5k DS	AM	J13 Otterpool Park_AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	965	100.000
B		ONE HOUR	✓	80	100.000
C		ONE HOUR	✓	838	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	84	881
	B	80	0	0
	C	838	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	2
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.52	43.89	1.0	E	73	110
C-AB	0.00	0.00	0.0	A	0	0
C-A					769	1153
A-B					77	116
A-C					808	1213

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	343	0.000	0	0.0	0.0	0.000	A
B-A	60	15	286	0.210	59	0.0	0.3	15.794	C
C-AB	0	0	932	0.000	0	0.0	0.0	0.000	A
C-A	631	158			631				
A-B	63	16			63				
A-C	663	166			663				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	313	0.000	0	0.0	0.0	0.000	A
B-A	72	18	237	0.303	71	0.3	0.4	21.613	C
C-AB	0	0	867	0.000	0	0.0	0.0	0.000	A
C-A	753	188			753				
A-B	76	19			76				
A-C	792	198			792				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	266	0.000	0	0.0	0.0	0.000	A
B-A	88	22	169	0.520	86	0.4	1.0	41.972	E
C-AB	0	0	778	0.000	0	0.0	0.0	0.000	A
C-A	923	231			923				
A-B	92	23			92				
A-C	970	242			970				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	265	0.000	0	0.0	0.0	0.000	A
B-A	88	22	169	0.520	88	1.0	1.0	43.886	E
C-AB	0	0	778	0.000	0	0.0	0.0	0.000	A
C-A	923	231			923				
A-B	92	23			92				
A-C	970	242			970				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	312	0.000	0	0.0	0.0	0.000	A
B-A	72	18	237	0.303	74	1.0	0.4	22.388	C
C-AB	0	0	867	0.000	0	0.0	0.0	0.000	A
C-A	753	188			753				
A-B	76	19			76				
A-C	792	198			792				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	343	0.000	0	0.0	0.0	0.000	A
B-A	60	15	286	0.210	61	0.4	0.3	16.035	C
C-AB	0	0	932	0.000	0	0.0	0.0	0.000	A
C-A	631	158			631				
A-B	63	16			63				
A-C	663	166			663				

2044 8.5k DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2044 8.5k DS	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	957	100.000
B		ONE HOUR	✓	50	100.000
C		ONE HOUR	✓	1059	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	127	830
	B	50	0	0
	C	1059	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.37	38.01	0.6	E	46	69
C-AB	0.00	0.00	0.0	A	0	0
C-A					972	1458
A-B					117	175
A-C					762	1142

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	355	0.000	0	0.0	0.0	0.000	A
B-A	38	9	272	0.138	37	0.0	0.2	15.252	C
C-AB	0	0	938	0.000	0	0.0	0.0	0.000	A
C-A	797	199			797				
A-B	96	24			96				
A-C	625	156			625				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	328	0.000	0	0.0	0.0	0.000	A
B-A	45	11	221	0.204	45	0.2	0.2	20.378	C
C-AB	0	0	874	0.000	0	0.0	0.0	0.000	A
C-A	952	238			952				
A-B	114	29			114				
A-C	746	187			746				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	286	0.000	0	0.0	0.0	0.000	A
B-A	55	14	150	0.368	54	0.2	0.5	37.183	E
C-AB	0	0	787	0.000	0	0.0	0.0	0.000	A
C-A	1166	291			1166				
A-B	140	35			140				
A-C	914	228			914				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	285	0.000	0	0.0	0.0	0.000	A
B-A	55	14	150	0.368	55	0.5	0.6	38.012	E
C-AB	0	0	787	0.000	0	0.0	0.0	0.000	A
C-A	1166	291			1166				
A-B	140	35			140				
A-C	914	228			914				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	327	0.000	0	0.0	0.0	0.000	A
B-A	45	11	221	0.204	46	0.6	0.3	20.741	C
C-AB	0	0	874	0.000	0	0.0	0.0	0.000	A
C-A	952	238			952				
A-B	114	29			114				
A-C	746	187			746				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	355	0.000	0	0.0	0.0	0.000	A
B-A	38	9	272	0.138	38	0.3	0.2	15.382	C
C-AB	0	0	938	0.000	0	0.0	0.0	0.000	A
C-A	797	199			797				
A-B	96	24			96				
A-C	625	156			625				

2044 10k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2044 10k DM	AM	J13 Otterpool Park_AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	838	100.000
B		ONE HOUR	✓	121	100.000
C		ONE HOUR	✓	715	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	**B**	**C**
From	**A**	0	424	414
	B	121	0	0
	C	699	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	4	0
	B	0	0	0
	C	4	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.49	26.12	0.9	D	111	167
C-AB	0.04	8.61	0.1	A	16	24
C-A					640	961
A-B					389	584
A-C					380	570

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	381	0.000	0	0.0	0.0	0.000	A
B-A	91	23	355	0.256	90	0.0	0.3	13.489	B
C-AB	12	3	477	0.026	12	0.0	0.0	7.750	A
C-A	526	131			526				
A-B	319	80			319				
A-C	312	78			312				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	358	0.000	0	0.0	0.0	0.000	A
B-A	109	27	320	0.340	108	0.3	0.5	16.952	C
C-AB	15	4	459	0.033	15	0.0	0.0	8.117	A
C-A	628	157			628				
A-B	381	95			381				
A-C	372	93			372				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	325	0.000	0	0.0	0.0	0.000	A
B-A	133	33	271	0.492	132	0.5	0.9	25.563	D
C-AB	19	5	438	0.044	19	0.0	0.1	8.606	A
C-A	768	192			768				
A-B	467	117			467				
A-C	456	114			456				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	325	0.000	0	0.0	0.0	0.000	A
B-A	133	33	271	0.492	133	0.9	0.9	26.124	D
C-AB	19	5	438	0.044	19	0.1	0.1	8.610	A
C-A	768	192			768				
A-B	467	117			467				
A-C	456	114			456				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	358	0.000	0	0.0	0.0	0.000	A
B-A	109	27	320	0.340	110	0.9	0.5	17.326	C
C-AB	15	4	459	0.033	15	0.1	0.0	8.121	A
C-A	628	157			628				
A-B	381	95			381				
A-C	372	93			372				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	380	0.000	0	0.0	0.0	0.000	A
B-A	91	23	355	0.256	92	0.5	0.4	13.701	B
C-AB	12	3	477	0.026	13	0.0	0.0	7.754	A
C-A	526	131			526				
A-B	319	80			319				
A-C	312	78			312				

2044 10k DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 10k DM	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	804	100.000
B		ONE HOUR	✓	72	100.000
C		ONE HOUR	✓	929	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	658	146
	B	72	0	0
	C	929	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.27	17.14	0.4	C	66	99
C-AB	0.00	0.00	0.0	A	0	0
C-A					852	1279
A-B					604	906
A-C					134	201

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	414	0.000	0	0.0	0.0	0.000	A
B-A	54	14	368	0.147	54	0.0	0.2	11.424	B
C-AB	0	0	988	0.000	0	0.0	0.0	0.000	A
C-A	699	175			699				
A-B	495	124			495				
A-C	110	27			110				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	399	0.000	0	0.0	0.0	0.000	A
B-A	65	16	335	0.193	64	0.2	0.2	13.295	B
C-AB	0	0	934	0.000	0	0.0	0.0	0.000	A
C-A	835	209			835				
A-B	592	148			592				
A-C	131	33			131				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	377	0.000	0	0.0	0.0	0.000	A
B-A	79	20	289	0.274	79	0.2	0.4	17.056	C
C-AB	0	0	860	0.000	0	0.0	0.0	0.000	A
C-A	1023	256			1023				
A-B	724	181			724				
A-C	161	40			161				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	377	0.000	0	0.0	0.0	0.000	A
B-A	79	20	289	0.274	79	0.4	0.4	17.138	C
C-AB	0	0	860	0.000	0	0.0	0.0	0.000	A
C-A	1023	256			1023				
A-B	724	181			724				
A-C	161	40			161				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	399	0.000	0	0.0	0.0	0.000	A
B-A	65	16	335	0.193	65	0.4	0.2	13.371	B
C-AB	0	0	934	0.000	0	0.0	0.0	0.000	A
C-A	835	209			835				
A-B	592	148			592				
A-C	131	33			131				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	414	0.000	0	0.0	0.0	0.000	A
B-A	54	14	368	0.147	54	0.2	0.2	11.491	B
C-AB	0	0	988	0.000	0	0.0	0.0	0.000	A
C-A	699	175			699				
A-B	495	124			495				
A-C	110	27			110				

2044 10k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2044 10k DS	AM	J13 Otterpool Park_AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	950	100.000
B		ONE HOUR	✓	85	100.000
C		ONE HOUR	✓	844	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	93	857
	B	85	0	0
	C	840	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.54	44.96	1.1	E	78	117
C-AB	0.01	9.03	0.0	A	4	6
C-A					771	1156
A-B					85	128
A-C					786	1180

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	345	0.000	0	0.0	0.0	0.000	A
B-A	64	16	289	0.222	63	0.0	0.3	15.881	C
C-AB	3	0.76	473	0.006	3	0.0	0.0	7.666	A
C-A	632	158			632				
A-B	70	18			70				
A-C	645	161			645				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	315	0.000	0	0.0	0.0	0.000	A
B-A	76	19	240	0.318	76	0.3	0.5	21.817	C
C-AB	4	0.91	443	0.008	4	0.0	0.0	8.193	A
C-A	755	189			755				
A-B	84	21			84				
A-C	770	193			770				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	268	0.000	0	0.0	0.0	0.000	A
B-A	94	23	173	0.541	91	0.5	1.1	42.756	E
C-AB	5	1	403	0.011	5	0.0	0.0	9.026	A
C-A	925	231			925				
A-B	102	26			102				
A-C	944	236			944				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	267	0.000	0	0.0	0.0	0.000	A
B-A	94	23	173	0.541	93	1.1	1.1	44.960	E
C-AB	5	1	403	0.011	5	0.0	0.0	9.026	A
C-A	925	231			925				
A-B	102	26			102				
A-C	944	236			944				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	314	0.000	0	0.0	0.0	0.000	A
B-A	76	19	240	0.318	79	1.1	0.5	22.682	C
C-AB	4	0.91	443	0.008	4	0.0	0.0	8.195	A
C-A	755	189			755				
A-B	84	21			84				
A-C	770	193			770				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	344	0.000	0	0.0	0.0	0.000	A
B-A	64	16	288	0.222	65	0.5	0.3	16.144	C
C-AB	3	0.76	473	0.006	3	0.0	0.0	7.669	A
C-A	632	158			632				
A-B	70	18			70				
A-C	645	161			645				

2044 10k DS, PM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2044 10k DS	PM	J13 Otterpool Park_PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	962	100.000
B		ONE HOUR	✓	52	100.000
C		ONE HOUR	✓	1049	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	133	829
	B	52	0	0
	C	1049	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.38	38.40	0.6	E	48	72
C-AB	0.00	0.00	0.0	A	0	0
C-A					963	1444
A-B					122	183
A-C					761	1141

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	355	0.000	0	0.0	0.0	0.000	A
B-A	39	10	273	0.143	38	0.0	0.2	15.296	C
C-AB	0	0	936	0.000	0	0.0	0.0	0.000	A
C-A	790	197			790				
A-B	100	25			100				
A-C	624	156			624				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	327	0.000	0	0.0	0.0	0.000	A
B-A	47	12	222	0.211	46	0.2	0.3	20.466	C
C-AB	0	0	872	0.000	0	0.0	0.0	0.000	A
C-A	943	236			943				
A-B	120	30			120				
A-C	745	186			745				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	284	0.000	0	0.0	0.0	0.000	A
B-A	57	14	151	0.380	56	0.3	0.6	37.508	E
C-AB	0	0	784	0.000	0	0.0	0.0	0.000	A
C-A	1155	289			1155				
A-B	146	37			146				
A-C	913	228			913				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	284	0.000	0	0.0	0.0	0.000	A
B-A	57	14	151	0.380	57	0.6	0.6	38.397	E
C-AB	0	0	784	0.000	0	0.0	0.0	0.000	A
C-A	1155	289			1155				
A-B	146	37			146				
A-C	913	228			913				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	327	0.000	0	0.0	0.0	0.000	A
B-A	47	12	222	0.211	48	0.6	0.3	20.851	C
C-AB	0	0	872	0.000	0	0.0	0.0	0.000	A
C-A	943	236			943				
A-B	120	30			120				
A-C	745	186			745				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	354	0.000	0	0.0	0.0	0.000	A
B-A	39	10	273	0.143	40	0.3	0.2	15.429	C
C-AB	0	0	936	0.000	0	0.0	0.0	0.000	A
C-A	790	197			790				
A-B	100	25			100				
A-C	624	156			624				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

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Filename: J14 A261 London Rd_Barrack Hill - UPDATED GEOMETRY.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J14 A261 London Rd - Barrack Hill
Report generation date: 10/11/2021 16:58:03

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Stream B-C		0.5	8.68	0.32	A		0.3	8.28	0.25	A
Stream B-A	D1	0.2	17.70	0.15	C	D2	0.1	16.01	0.07	C
Stream C-AB		0.6	9.45	0.37	A		0.3	8.82	0.23	A
	2037 DM									
Stream B-C		0.7	12.58	0.41	B		0.6	12.94	0.36	B
Stream B-A	D3	0.2	44.50	0.18	E	D4	0.2	47.06	0.20	E
Stream C-AB		1.2	10.77	0.47	B		0.6	10.87	0.32	B
	2037 DS									
Stream B-C		0.8	17.04	0.46	C		1.3	41.63	0.58	E
Stream B-A	D5	0.8	87.56	0.47	F	D6	2.4	145.69	0.76	F
Stream C-AB		1.4	10.92	0.49	B		0.6	11.03	0.33	B
	2044 8.5k DM									
Stream B-C		0.7	12.92	0.42	B		0.6	13.65	0.38	B
Stream B-A	D7	0.2	48.39	0.19	E	D8	0.3	51.76	0.21	F
Stream C-AB		1.4	10.78	0.48	B		0.6	11.02	0.33	B
	2044 8.5k DS									
Stream B-C		1.2	25.01	0.56	D		12.8	348.38	1.18	F
Stream B-A	D9	1.3	143.44	0.60	F	D10	8.9	398.34	1.16	F
Stream C-AB		1.7	10.99	0.51	B		0.7	11.39	0.35	B
	2044 10k DM									
Stream B-C		0.7	12.71	0.42	B		0.6	13.26	0.37	B

Stream B-A	D11	0.2	46.29	0.18	E	D12	0.2	49.45	0.20	E
Stream C-AB		1.3	10.75	0.47	B		0.6	10.93	0.32	B
	2044 10k DS									
Stream B-C	D13	1.1	23.32	0.54	C	D14	11.5	323.74	1.15	F
Stream B-A		1.2	132.98	0.58	F		8.2	371.34	1.13	F
Stream C-AB		1.6	11.03	0.50	B		0.7	11.32	0.34	B

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

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

File summary

File Description

Title	J14 Otterpool Park_Base Model
Location	A261 London Rd - Barrack Hill
Site number	
Date	08/08/2017
Version	
Status	Base
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J14 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D3	2037 DM	AM	J14 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D5	2037 DS	AM	J14 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D7	2044 8.5k DM	AM	J14 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D9	2044 8.5k DS	AM	J14 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D11	2044 10k DM	AM	J14 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓
D13	2044 10k DS	AM	J14 Otterpool Park AM PEAK	ONE HOUR	07:45	09:15	15	✓

D14	2044 10k DS	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A261 London Road Eastbound		Major
B	Barrack Hill		Minor
C	A261 London Road Westbound		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.60	✓	0.00	✓	2.70	85.0	✓	2.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	6.00	4.34	4.19	4.05	3.99	✓	1.00	75	80

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	433	0.073	0.186	0.117	0.265
B-C	763	0.109	0.275	-	-
C-B	657	0.237	0.237	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	J14 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	397	100.000
B		ONE HOUR	✓	209	100.000
C		ONE HOUR	✓	573	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	37	360
	B	32	0	177
	C	393	180	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	6
	B	0	0	1
	C	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.32	8.68	0.5	A	162	244
B-A	0.15	17.70	0.2	C	29	44
C-AB	0.37	9.45	0.6	A	177	265
C-A					349	524
A-B					34	51
A-C					330	496

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	660	0.202	132	0.0	0.3	6.809	A
B-A	24	6	303	0.079	24	0.0	0.1	12.855	B
C-AB	139	35	593	0.235	138	0.0	0.3	7.893	A
C-A	292	73			292				

A-B	28	7			28				
A-C	271	68			271				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	159	40	640	0.249	159	0.3	0.3	7.482	A
B-A	29	7	277	0.104	29	0.1	0.1	14.511	B
C-AB	170	43	592	0.288	170	0.3	0.4	8.527	A
C-A	345	86			345				
A-B	33	8			33				
A-C	324	81			324				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	195	49	610	0.320	194	0.3	0.5	8.658	A
B-A	35	9	239	0.147	35	0.1	0.2	17.638	C
C-AB	220	55	601	0.366	219	0.4	0.6	9.412	A
C-A	411	103			411				
A-B	41	10			41				
A-C	396	99			396				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	195	49	609	0.320	195	0.5	0.5	8.685	A
B-A	35	9	239	0.148	35	0.2	0.2	17.697	C
C-AB	220	55	601	0.366	220	0.6	0.6	9.452	A
C-A	411	103			411				
A-B	41	10			41				
A-C	396	99			396				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	159	40	639	0.249	160	0.5	0.3	7.514	A
B-A	29	7	276	0.104	29	0.2	0.1	14.569	B
C-AB	170	43	592	0.288	171	0.6	0.4	8.576	A
C-A	345	86			345				
A-B	33	8			33				
A-C	324	81			324				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	660	0.202	134	0.3	0.3	6.848	A
B-A	24	6	303	0.080	24	0.1	0.1	12.923	B
C-AB	139	35	593	0.235	140	0.4	0.3	7.951	A
C-A	292	73			292				
A-B	28	7			28				
A-C	271	68			271				

2018, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	561	100.000
B		ONE HOUR	✓	148	100.000
C		ONE HOUR	✓	453	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	36	525
	B	15	0	133
	C	347	106	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	1
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	8.28	0.3	A	122	183
B-A	0.07	16.01	0.1	C	14	21
C-AB	0.23	8.82	0.3	A	100	149
C-A					316	474
A-B					33	50
A-C					482	723

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	100	25	638	0.157	99	0.0	0.2	6.679	A
B-A	11	3	304	0.037	11	0.0	0.0	12.299	B
C-AB	81	20	561	0.144	80	0.0	0.2	7.467	A
C-A	260	65			260				
A-B	27	7			27				
A-C	395	99			395				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	120	30	614	0.195	119	0.2	0.2	7.269	A
B-A	13	3	278	0.049	13	0.0	0.1	13.622	B
C-AB	97	24	546	0.178	97	0.2	0.2	8.005	A
C-A	310	78			310				
A-B	32	8			32				
A-C	472	118			472				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	146	37	581	0.252	146	0.2	0.3	8.261	A
B-A	17	4	241	0.068	16	0.1	0.1	15.986	C
C-AB	121	30	529	0.229	121	0.2	0.3	8.807	A
C-A	377	94			377				
A-B	40	10			40				
A-C	578	145			578				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	146	37	581	0.252	146	0.3	0.3	8.276	A
B-A	17	4	241	0.068	17	0.1	0.1	16.013	C
C-AB	121	30	529	0.229	121	0.3	0.3	8.820	A
C-A	377	94			377				
A-B	40	10			40				
A-C	578	145			578				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	120	30	614	0.195	120	0.3	0.2	7.290	A
B-A	13	3	278	0.049	14	0.1	0.1	13.644	B
C-AB	97	24	547	0.178	97	0.3	0.2	8.026	A
C-A	310	78			310				
A-B	32	8			32				
A-C	472	118			472				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	100	25	638	0.157	100	0.2	0.2	6.705	A
B-A	11	3	303	0.037	11	0.1	0.0	12.329	B
C-AB	81	20	562	0.143	81	0.2	0.2	7.491	A
C-A	260	65			260				
A-B	27	7			27				
A-C	395	99			395				

2037 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2037 DM	AM	J14 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	814	100.000
B		ONE HOUR	✓	199	100.000
C		ONE HOUR	✓	994	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	35	779
	B	16	0	183
	C	807	187	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.41	12.58	0.7	B	168	252
B-A	0.18	44.50	0.2	E	15	22
C-AB	0.47	10.77	1.2	B	217	325
C-A					695	1043
A-B					32	48
A-C					715	1072

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	585	0.235	137	0.0	0.3	8.005	A
B-A	12	3	207	0.058	12	0.0	0.1	18.400	C
C-AB	154	38	554	0.277	152	0.0	0.4	8.918	A
C-A	595	149			595				
A-B	26	7			26				
A-C	586	147			586				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	165	41	548	0.300	164	0.3	0.4	9.373	A
B-A	14	4	162	0.089	14	0.1	0.1	24.379	C
C-AB	200	50	568	0.351	199	0.4	0.6	9.739	A
C-A	694	174			694				
A-B	31	8			31				
A-C	700	175			700				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	489	0.412	200	0.4	0.7	12.447	B
B-A	18	4	99	0.178	17	0.1	0.2	43.767	E
C-AB	298	74	634	0.470	295	0.6	1.2	10.629	B
C-A	797	199			797				
A-B	39	10			39				
A-C	858	214			858				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	488	0.413	201	0.7	0.7	12.576	B
B-A	18	4	98	0.179	18	0.2	0.2	44.500	E
C-AB	298	74	634	0.469	298	1.2	1.2	10.769	B
C-A	797	199			797				
A-B	39	10			39				
A-C	858	214			858				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	165	41	547	0.301	166	0.7	0.4	9.462	A
B-A	14	4	161	0.089	15	0.2	0.1	24.699	C
C-AB	200	50	569	0.350	202	1.2	0.7	9.909	A
C-A	694	174			694				
A-B	31	8			31				
A-C	700	175			700				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	585	0.236	138	0.4	0.3	8.072	A
B-A	12	3	207	0.058	12	0.1	0.1	18.541	C
C-AB	154	38	555	0.277	155	0.7	0.4	9.031	A
C-A	595	149			595				
A-B	26	7			26				
A-C	586	147			586				

2037 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2037 DM	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	986	100.000
B		ONE HOUR	✓	162	100.000
C		ONE HOUR	✓	897	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	37	949
	B	17	0	145
	C	781	116	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	1
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.36	12.94	0.6	B	133	200
B-A	0.20	47.06	0.2	E	16	23
C-AB	0.32	10.87	0.6	B	120	180
C-A					703	1055
A-B					34	51
A-C					871	1306

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	549	0.199	108	0.0	0.2	8.152	A
B-A	13	3	204	0.063	13	0.0	0.1	18.768	C
C-AB	91	23	501	0.181	90	0.0	0.2	8.748	A
C-A	584	146			584				
A-B	28	7			28				
A-C	714	179			714				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	33	506	0.258	130	0.2	0.3	9.566	A
B-A	15	4	159	0.096	15	0.1	0.1	25.070	D
C-AB	113	28	485	0.233	113	0.2	0.3	9.658	A
C-A	693	173			693				
A-B	33	8			33				
A-C	853	213			853				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	160	40	439	0.364	159	0.3	0.6	12.822	B
B-A	19	5	95	0.196	18	0.1	0.2	46.340	E
C-AB	156	39	487	0.320	155	0.3	0.6	10.809	B
C-A	832	208			832				
A-B	41	10			41				
A-C	1045	261			1045				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	160	40	438	0.365	160	0.6	0.6	12.943	B
B-A	19	5	95	0.197	19	0.2	0.2	47.059	E
C-AB	156	39	488	0.319	156	0.6	0.6	10.868	B
C-A	832	208			832				
A-B	41	10			41				
A-C	1045	261			1045				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	33	505	0.258	131	0.6	0.4	9.647	A
B-A	15	4	158	0.097	16	0.2	0.1	25.369	D
C-AB	113	28	486	0.233	114	0.6	0.3	9.725	A
C-A	693	173			693				
A-B	33	8			33				
A-C	853	213			853				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	548	0.199	110	0.4	0.3	8.209	A
B-A	13	3	204	0.063	13	0.1	0.1	18.892	C
C-AB	91	23	501	0.181	91	0.3	0.2	8.804	A
C-A	584	146			584				
A-B	28	7			28				
A-C	714	179			714				

2037 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 DS	AM	J14 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	881	100.000
B		ONE HOUR	✓	197	100.000
C		ONE HOUR	✓	1063	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	41	840
	B	32	0	165
	C	876	187	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.46	17.04	0.8	C	151	227
B-A	0.47	87.56	0.8	F	29	44
C-AB	0.49	10.92	1.4	B	227	340
C-A					749	1123
A-B					38	56
A-C					771	1156

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	124	31	561	0.222	123	0.0	0.3	8.207	A
B-A	24	6	192	0.125	24	0.0	0.1	21.252	C
C-AB	156	39	549	0.284	154	0.0	0.4	9.100	A
C-A	644	161			644				
A-B	31	8			31				
A-C	632	158			632				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	512	0.290	148	0.3	0.4	9.867	A
B-A	29	7	144	0.200	28	0.1	0.2	31.008	D
C-AB	206	51	567	0.362	205	0.4	0.7	9.919	A
C-A	750	188			750				
A-B	37	9			37				
A-C	755	189			755				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	182	45	402	0.452	180	0.4	0.8	16.107	C
B-A	35	9	76	0.462	33	0.2	0.7	80.414	F
C-AB	319	80	651	0.490	316	0.7	1.4	10.746	B
C-A	851	213			851				
A-B	45	11			45				
A-C	925	231			925				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	182	45	392	0.463	181	0.8	0.8	17.044	C
B-A	35	9	76	0.466	35	0.7	0.8	87.556	F
C-AB	319	80	652	0.489	319	1.4	1.4	10.923	B
C-A	851	213			851				
A-B	45	11			45				
A-C	925	231			925				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	508	0.292	150	0.8	0.4	10.102	B
B-A	29	7	144	0.200	31	0.8	0.3	32.436	D
C-AB	206	51	569	0.361	208	1.4	0.7	10.132	B
C-A	750	188			750				
A-B	37	9			37				
A-C	755	189			755				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	124	31	560	0.222	125	0.4	0.3	8.288	A
B-A	24	6	192	0.126	25	0.3	0.1	21.602	C
C-AB	156	39	549	0.284	157	0.7	0.4	9.224	A
C-A	644	161			644				
A-B	31	8			31				
A-C	632	158			632				

2037 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 DS	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1039	100.000
B		ONE HOUR	✓	163	100.000
C		ONE HOUR	✓	970	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	40	999
	B	59	0	104
	C	854	116	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	1
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.58	41.63	1.3	E	95	143
B-A	0.76	145.69	2.4	F	54	81
C-AB	0.33	11.03	0.6	B	123	184
C-A					767	1151
A-B					37	55
A-C					917	1375

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	78	20	494	0.159	78	0.0	0.2	8.630	A
B-A	44	11	219	0.202	43	0.0	0.2	20.352	C
C-AB	91	23	494	0.185	90	0.0	0.2	8.906	A
C-A	639	160			639				
A-B	30	8			30				
A-C	752	188			752				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	93	23	431	0.217	93	0.2	0.3	10.637	B
B-A	53	13	165	0.322	52	0.2	0.5	31.792	D
C-AB	115	29	480	0.239	114	0.2	0.3	9.847	A
C-A	757	189			757				
A-B	36	9			36				
A-C	898	225			898				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	115	29	235	0.487	112	0.3	0.9	28.725	D
B-A	65	16	86	0.752	59	0.5	2.0	113.842	F
C-AB	162	40	489	0.331	161	0.3	0.6	10.961	B
C-A	906	227			906				
A-B	44	11			44				
A-C	1100	275			1100				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	115	29	198	0.579	113	0.9	1.3	41.626	E
B-A	65	16	86	0.757	63	2.0	2.4	145.691	F
C-AB	162	40	489	0.331	162	0.6	0.6	11.030	B
C-A	906	227			906				
A-B	44	11			44				
A-C	1100	275			1100				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	93	23	414	0.226	97	1.3	0.3	11.513	B
B-A	53	13	166	0.319	61	2.4	0.5	36.172	E
C-AB	115	29	480	0.239	116	0.6	0.4	9.927	A
C-A	757	189			757				
A-B	36	9			36				
A-C	898	225			898				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	78	20	491	0.160	79	0.3	0.2	8.750	A
B-A	44	11	220	0.202	45	0.5	0.3	20.738	C
C-AB	91	23	494	0.185	92	0.4	0.2	8.967	A
C-A	639	160			639				
A-B	30	8			30				
A-C	752	188			752				

2044 8.5k DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2044 8.5k DM	AM	J14 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	820	100.000
B		ONE HOUR	✓	202	100.000
C		ONE HOUR	✓	1027	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	35	785
	B	16	0	186
	C	835	192	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.42	12.92	0.7	B	171	256
B-A	0.19	48.39	0.2	E	15	22
C-AB	0.48	10.78	1.4	B	228	341
C-A					715	1072
A-B					32	48
A-C					720	1080

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	140	35	584	0.240	139	0.0	0.3	8.071	A
B-A	12	3	203	0.059	12	0.0	0.1	18.829	C
C-AB	159	40	558	0.285	157	0.0	0.4	8.960	A
C-A	614	154			614				
A-B	26	7			26				
A-C	591	148			591				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	167	42	546	0.306	167	0.3	0.4	9.487	A
B-A	14	4	156	0.092	14	0.1	0.1	25.293	D
C-AB	208	52	575	0.362	207	0.4	0.7	9.768	A
C-A	715	179			715				
A-B	31	8			31				
A-C	706	176			706				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	205	51	485	0.423	204	0.4	0.7	12.765	B
B-A	18	4	93	0.190	17	0.1	0.2	47.453	E
C-AB	315	79	651	0.484	313	0.7	1.3	10.625	B
C-A	815	204			815				
A-B	39	10			39				
A-C	864	216			864				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	205	51	483	0.424	205	0.7	0.7	12.919	B
B-A	18	4	92	0.192	18	0.2	0.2	48.394	E
C-AB	315	79	652	0.484	315	1.3	1.3	10.780	B
C-A	815	204			815				
A-B	39	10			39				
A-C	864	216			864				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	167	42	545	0.307	168	0.7	0.4	9.589	A
B-A	14	4	156	0.092	15	0.2	0.1	25.675	D
C-AB	208	52	577	0.361	211	1.3	0.7	9.961	A
C-A	715	179			715				
A-B	31	8			31				
A-C	706	176			706				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	140	35	583	0.240	141	0.4	0.3	8.141	A
B-A	12	3	202	0.060	12	0.1	0.1	18.983	C
C-AB	159	40	558	0.285	160	0.7	0.4	9.083	A
C-A	614	154			614				
A-B	26	7			26				
A-C	591	148			591				

2044 8.5k DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2044 8.5k DM	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1011	100.000
B		ONE HOUR	✓	166	100.000
C		ONE HOUR	✓	907	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	37	974
	B	17	0	149
	C	790	117	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	1
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.38	13.65	0.6	B	137	205
B-A	0.21	51.76	0.3	F	16	23
C-AB	0.33	11.02	0.6	B	122	183
C-A					710	1065
A-B					34	51
A-C					894	1341

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	544	0.206	111	0.0	0.3	8.300	A
B-A	13	3	199	0.064	13	0.0	0.1	19.232	C
C-AB	92	23	497	0.185	91	0.0	0.2	8.844	A
C-A	591	148			591				
A-B	28	7			28				
A-C	733	183			733				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	33	499	0.268	134	0.3	0.4	9.829	A
B-A	15	4	153	0.100	15	0.1	0.1	26.086	D
C-AB	115	29	482	0.238	114	0.2	0.3	9.785	A
C-A	701	175			701				
A-B	33	8			33				
A-C	876	219			876				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	164	41	429	0.382	163	0.4	0.6	13.492	B
B-A	19	5	88	0.212	18	0.1	0.3	50.797	F
C-AB	159	40	486	0.328	158	0.3	0.6	10.958	B
C-A	839	210			839				
A-B	41	10			41				
A-C	1072	268			1072				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	164	41	428	0.384	164	0.6	0.6	13.650	B
B-A	19	5	88	0.212	19	0.3	0.3	51.764	F
C-AB	159	40	487	0.327	159	0.6	0.6	11.024	B
C-A	839	210			839				
A-B	41	10			41				
A-C	1072	268			1072				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	33	499	0.269	135	0.6	0.4	9.926	A
B-A	15	4	153	0.100	16	0.3	0.1	26.443	D
C-AB	115	29	483	0.238	116	0.6	0.3	9.858	A
C-A	701	175			701				
A-B	33	8			33				
A-C	876	219			876				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	543	0.207	113	0.4	0.3	8.370	A
B-A	13	3	199	0.064	13	0.1	0.1	19.365	C
C-AB	92	23	497	0.185	92	0.3	0.2	8.905	A
C-A	591	148			591				
A-B	28	7			28				
A-C	733	183			733				

2044 8.5k DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 8.5k DS	AM	J14 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	917	100.000
B		ONE HOUR	✓	199	100.000
C		ONE HOUR	✓	1125	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	44	873
	B	32	0	167
	C	933	192	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.56	25.01	1.2	D	153	230
B-A	0.60	143.44	1.3	F	29	44
C-AB	0.51	10.99	1.7	B	244	366
C-A					788	1183
A-B					40	61
A-C					801	1202

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	126	31	552	0.228	125	0.0	0.3	8.393	A
B-A	24	6	181	0.133	23	0.0	0.1	22.730	C
C-AB	163	41	550	0.296	161	0.0	0.5	9.211	A
C-A	684	171			684				
A-B	33	8			33				
A-C	657	164			657				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	38	500	0.300	150	0.3	0.4	10.262	B
B-A	29	7	131	0.220	28	0.1	0.3	34.962	D
C-AB	218	55	576	0.379	217	0.5	0.7	10.016	B
C-A	793	198			793				
A-B	40	10			40				
A-C	785	196			785				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	184	46	351	0.524	181	0.4	1.1	20.953	C
B-A	35	9	60	0.591	32	0.3	1.1	119.600	F
C-AB	351	88	682	0.515	348	0.7	1.6	10.775	B
C-A	888	222			888				
A-B	48	12			48				
A-C	961	240			961				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	184	46	326	0.564	183	1.1	1.2	25.009	D
B-A	35	9	58	0.603	35	1.1	1.3	143.442	F
C-AB	351	88	683	0.514	351	1.6	1.7	10.990	B
C-A	888	222			888				
A-B	48	12			48				
A-C	961	240			961				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	38	492	0.305	153	1.2	0.4	10.722	B
B-A	29	7	131	0.220	33	1.3	0.3	38.013	E
C-AB	218	55	578	0.377	222	1.7	0.8	10.285	B
C-A	793	198			793				
A-B	40	10			40				
A-C	785	196			785				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	126	31	551	0.228	126	0.4	0.3	8.488	A
B-A	24	6	180	0.133	25	0.3	0.2	23.183	C
C-AB	163	41	551	0.295	164	0.8	0.5	9.360	A
C-A	684	171			684				
A-B	33	8			33				
A-C	657	164			657				

2044 8.5k DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		29.19	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2044 8.5k DS	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1108	100.000
B		ONE HOUR	✓	177	100.000
C		ONE HOUR	✓	1004	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	41	1067
	B	70	0	107
	C	887	117	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	1
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	1.18	348.38	12.8	F	98	147
B-A	1.16	398.34	8.9	F	64	96
C-AB	0.35	11.39	0.7	B	127	191
C-A					794	1191
A-B					38	56
A-C					979	1469

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	81	20	463	0.174	80	0.0	0.2	9.376	A
B-A	53	13	209	0.252	51	0.0	0.3	22.672	C
C-AB	93	23	484	0.192	92	0.0	0.2	9.157	A
C-A	663	166			663				
A-B	31	8			31				
A-C	803	201			803				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	383	0.251	96	0.2	0.3	12.492	B
B-A	63	16	150	0.421	62	0.3	0.7	40.272	E
C-AB	118	29	471	0.250	117	0.2	0.4	10.171	B
C-A	785	196			785				
A-B	37	9			37				
A-C	959	240			959				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	118	29	100	1.183	89	0.3	7.6	208.500	F
B-A	77	19	67	1.156	58	0.7	5.5	255.804	F
C-AB	171	43	487	0.350	169	0.4	0.7	11.307	B
C-A	935	234			935				
A-B	45	11			45				
A-C	1175	294			1175				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	118	29	99	1.185	97	7.6	12.8	348.377	F
B-A	77	19	66	1.161	63	5.5	8.9	398.344	F
C-AB	171	43	488	0.350	171	0.7	0.7	11.393	B
C-A	935	234			935				
A-B	45	11			45				
A-C	1175	294			1175				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	288	0.334	145	12.8	0.5	34.784	D
B-A	63	16	139	0.453	95	8.9	0.9	112.870	F
C-AB	118	29	471	0.250	119	0.7	0.4	10.273	B
C-A	785	196			785				
A-B	37	9			37				
A-C	959	240			959				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	81	20	457	0.176	82	0.5	0.2	9.632	A
B-A	53	13	210	0.251	55	0.9	0.3	23.613	C
C-AB	93	23	484	0.192	93	0.4	0.3	9.228	A
C-A	663	166			663				
A-B	31	8			31				
A-C	803	201			803				

2044 10k DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2044 10k DM	AM	J14 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	820	100.000
B		ONE HOUR	✓	199	100.000
C		ONE HOUR	✓	1009	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	35	785
	B	16	0	183
	C	822	187	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.42	12.71	0.7	B	168	252
B-A	0.18	46.29	0.2	E	15	22
C-AB	0.47	10.75	1.3	B	218	327
C-A					708	1061
A-B					32	48
A-C					720	1080

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	584	0.236	137	0.0	0.3	8.030	A
B-A	12	3	205	0.059	12	0.0	0.1	18.608	C
C-AB	154	39	554	0.278	152	0.0	0.4	8.923	A
C-A	606	151			606				
A-B	26	7			26				
A-C	591	148			591				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	165	41	546	0.301	164	0.3	0.4	9.413	A
B-A	14	4	159	0.090	14	0.1	0.1	24.817	C
C-AB	200	50	569	0.352	199	0.4	0.6	9.739	A
C-A	707	177			707				
A-B	31	8			31				
A-C	706	176			706				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	486	0.415	200	0.4	0.7	12.570	B
B-A	18	4	96	0.184	17	0.1	0.2	45.482	E
C-AB	300	75	637	0.472	298	0.6	1.2	10.605	B
C-A	810	203			810				
A-B	39	10			39				
A-C	864	216			864				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	485	0.416	201	0.7	0.7	12.707	B
B-A	18	4	95	0.185	18	0.2	0.2	46.294	E
C-AB	300	75	638	0.471	300	1.2	1.3	10.748	B
C-A	810	203			810				
A-B	39	10			39				
A-C	864	216			864				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	165	41	545	0.302	166	0.7	0.4	9.508	A
B-A	14	4	158	0.091	15	0.2	0.1	25.163	D
C-AB	200	50	570	0.351	203	1.3	0.7	9.911	A
C-A	707	177			707				
A-B	31	8			31				
A-C	706	176			706				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	583	0.236	138	0.4	0.3	8.097	A
B-A	12	3	204	0.059	12	0.1	0.1	18.755	C
C-AB	154	39	555	0.278	155	0.7	0.4	9.042	A
C-A	606	151			606				
A-B	26	7			26				
A-C	591	148			591				

2044 10k DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 10k DM	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1000	100.000
B		ONE HOUR	✓	163	100.000
C		ONE HOUR	✓	903	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	36	964
	B	17	0	146
	C	788	115	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	1
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.37	13.26	0.6	B	134	201
B-A	0.20	49.45	0.2	E	16	23
C-AB	0.32	10.93	0.6	B	119	179
C-A					710	1064
A-B					33	50
A-C					885	1327

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	546	0.201	109	0.0	0.2	8.222	A
B-A	13	3	202	0.063	13	0.0	0.1	19.013	C
C-AB	90	23	498	0.181	89	0.0	0.2	8.785	A
C-A	590	147			590				
A-B	27	7			27				
A-C	726	181			726				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	131	33	502	0.261	131	0.2	0.3	9.685	A
B-A	15	4	156	0.098	15	0.1	0.1	25.606	D
C-AB	112	28	482	0.233	112	0.2	0.3	9.708	A
C-A	699	175			699				
A-B	32	8			32				
A-C	867	217			867				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	40	433	0.371	160	0.3	0.6	13.127	B
B-A	19	5	92	0.204	18	0.1	0.2	48.618	E
C-AB	155	39	484	0.320	154	0.3	0.6	10.873	B
C-A	839	210			839				
A-B	40	10			40				
A-C	1061	265			1061				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	40	432	0.372	161	0.6	0.6	13.265	B
B-A	19	5	91	0.205	19	0.2	0.2	49.453	E
C-AB	155	39	485	0.320	155	0.6	0.6	10.934	B
C-A	839	210			839				
A-B	40	10			40				
A-C	1061	265			1061				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	131	33	501	0.262	132	0.6	0.4	9.773	A
B-A	15	4	155	0.099	16	0.2	0.1	25.931	D
C-AB	112	28	483	0.232	113	0.6	0.3	9.777	A
C-A	699	175			699				
A-B	32	8			32				
A-C	867	217			867				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	545	0.202	110	0.4	0.3	8.282	A
B-A	13	3	201	0.064	13	0.1	0.1	19.143	C
C-AB	90	23	498	0.181	90	0.3	0.2	8.840	A
C-A	590	147			590				
A-B	27	7			27				
A-C	726	181			726				

2044 10k DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2044 10k DS	AM	J14 Otterpool Park AM PEAK	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	925	100.000
B		ONE HOUR	✓	197	100.000
C		ONE HOUR	✓	1105	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	45	880
	B	32	0	165
	C	918	187	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.54	23.32	1.1	C	151	227
B-A	0.58	132.98	1.2	F	29	44
C-AB	0.50	11.03	1.6	B	234	351
C-A					780	1170
A-B					41	62
A-C					808	1211

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	124	31	551	0.225	123	0.0	0.3	8.390	A
B-A	24	6	183	0.132	24	0.0	0.1	22.543	C
C-AB	157	39	545	0.289	156	0.0	0.4	9.211	A
C-A	674	169			674				
A-B	34	8			34				
A-C	663	166			663				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	499	0.297	148	0.3	0.4	10.244	B
B-A	29	7	132	0.217	28	0.1	0.3	34.432	D
C-AB	210	52	567	0.370	209	0.4	0.7	10.038	B
C-A	784	196			784				
A-B	40	10			40				
A-C	791	198			791				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	182	45	356	0.511	179	0.4	1.0	20.140	C
B-A	35	9	62	0.571	32	0.3	1.0	113.159	F
C-AB	335	84	664	0.504	332	0.7	1.5	10.827	B
C-A	882	220			882				
A-B	50	12			50				
A-C	969	242			969				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	182	45	335	0.543	181	1.0	1.1	23.321	C
B-A	35	9	61	0.581	35	1.0	1.2	132.983	F
C-AB	335	84	665	0.503	335	1.5	1.6	11.027	B
C-A	882	220			882				
A-B	50	12			50				
A-C	969	242			969				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	492	0.302	151	1.1	0.4	10.660	B
B-A	29	7	132	0.217	32	1.2	0.3	37.096	E
C-AB	210	52	569	0.369	213	1.6	0.8	10.287	B
C-A	784	196			784				
A-B	40	10			40				
A-C	791	198			791				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	124	31	550	0.226	125	0.4	0.3	8.484	A
B-A	24	6	182	0.132	25	0.3	0.2	22.968	C
C-AB	157	39	546	0.289	159	0.8	0.5	9.352	A
C-A	674	169			674				
A-B	34	8			34				
A-C	663	166			663				

2044 10k DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		26.86	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2044 10k DS	PM	J14 Otterpool Park PM PEAK	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1100	100.000
B		ONE HOUR	✓	174	100.000
C		ONE HOUR	✓	1007	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	41	1059
	B	70	0	104
	C	892	115	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	1
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	1.15	323.74	11.5	F	95	143
B-A	1.13	371.34	8.2	F	64	96
C-AB	0.34	11.32	0.7	B	124	186
C-A					800	1200
A-B					38	56
A-C					972	1458

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	78	20	463	0.169	77	0.0	0.2	9.315	A
B-A	53	13	211	0.249	51	0.0	0.3	22.356	C
C-AB	91	23	485	0.188	90	0.0	0.2	9.104	A
C-A	667	167			667				
A-B	31	8			31				
A-C	797	199			797				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	93	23	385	0.243	93	0.2	0.3	12.293	B
B-A	63	16	152	0.414	62	0.3	0.7	39.263	E
C-AB	115	29	471	0.245	115	0.2	0.4	10.102	B
C-A	790	198			790				
A-B	37	9			37				
A-C	952	238			952				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	115	29	100	1.148	88	0.3	6.9	196.703	F
B-A	77	19	69	1.122	59	0.7	5.1	240.393	F
C-AB	166	41	485	0.342	165	0.4	0.7	11.233	B
C-A	943	236			943				
A-B	45	11			45				
A-C	1166	291			1166				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	115	29	100	1.150	96	6.9	11.5	323.741	F
B-A	77	19	68	1.127	65	5.1	8.2	371.340	F
C-AB	166	41	485	0.342	166	0.7	0.7	11.316	B
C-A	943	236			943				
A-B	45	11			45				
A-C	1166	291			1166				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	93	23	302	0.309	138	11.5	0.5	28.144	D
B-A	63	16	143	0.439	92	8.2	0.9	96.488	F
C-AB	115	29	471	0.244	116	0.7	0.4	10.196	B
C-A	790	198			790				
A-B	37	9			37				
A-C	952	238			952				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	78	20	457	0.171	79	0.5	0.2	9.549	A
B-A	53	13	212	0.249	55	0.9	0.3	23.205	C
C-AB	91	23	485	0.188	92	0.4	0.2	9.170	A
C-A	667	167			667				
A-B	31	8			31				
A-C	797	199			797				

J15 – Military Road / Dymchurch Road

LinSig Modelling Results

Otterpool_Report_Output

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2018 AM	2018 AM	Network Control Plan 1	08:00 - 09:00	66/70/82	26.9	21.98
2	2018 PM	2018 PM	Network Control Plan 1	17:00 - 18:00	65/62/66	21.0	22.97
3	2037 DM AM	2037 DM AM	Network Control Plan 1	08:00 - 09:00	66/70/82	-5.9	54.63
4	2037 DM PM	2037 DM PM	Network Control Plan 1	17:00 - 18:00	65/62/66	-8.5	62.94
5	2037 DS AM	2037 DS AM	Network Control Plan 1	08:00 - 09:00	66/70/82	-6.5	61.68
6	2037 DS PM	2037 DS PM	Network Control Plan 1	17:00 - 18:00	65/62/66	-8.6	67.20
7	2044 8.5k DM AM	2044 8.5k DM AM	Network Control Plan 1	08:00 - 09:00	66/70/82	-6.6	61.58
8	2044 8.5k DM PM	2044 8.5k DM PM	Network Control Plan 1	17:00 - 18:00	65/62/66	-11.0	74.31
9	2044 8.5k DS AM	2044 8.5k DS AM	Network Control Plan 1	08:00 - 09:00	66/70/82	-8.0	77.39
10	2044 8.5k DS PM	2044 8.5k DS PM	Network Control Plan 1	17:00 - 18:00	65/62/66	-11.7	89.25
11	2044 10k DM AM	2044 10k DM AM	Network Control Plan 1	08:00 - 09:00	66/70/82	-6.3	57.17
12	2044 10k DM PM	2044 10k DM PM	Network Control Plan 1	17:00 - 18:00	65/62/66	-9.5	66.73
13	2044 10k DS AM	2044 10k DS AM	Network Control Plan 1	08:00 - 09:00	66/70/82	-5.0	59.58
14	2044 10k DS PM	2044 10k DS PM	Network Control Plan 1	17:00 - 18:00	65/62/66	-9.0	73.35

Scenario 1: '2018 AM' (FG1: '2018 AM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**70.9%**	**-**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**42.9%**	**-**	**-**
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	49	11	60	-	-	632	2061	2061	1472	42.9%	632	632
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**64.3%**	**-**	**-**
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	64	5	69	-	-	616	1841	1841	1459	42.2%	616	616
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	47	22	69	-	-	671	1783	1783	1044	64.3%	671	671
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	75	0	-	-	32	1827	1827	178	18.0%	32	32
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	19	Inf	Inf	Inf	0.0%	19	19
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	348	Inf	Inf	Inf	0.0%	348	348
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	692	Inf	Inf	Inf	0.0%	692	692
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	12:82	5:0	17:82	-	-	544	2051:1982	2051	325+577	60.3 : 60.3%	544	544
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	608	Inf	Inf	Inf	0.0%	608	608
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**67.5%**	**-**	**-**
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	36	30	0	-	-	363	1954	1954	1095	33.1%	363	363
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	18	48	0	-	-	388	1709:1729	1709	492+85	67.3 : 67.3%	388	388
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	559	Inf	Inf	Inf	0.0%	559	559
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	37	5	42	-	-	899	1868:1732	1868	910+423	67.5 : 67.5%	899	899
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	18	5	23	-	-	196	1774	1774	511	38.4%	196	196
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**70.9%**	**-**	**-**

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	52	40	22	-	-	1065	1984	1984	1502	70.9%	1065	1065
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1065	Inf	Inf	Inf	0.0%	1065	1065
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**45.2%**	-	-
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	50	7	57	-	-	196	1978	1978	1441	13.6%	196	196
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	7	57	-	-	616	1897	1897	1382	44.6%	616	616
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	7	57	-	-	671	2037	2037	1484	45.2%	671	671
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**46.2%**	-	-
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	266	1598	1598	576	46.2%	266	266
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	147	Inf	Inf	Inf	0.0%	147	147
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	632	Inf	Inf	Inf	0.0%	632	632
J7: Sir John Moore Ave / Military Road	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**30.4%**	-	-
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	148	1634	1634	486	30.4%	148	148
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	123	Inf	Inf	Inf	0.0%	123	123
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1040	Inf	Inf	Inf	0.0%	1040	1040

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**418**	**0**	**0**	**14.1**	**7.9**	**0.0**	**22.0**	**-**	**3386.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**70.9%**	**28.2**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**0.6**	**0.4**	**0.0**	**1.0**	**-**	**218.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**42.9%**	**1.4**	**-**
1/1	-	-	-	0.6	0.4	-	1.0	5.5	218.0	0.3	2.7	4.2	0.4	4.6	-	0.00	42.9%	1.4	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**4**	**0**	**0**	**4.6**	**2.1**	**0.0**	**6.7**	**-**	**844.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**64.3%**	**8.3**	**-**
1/1	-	-	-	0.5	0.4	-	0.8	4.8	187.8	0.3	2.6	4.3	0.4	4.6	-	0.00	42.2%	1.2	-
1/2	-	-	-	2.1	0.9	-	3.0	16.1	441.9	0.7	6.0	10.1	0.9	11.0	-	0.00	64.3%	3.8	-
2/1	-	-	-	0.3	0.1	-	0.4	46.3	29.3	0.9	0.6	0.7	0.1	0.8	-	0.00	18.0%	0.5	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	4	0	0	1.7	0.8	0.0	2.5	16.6	185.5	0.3	3.6	4.1	0.8	4.9	-	0.00	60.3 : 60.3%	2.8	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**6.1**	**2.6**	**0.0**	**8.7**	**-**	**1203.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**67.5%**	**10.9**	**-**
1/1	-	-	-	0.8	0.2	-	1.0	10.3	192.5	0.5	2.7	3.5	0.2	3.8	-	0.00	33.1%	1.4	-
1/2+1/3	-	-	-	2.2	1.0	-	3.2	29.7	332.3	0.9	4.1	5.3	1.0	6.3	-	0.00	67.3 : 67.3%	3.8	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	2.1	1.0	-	3.1	12.4	523.9	0.6	4.4	7.0	1.0	8.0	-	0.00	67.5 : 67.5%	4.1	-
4/1	-	-	-	1.0	0.3	-	1.3	24.5	154.4	0.8	2.5	2.8	0.3	3.1	-	0.00	38.4%	1.6	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**1.3**	**1.2**	**0.0**	**2.5**	**-**	**547.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**70.9%**	**3.5**	**-**
1/1	-	-	-	1.3	1.2	-	2.5	8.6	547.7	0.5	4.4	10.7	1.2	11.9	-	0.00	70.9%	3.5	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**1.5**	**0.9**	**0.0**	**2.4**	**-**	**573.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**45.2%**	**3.5**	**-**
1/1	-	-	-	0.2	0.1	-	0.2	4.3	58.8	0.3	0.9	1.1	0.1	1.2	-	0.00	13.6%	0.3	-
2/1	-	-	-	0.7	0.4	-	1.1	6.2	246.4	0.4	2.9	4.8	0.4	5.2	-	0.00	44.6%	1.5	-
2/2	-	-	-	0.7	0.4	-	1.1	6.1	268.4	0.4	3.2	5.2	0.4	5.6	-	0.00	45.2%	1.6	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**266**	**0**	**0**	**0.0**	**0.4**	**0.0**	**0.4**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**46.2%**	**0.4**	**-**
1/1	266	0	0	0.0	0.4	-	0.4	5.8	0.0	0.0	-	0.0	0.4	0.4	-	0.00	46.2%	0.4	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**148**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**30.4%**	**0.2**	**-**
1/1	148	0	0	0.0	0.2	-	0.2	5.3	0.0	0.0	-	0.0	0.2	0.2	-	0.00	30.4%	0.2	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	109.6	Total Delay for Signalled Lanes (pcuHr):	0.96	Cycle Time (s):	70
C2 - 14-0632	PRC for Signalled Lanes (%):	40.0	Total Delay for Signalled Lanes (pcuHr):	6.74	Cycle Time (s):	82
C3 - 14-0633	PRC for Signalled Lanes (%):	33.4	Total Delay for Signalled Lanes (pcuHr):	8.68	Cycle Time (s):	66
C4 - 14-1129	PRC for Signalled Lanes (%):	26.9	Total Delay for Signalled Lanes (pcuHr):	2.53	Cycle Time (s):	70
C5 - 14-1165	PRC for Signalled Lanes (%):	99.1	Total Delay for Signalled Lanes (pcuHr):	2.42	Cycle Time (s):	70
	PRC Over All Lanes (%):	26.9	Total Delay Over All Lanes(pcuHr):	21.98		

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	1	48	243	56	192	4	544
	B	24	10	74	18	29	3	158
	C	149	20	91	17	249	9	535
	D	143	16	14	7	84	2	266
	E	284	38	526	49	1	1	899
	F	7	1	20	0	4	0	32
	Tot.	608	133	968	147	559	19	2434

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	-10	0	0	0	0	-10
	C	0	0	-91	0	0	0	-91
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	-10	-91	0	0	0	-101

Scenario 2: '2018 PM' (FG2: '2018 PM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**74.4%**	**-**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**60.6%**	**-**	**-**
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	41	11	52	-	-	846	2061	2061	1396	60.6%	846	846
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**66.6%**	**-**	**-**
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	48	27	9	-	-	467	1841	1841	1367	34.2%	467	467
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	32	43	9	-	-	594	1783	1783	892	66.6%	594	594
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	15	22	-	-	36	1772	1772	215	16.8%	36	36
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	402	Inf	Inf	Inf	0.0%	402	402
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	613	Inf	Inf	Inf	0.0%	613	613
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	11:66	27:0	38:66	-	-	637	2046:1982	2046	372+636	63.2 : 63.2%	637	637
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	469	Inf	Inf	Inf	0.0%	469	469
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**55.0%**	**-**	**-**
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	38	0	38	-	-	611	1954	1954	1172	52.1%	611	611
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	20	18	38	-	-	389	1709:1729	1709	552+201	51.6 : 51.6%	389	389
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	840	Inf	Inf	Inf	0.0%	840	840
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	34	43	12	-	-	672	1868:1732	1868	890+331	55.0 : 55.0%	672	672
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	15	43	58	-	-	229	1774	1774	437	52.4%	229	229
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**74.4%**	**-**	**-**

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	44	33	15	-	-	1071	1984	1984	1440	74.4%	1071	1071
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1071	Inf	Inf	Inf	0.0%	1071	1071
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**42.0%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	42	9	51	-	-	229	1978	1978	1372	16.7%	229	229
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	9	51	-	-	467	1897	1897	1316	35.5%	467	467
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	9	51	-	-	594	2037	2037	1413	42.0%	594	594
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**46.1%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	244	1598	1598	529	46.1%	244	244
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	90	Inf	Inf	Inf	0.0%	90	90
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	846	Inf	Inf	Inf	0.0%	846	846
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**56.7%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	279	1634	1634	492	56.7%	279	279
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	223	Inf	Inf	Inf	0.0%	223	223
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1015	Inf	Inf	Inf	0.0%	1015	1015

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**533**	**0**	**0**	**14.5**	**8.5**	**0.0**	**23.0**	**-**	**3699.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**74.4%**	**29.7**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**1.1**	**0.8**	**0.0**	**1.9**	**-**	**413.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**60.6%**	**2.6**	**-**
1/1	-	-	-	1.1	0.8	-	1.9	8.0	413.0	0.5	3.8	7.1	0.8	7.9	-	0.00	60.6%	2.6	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**10**	**0**	**0**	**4.3**	**2.2**	**0.0**	**6.5**	**-**	**854.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**66.6%**	**8.1**	**-**
1/1	-	-	-	0.4	0.3	-	0.6	4.9	155.7	0.3	1.9	2.9	0.3	3.1	-	0.00	34.2%	0.9	-
1/2	-	-	-	2.0	1.0	-	3.0	18.4	441.0	0.7	5.1	8.1	1.0	9.1	-	0.00	66.6%	3.8	-
2/1	-	-	-	0.3	0.1	-	0.4	36.1	32.2	0.9	0.6	0.6	0.1	0.7	-	0.00	16.8%	0.4	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	10	0	0	1.6	0.9	0.0	2.5	14.1	225.1	0.4	3.4	4.0	0.9	4.8	-	0.00	63.2 : 63.2%	2.9	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**6.2**	**2.2**	**0.0**	**8.4**	**-**	**1240.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**55.0%**	**10.7**	**-**
1/1	-	-	-	1.3	0.5	-	1.8	10.8	347.8	0.6	4.1	6.3	0.5	6.8	-	0.00	52.1%	2.5	-
1/2+1/3	-	-	-	1.9	0.5	-	2.4	22.3	301.6	0.8	3.3	4.1	0.5	4.6	-	0.00	51.6 : 51.6%	3.0	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	1.7	0.6	-	2.3	12.2	393.9	0.6	3.8	5.4	0.6	6.1	-	0.00	55.0 : 55.0%	3.0	-
4/1	-	-	-	1.3	0.5	-	1.9	29.8	197.3	0.9	3.0	3.6	0.5	4.1	-	0.00	52.4%	2.3	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**1.5**	**1.4**	**0.0**	**2.9**	**-**	**621.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**74.4%**	**4.1**	**-**
1/1	-	-	-	1.5	1.4	-	2.9	9.9	621.9	0.6	4.5	10.7	1.4	12.1	-	0.00	74.4%	4.1	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**1.4**	**0.7**	**0.0**	**2.1**	**-**	**515.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**42.0%**	**3.1**	**-**
1/1	-	-	-	0.2	0.1	-	0.3	4.9	77.6	0.3	1.1	1.3	0.1	1.4	-	0.00	16.7%	0.5	-
2/1	-	-	-	0.5	0.3	-	0.8	6.0	188.3	0.4	2.2	3.2	0.3	3.5	-	0.00	35.5%	1.1	-
2/2	-	-	-	0.7	0.4	-	1.0	6.3	249.1	0.4	2.8	4.3	0.4	4.7	-	0.00	42.0%	1.5	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**244**	**0**	**0**	**0.0**	**0.4**	**0.0**	**0.4**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**46.1%**	**0.4**	**-**
1/1	244	0	0	0.0	0.4	-	0.4	6.3	0.0	0.0	-	0.0	0.4	0.4	-	0.00	46.1%	0.4	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**279**	**0**	**0**	**0.0**	**0.7**	**0.0**	**0.7**	**-**	**55.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**56.7%**	**0.8**	**-**
1/1	279	0	0	0.0	0.7	-	0.7	8.5	55.0	0.2	-	1.0	0.7	1.7	-	0.00	56.7%	0.8	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	48.5	Total Delay for Signalled Lanes (pcuHr):	1.87	Cycle Time (s):	62
C2 - 14-0632	PRC for Signalled Lanes (%):	35.1	Total Delay for Signalled Lanes (pcuHr):	6.53	Cycle Time (s):	66
C3 - 14-0633	PRC for Signalled Lanes (%):	63.5	Total Delay for Signalled Lanes (pcuHr):	8.41	Cycle Time (s):	65
C4 - 14-1129	PRC for Signalled Lanes (%):	21.0	Total Delay for Signalled Lanes (pcuHr):	2.95	Cycle Time (s):	62
C5 - 14-1165	PRC for Signalled Lanes (%):	114.1	Total Delay for Signalled Lanes (pcuHr):	2.13	Cycle Time (s):	62
	PRC Over All Lanes (%):	21.0	Total Delay Over All Lanes(pcuHr):	22.97		

Traffic Flows, Desired

Desired Flow :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	87	288	27	225	10	637
	B	40	8	146	22	70	1	287
	C	165	46	89	17	429	3	749
	D	72	27	20	11	110	4	244
	E	179	62	413	13	2	3	672
	F	13	1	18	0	4	0	36
	Tot.	469	231	974	90	840	21	2625

Traffic Flows, Difference

Difference :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	0	0	0	0	0	0
	B	0	-8	0	0	0	0	-8
	C	0	0	-89	0	0	0	-89
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	-8	-89	0	0	0	-97

Scenario 3: '2037 DM AM' (FG3: '2037 DM AM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**95.3%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**54.5%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	49	11	60	-	-	803	2061	2061	1472	54.5%	803	803
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**95.3%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	64	26	8	-	-	1020	1845	1845	1463	69.7%	1020	1020
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	37	53	8	-	-	771	1783	1783	826	93.3%	771	771
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	14	21	-	-	35	1843	1843	180	19.5%	35	35
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	528	Inf	Inf	Inf	0.0%	528	528
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	795	Inf	Inf	Inf	0.0%	795	795
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	22:82	26:0	48:82	-	-	987	2054:1982	2054	482+554	95.3 : 95.3%	987	987
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	1009	Inf	Inf	Inf	0.0%	1009	1009
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**86.2%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	25	30	55	-	-	432	1954	1954	770	56.1%	432	432
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	18	37	55	-	-	467	1709:1729	1709	492+73	82.7 : 82.7%	467	467
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	892	Inf	Inf	Inf	0.0%	892	892
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	37	60	31	-	-	1324	1868:1732	1868	825+711	86.2 : 86.2%	1324	1324
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	29	60	23	-	-	460	1774	1774	806	57.0%	460	460
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**89.6%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	52	39	21	-	-	1346	1984	1984	1502	89.6%	1346	1346
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1346	Inf	Inf	Inf	0.0%	1346	1346
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**73.8%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	50	4	54	-	-	460	1978	1978	1441	31.9%	460	460
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	4	54	-	-	1020	1897	1897	1382	73.8%	1020	1020
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	4	54	-	-	771	2037	2037	1484	52.0%	771	771
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**62.6%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	337	1598	1598	538	62.6%	337	337
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	241	Inf	Inf	Inf	0.0%	241	241
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	803	Inf	Inf	Inf	0.0%	803	803
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**35.9%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	152	1634	1634	424	35.9%	152	152
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	129	Inf	Inf	Inf	0.0%	129	129
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1323	Inf	Inf	Inf	0.0%	1323	1323

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**493**	**0**	**0**	**25.3**	**29.3**	**0.0**	**54.6**	**-**	**6115.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**95.3%**	**65.8**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**0.8**	**0.6**	**0.0**	**1.4**	**-**	**302.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**54.5%**	**1.9**	**-**
1/1	-	-	-	0.8	0.6	-	1.4	6.3	302.6	0.4	3.3	5.9	0.6	6.5	-	0.00	54.5%	1.9	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**4**	**0**	**0**	**9.4**	**14.7**	**0.0**	**24.1**	**-**	**1755.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**95.3%**	**27.4**	**-**
1/1	-	-	-	1.1	1.1	-	2.3	8.0	472.7	0.5	4.3	10.8	1.1	11.9	-	0.00	69.7%	3.1	-
1/2	-	-	-	4.5	5.8	-	10.2	47.7	724.0	0.9	9.0	16.5	5.8	22.3	-	0.00	93.3%	11.6	-
2/1	-	-	-	0.3	0.1	-	0.5	46.5	32.0	0.9	0.7	0.7	0.1	0.8	-	0.00	19.5%	0.5	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	4	0	0	3.5	7.7	0.0	11.2	40.9	526.3	0.5	7.3	11.5	7.7	19.2	-	0.00	95.3 : 95.3%	12.2	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**9.8**	**6.6**	**0.0**	**16.4**	**-**	**1972.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.2%**	**20.0**	**-**
1/1	-	-	-	1.9	0.6	-	2.5	20.9	333.8	0.8	4.6	6.1	0.6	6.8	-	0.00	56.1%	3.1	-
1/2+1/3	-	-	-	2.8	2.3	-	5.1	39.0	419.8	0.9	5.1	6.9	2.3	9.2	-	0.00	82.7 : 82.7%	5.8	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	3.5	3.0	-	6.5	17.6	884.2	0.7	5.1	8.9	3.0	11.9	-	0.00	86.2 : 86.2%	8.1	-
4/1	-	-	-	1.7	0.7	-	2.4	18.4	334.5	0.7	4.3	6.1	0.7	6.8	-	0.00	57.0%	3.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**2.4**	**4.1**	**0.0**	**6.5**	**-**	**999.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**89.6%**	**8.3**	**-**
1/1	-	-	-	2.4	4.1	-	6.5	17.4	999.9	0.7	5.6	19.4	4.1	23.5	-	0.00	89.6%	8.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**2.9**	**2.2**	**0.0**	**5.1**	**-**	**1085.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**73.8%**	**7.1**	**-**
1/1	-	-	-	0.4	0.2	-	0.7	5.2	157.7	0.3	2.2	3.1	0.2	3.3	-	0.00	31.9%	1.0	-
2/1	-	-	-	1.6	1.4	-	3.0	10.5	597.4	0.6	4.8	11.6	1.4	13.0	-	0.00	73.8%	4.1	-
2/2	-	-	-	0.9	0.5	-	1.4	6.7	330.4	0.4	3.6	6.4	0.5	7.0	-	0.00	52.0%	2.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**337**	**0**	**0**	**0.0**	**0.8**	**0.0**	**0.8**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**62.6%**	**0.8**	**-**
1/1	337	0	0	0.0	0.8	-	0.8	8.9	0.0	0.0	-	0.0	0.8	0.8	-	0.00	62.6%	0.8	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**152**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**35.9%**	**0.3**	**-**
1/1	152	0	0	0.0	0.3	-	0.3	6.6	0.0	0.0	-	0.0	0.3	0.3	-	0.00	35.9%	0.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	65.0	Total Delay for Signalled Lanes (pcuHr):	1.39	Cycle Time (s):	70
C2 - 14-0632	PRC for Signalled Lanes (%):	-5.9	Total Delay for Signalled Lanes (pcuHr):	24.15	Cycle Time (s):	82
C3 - 14-0633	PRC for Signalled Lanes (%):	4.5	Total Delay for Signalled Lanes (pcuHr):	16.41	Cycle Time (s):	66
C4 - 14-1129	PRC for Signalled Lanes (%):	0.4	Total Delay for Signalled Lanes (pcuHr):	6.49	Cycle Time (s):	70
C5 - 14-1165	PRC for Signalled Lanes (%):	21.9	Total Delay for Signalled Lanes (pcuHr):	5.07	Cycle Time (s):	70
	PRC Over All Lanes (%):	-5.9	Total Delay Over All Lanes(pcuHr):	54.63		

Traffic Flows, Desired

Desired Flow :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	41	375	112	455	4	987
	B	21	0	75	20	33	3	152
	C	200	22	0	19	273	10	524
	D	170	20	18	0	126	3	337
	E	612	45	576	90	0	1	1324
	F	6	1	23	0	5	0	35
	Tot.	1009	129	1067	241	892	21	3359

Traffic Flows, Difference

Difference :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 4: '2037 DM PM' (FG4: '2037 DM PM', Plan 1: 'Network Control Plan 1')
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**97.6%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**76.3%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	41	11	52	-	-	1065	2061	2061	1396	76.3%	1065	1065
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**97.6%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	48	55	37	-	-	908	1847	1847	1371	66.2%	908	908
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	23	14	37	-	-	631	1783	1783	648	97.3%	631	631
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	43	50	-	-	37	1776	1776	215	17.2%	37	37
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	532	Inf	Inf	Inf	0.0%	532	532
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	651	Inf	Inf	Inf	0.0%	651	651
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	20:66	55:0	9:66	-	-	1098	2052:1982	2052	580+545	97.6 : 97.6%	1098	1098
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	910	Inf	Inf	Inf	0.0%	910	910
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**82.1%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	29	55	19	-	-	726	1954	1954	902	80.5%	726	726
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	22	62	19	-	-	523	1709:1729	1709	605+147	69.6 : 69.6%	523	523
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	1286	Inf	Inf	Inf	0.0%	1286	1286
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	32	24	56	-	-	1016	1868:1732	1868	756+696	70.0 : 70.0%	1016	1016
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	24	24	48	-	-	560	1774	1774	682	82.1%	560	560
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**86.6%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	44	33	15	-	-	1247	1984	1984	1440	86.6%	1247	1247
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1247	Inf	Inf	Inf	0.0%	1247	1247
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.0%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	42	57	37	-	-	560	1978	1978	1372	40.8%	560	560
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	57	37	-	-	908	1897	1897	1316	69.0%	908	908
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	57	37	-	-	631	2037	2037	1413	44.7%	631	631
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**70.5%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	339	1598	1598	481	70.5%	339	339
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	155	Inf	Inf	Inf	0.0%	155	155
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1065	Inf	Inf	Inf	0.0%	1065	1065
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**65.5%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	298	1634	1634	455	65.5%	298	298
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	234	Inf	Inf	Inf	0.0%	234	234
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1183	Inf	Inf	Inf	0.0%	1183	1183

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**647**	**0**	**0**	**26.5**	**36.4**	**0.0**	**62.9**	**-**	**6701.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**97.6%**	**75.2**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**1.7**	**1.6**	**0.0**	**3.3**	**-**	**641.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**76.3%**	**4.4**	**-**
1/1	-	-	-	1.7	1.6	-	3.3	11.0	641.7	0.6	4.7	11.1	1.6	12.6	-	0.00	76.3%	4.4	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**10**	**0**	**0**	**8.4**	**21.2**	**0.0**	**29.6**	**-**	**1768.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**97.6%**	**32.8**	**-**
1/1	-	-	-	1.1	1.0	-	2.1	8.2	454.0	0.5	3.8	8.3	1.0	9.3	-	0.00	66.2%	2.9	-
1/2	-	-	-	3.6	8.9	-	12.6	71.7	621.4	1.0	7.0	11.4	8.9	20.3	-	0.00	97.3%	13.7	-
2/1	-	-	-	0.3	0.1	-	0.4	36.2	33.1	0.9	0.6	0.6	0.1	0.7	-	0.00	17.2%	0.4	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	10	0	0	3.4	11.2	0.0	14.6	47.8	660.1	0.6	6.8	11.5	11.2	22.7	-	0.00	97.6 : 97.6%	15.8	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**11.4**	**6.5**	**0.0**	**18.0**	**-**	**2227.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.1%**	**22.0**	**-**
1/1	-	-	-	3.0	2.0	-	5.0	25.0	614.3	0.8	6.7	11.1	2.0	13.1	-	0.00	80.5%	6.2	-
1/2+1/3	-	-	-	2.5	1.1	-	3.6	25.1	425.3	0.8	4.7	6.4	1.1	7.6	-	0.00	69.6 : 69.6%	4.4	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	3.1	1.2	-	4.3	15.1	687.8	0.7	4.4	6.5	1.2	7.6	-	0.00	70.0 : 70.0%	5.5	-
4/1	-	-	-	2.8	2.2	-	5.0	32.2	499.7	0.9	5.9	9.0	2.2	11.2	-	0.00	82.1%	5.9	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**2.2**	**3.1**	**0.0**	**5.3**	**-**	**905.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.6%**	**7.0**	**-**
1/1	-	-	-	2.2	3.1	-	5.3	15.3	905.1	0.7	5.2	15.6	3.1	18.7	-	0.00	86.6%	7.0	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**2.8**	**1.9**	**0.0**	**4.6**	**-**	**1036.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.0%**	**6.5**	**-**
1/1	-	-	-	0.6	0.3	-	1.0	6.3	234.8	0.4	2.6	4.0	0.3	4.4	-	0.00	40.8%	1.4	-
2/1	-	-	-	1.4	1.1	-	2.5	10.0	527.2	0.6	4.3	9.1	1.1	10.2	-	0.00	69.0%	3.5	-
2/2	-	-	-	0.7	0.4	-	1.1	6.5	274.8	0.4	3.0	4.7	0.4	5.1	-	0.00	44.7%	1.6	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**339**	**0**	**0**	**0.0**	**1.2**	**0.0**	**1.2**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**70.5%**	**1.2**	**-**
1/1	339	0	0	0.0	1.2	-	1.2	12.5	0.0	0.0	-	0.0	1.2	1.2	-	0.00	70.5%	1.2	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**298**	**0**	**0**	**0.1**	**0.9**	**0.0**	**1.0**	**-**	**121.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**65.5%**	**1.2**	**-**
1/1	298	0	0	0.1	0.9	-	1.0	12.3	121.9	0.4	-	2.2	0.9	3.2	-	0.00	65.5%	1.2	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	18.0	Total Delay for Signalled Lanes (pcuHr):	3.25	Cycle Time (s):	62
C2 - 14-0632	PRC for Signalled Lanes (%):	-8.5	Total Delay for Signalled Lanes (pcuHr):	29.59	Cycle Time (s):	66
C3 - 14-0633	PRC for Signalled Lanes (%):	9.7	Total Delay for Signalled Lanes (pcuHr):	17.96	Cycle Time (s):	65
C4 - 14-1129	PRC for Signalled Lanes (%):	3.9	Total Delay for Signalled Lanes (pcuHr):	5.30	Cycle Time (s):	62
C5 - 14-1165	PRC for Signalled Lanes (%):	30.4	Total Delay for Signalled Lanes (pcuHr):	4.64	Cycle Time (s):	62
	PRC Over All Lanes (%):	-8.5	Total Delay Over All Lanes(pcuHr):	62.94		

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	85	370	77	556	10	1098
	B	42	0	155	24	76	1	298
	C	233	53	0	19	502	3	810
	D	138	28	21	0	148	4	339
	E	484	67	427	35	0	3	1016
	F	13	1	19	0	4	0	37
	Tot.	910	234	992	155	1286	21	3598

Traffic Flows, Difference

Difference :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 5: '2037 DS AM' (FG5: '2037 DS AM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**95.8%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**59.7%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	49	11	60	-	-	879	2061	2061	1472	59.7%	879	879
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**95.8%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	64	39	21	-	-	1088	1845	1845	1463	74.4%	1088	1088
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	36	67	21	-	-	771	1783	1783	805	95.8%	771	771
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	27	34	-	-	35	1843	1843	180	19.5%	35	35
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	571	Inf	Inf	Inf	0.0%	571	571
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	795	Inf	Inf	Inf	0.0%	795	795
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	23:82	39:0	62:82	-	-	1030	2054:1982	2054	489+608	93.9 : 93.9%	1030	1030
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	1077	Inf	Inf	Inf	0.0%	1077	1077
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**89.3%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	26	26	52	-	-	432	1954	1954	799	54.0%	432	432
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	20	32	52	-	-	535	1709:1729	1709	544+69	87.4 : 87.4%	535	535
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	892	Inf	Inf	Inf	0.0%	892	892
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	35	57	26	-	-	1324	1868:1732	1868	796+686	89.3 : 89.3%	1324	1324
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	28	57	19	-	-	460	1774	1774	779	59.0%	460	460
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**92.5%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	52	38	20	-	-	1389	1984	1984	1502	92.5%	1389	1389
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1389	Inf	Inf	Inf	0.0%	1389	1389
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**78.7%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	50	5	55	-	-	460	1978	1978	1441	31.9%	460	460
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	5	55	-	-	1088	1897	1897	1382	78.7%	1088	1088
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	5	55	-	-	771	2037	2037	1484	52.0%	771	771
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.2%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	361	1598	1598	522	69.2%	361	361
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	273	Inf	Inf	Inf	0.0%	273	273
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	879	Inf	Inf	Inf	0.0%	879	879
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**36.7%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	152	1634	1634	414	36.7%	152	152
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	129	Inf	Inf	Inf	0.0%	129	129
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1366	Inf	Inf	Inf	0.0%	1366	1366

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**517**	**0**	**0**	**27.0**	**34.7**	**0.0**	**61.7**	**-**	**6567.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**95.8%**	**73.7**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**0.9**	**0.7**	**0.0**	**1.7**	**-**	**358.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**59.7%**	**2.3**	**-**
1/1	-	-	-	0.9	0.7	-	1.7	6.8	358.5	0.4	3.5	7.0	0.7	7.7	-	0.00	59.7%	2.3	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**4**	**0**	**0**	**9.7**	**15.9**	**0.0**	**25.6**	**-**	**1824.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**95.8%**	**28.9**	**-**
1/1	-	-	-	1.3	1.4	-	2.7	9.1	544.0	0.5	4.5	12.4	1.4	13.8	-	0.00	74.4%	3.7	-
1/2	-	-	-	4.7	7.8	-	12.5	58.3	742.8	1.0	9.2	16.9	7.8	24.8	-	0.00	95.8%	13.9	-
2/1	-	-	-	0.3	0.1	-	0.5	46.5	32.0	0.9	0.7	0.7	0.1	0.8	-	0.00	19.5%	0.5	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	4	0	0	3.4	6.5	0.0	9.9	34.5	505.8	0.5	7.1	11.1	6.5	17.5	-	0.00	93.9 : 93.9%	10.8	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**10.6**	**8.5**	**0.0**	**19.1**	**-**	**2101.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**89.3%**	**22.9**	**-**
1/1	-	-	-	1.8	0.6	-	2.4	19.7	327.3	0.8	4.4	6.0	0.6	6.6	-	0.00	54.0%	3.0	-
1/2+1/3	-	-	-	3.1	3.2	-	6.3	42.1	488.0	0.9	5.7	8.2	3.2	11.4	-	0.00	87.4 : 87.4%	7.2	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	4.0	4.0	-	8.0	21.6	944.3	0.7	5.5	9.5	4.0	13.5	-	0.00	89.3 : 89.3%	9.7	-
4/1	-	-	-	1.8	0.7	-	2.5	19.6	341.5	0.7	4.5	6.3	0.7	7.0	-	0.00	59.0%	3.1	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**2.7**	**5.6**	**0.0**	**8.2**	**-**	**1111.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**92.5%**	**10.3**	**-**
1/1	-	-	-	2.7	5.6	-	8.2	21.4	1111.2	0.8	5.8	21.6	5.6	27.2	-	0.00	92.5%	10.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**3.1**	**2.6**	**0.0**	**5.7**	**-**	**1172.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**78.7%**	**7.9**	**-**
1/1	-	-	-	0.4	0.2	-	0.7	5.2	157.7	0.3	2.2	3.1	0.2	3.3	-	0.00	31.9%	1.0	-
2/1	-	-	-	1.8	1.8	-	3.7	12.1	683.9	0.6	5.1	13.3	1.8	15.1	-	0.00	78.7%	4.9	-
2/2	-	-	-	0.9	0.5	-	1.4	6.7	330.4	0.4	3.6	6.4	0.5	7.0	-	0.00	52.0%	2.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**361**	**0**	**0**	**0.0**	**1.1**	**0.0**	**1.1**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.2%**	**1.1**	**-**
1/1	361	0	0	0.0	1.1	-	1.1	11.1	0.0	0.0	-	0.0	1.1	1.1	-	0.00	69.2%	1.1	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**152**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**36.7%**	**0.3**	**-**
1/1	152	0	0	0.0	0.3	-	0.3	6.8	0.0	0.0	-	0.0	0.3	0.3	-	0.00	36.7%	0.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	50.7	Total Delay for Signalled Lanes (pcuHr):	1.65	Cycle Time (s):	70
C2 - 14-0632	PRC for Signalled Lanes (%):	-6.5	Total Delay for Signalled Lanes (pcuHr):	25.56	Cycle Time (s):	82
C3 - 14-0633	PRC for Signalled Lanes (%):	0.7	Total Delay for Signalled Lanes (pcuHr):	19.09	Cycle Time (s):	66
C4 - 14-1129	PRC for Signalled Lanes (%):	-2.7	Total Delay for Signalled Lanes (pcuHr):	8.24	Cycle Time (s):	70
C5 - 14-1165	PRC for Signalled Lanes (%):	14.3	Total Delay for Signalled Lanes (pcuHr):	5.75	Cycle Time (s):	70
	PRC Over All Lanes (%):	-6.5	Total Delay Over All Lanes(pcuHr):	61.68		

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	41	386	144	455	4	1030
	B	21	0	75	20	33	3	152
	C	244	22	0	19	273	10	568
	D	194	20	18	0	126	3	361
	E	612	45	576	90	0	1	1324
	F	6	1	23	0	5	0	35
	Tot.	1077	129	1078	273	892	21	3470

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 6: '2037 DS PM' (FG6: '2037 DS PM', Plan 1: 'Network Control Plan 1')
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**97.8%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**81.2%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	41	11	52	-	-	1134	2061	2061	1396	81.2%	1134	1134
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**97.8%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	48	51	33	-	-	981	1847	1847	1371	71.5%	981	981
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	23	10	33	-	-	631	1783	1783	648	97.3%	631	631
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	39	46	-	-	37	1776	1776	215	17.2%	37	37
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	541	Inf	Inf	Inf	0.0%	541	541
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	651	Inf	Inf	Inf	0.0%	651	651
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	20:66	51:0	5:66	-	-	1107	2052:1982	2052	579+553	97.8 : 97.8%	1107	1107
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	983	Inf	Inf	Inf	0.0%	983	983
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**82.1%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	29	6	35	-	-	726	1954	1954	902	80.5%	726	726
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	23	12	35	-	-	596	1709:1729	1709	630+130	78.4 : 78.4%	596	596
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	1286	Inf	Inf	Inf	0.0%	1286	1286
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	31	40	6	-	-	1016	1868:1732	1868	742+683	71.3 : 71.3%	1016	1016
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	24	40	64	-	-	560	1774	1774	682	82.1%	560	560
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**87.2%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	44	33	15	-	-	1256	1984	1984	1440	87.2%	1256	1256
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1256	Inf	Inf	Inf	0.0%	1256	1256
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**74.6%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	42	9	51	-	-	560	1978	1978	1372	40.8%	560	560
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	9	51	-	-	981	1897	1897	1316	74.6%	981	981
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	9	51	-	-	631	2037	2037	1413	44.7%	631	631
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**79.3%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	369	1598	1598	465	79.3%	369	369
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	181	Inf	Inf	Inf	0.0%	181	181
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1134	Inf	Inf	Inf	0.0%	1134	1134
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**65.8%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	298	1634	1634	453	65.8%	298	298
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	234	Inf	Inf	Inf	0.0%	234	234
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1192	Inf	Inf	Inf	0.0%	1192	1192

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**677**	**0**	**0**	**27.7**	**39.4**	**0.0**	**67.2**	**-**	**7105.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**97.8%**	**80.2**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**1.9**	**2.1**	**0.0**	**4.0**	**-**	**742.8**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**81.2%**	**5.4**	**-**
1/1	-	-	-	1.9	2.1	-	4.0	12.8	742.8	0.7	5.0	12.8	2.1	14.9	-	0.00	81.2%	5.4	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**10**	**0**	**0**	**8.5**	**21.8**	**0.0**	**30.3**	**-**	**1851.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**97.8%**	**33.7**	**-**
1/1	-	-	-	1.3	1.2	-	2.5	9.3	535.1	0.5	4.1	9.8	1.2	11.1	-	0.00	71.5%	3.5	-
1/2	-	-	-	3.6	8.9	-	12.6	71.7	621.4	1.0	7.0	11.4	8.9	20.3	-	0.00	97.3%	13.7	-
2/1	-	-	-	0.3	0.1	-	0.4	36.2	33.1	0.9	0.6	0.6	0.1	0.7	-	0.00	17.2%	0.4	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	10	0	0	3.4	11.5	0.0	14.9	48.4	661.8	0.6	6.8	11.6	11.5	23.0	-	0.00	97.8 : 97.8%	16.1	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**12.0**	**7.2**	**0.0**	**19.2**	**-**	**2326.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.1%**	**23.5**	**-**
1/1	-	-	-	3.0	2.0	-	5.0	25.0	614.3	0.8	6.7	11.1	2.0	13.1	-	0.00	80.5%	6.2	-
1/2+1/3	-	-	-	2.9	1.8	-	4.7	28.2	500.7	0.8	5.4	7.8	1.8	9.6	-	0.00	78.4 : 78.4%	5.6	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	3.3	1.2	-	4.5	16.0	711.5	0.7	4.6	6.8	1.2	8.0	-	0.00	71.3 : 71.3%	5.8	-
4/1	-	-	-	2.8	2.2	-	5.0	32.2	499.7	0.9	5.9	9.0	2.2	11.2	-	0.00	82.1%	5.9	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**2.2**	**3.3**	**0.0**	**5.5**	**-**	**931.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.2%**	**7.2**	**-**
1/1	-	-	-	2.2	3.3	-	5.5	15.8	931.9	0.7	5.2	16.0	3.3	19.3	-	0.00	87.2%	7.2	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**3.0**	**2.2**	**0.0**	**5.2**	**-**	**1126.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**74.6%**	**7.3**	**-**
1/1	-	-	-	0.6	0.3	-	1.0	6.3	234.8	0.4	2.6	4.0	0.3	4.4	-	0.00	40.8%	1.4	-
2/1	-	-	-	1.6	1.5	-	3.1	11.4	617.1	0.6	4.6	10.6	1.5	12.1	-	0.00	74.6%	4.2	-
2/2	-	-	-	0.7	0.4	-	1.1	6.5	274.8	0.4	3.0	4.7	0.4	5.1	-	0.00	44.7%	1.6	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**369**	**0**	**0**	**0.0**	**1.8**	**0.0**	**1.8**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**79.3%**	**1.8**	**-**
1/1	369	0	0	0.0	1.8	-	1.8	18.0	0.0	0.0	-	0.0	1.8	1.8	-	0.00	79.3%	1.8	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**298**	**0**	**0**	**0.1**	**1.0**	**0.0**	**1.0**	**-**	**126.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**65.8%**	**1.3**	**-**
1/1	298	0	0	0.1	1.0	-	1.0	12.5	126.4	0.4	-	2.3	1.0	3.3	-	0.00	65.8%	1.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	10.8	Total Delay for Signalled Lanes (pcuHr):	4.02	Cycle Time (s):	62
C2 - 14-0632	PRC for Signalled Lanes (%):	-8.6	Total Delay for Signalled Lanes (pcuHr):	30.34	Cycle Time (s):	66
C3 - 14-0633	PRC for Signalled Lanes (%):	9.7	Total Delay for Signalled Lanes (pcuHr):	19.24	Cycle Time (s):	65
C4 - 14-1129	PRC for Signalled Lanes (%):	3.2	Total Delay for Signalled Lanes (pcuHr):	5.51	Cycle Time (s):	62
C5 - 14-1165	PRC for Signalled Lanes (%):	20.7	Total Delay for Signalled Lanes (pcuHr):	5.22	Cycle Time (s):	62
	PRC Over All Lanes (%):	-8.6	Total Delay Over All Lanes(pcuHr):	67.20		

Traffic Flows, Desired

Desired Flow :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	85	353	103	556	10	1107
	B	42	0	155	24	76	1	298
	C	276	53	0	19	502	3	853
	D	168	28	21	0	148	4	369
	E	484	67	427	35	0	3	1016
	F	13	1	19	0	4	0	37
	Tot.	983	234	975	181	1286	21	3680

Traffic Flows, Difference

Difference :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 7: '2044 8.5k DM AM' (FG7: '2044 8.5k DM AM ', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**96.0%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**56.4%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	49	11	60	-	-	831	2061	2061	1472	56.4%	831	831
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**96.0%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	64	26	8	-	-	1054	1845	1845	1463	72.1%	1054	1054
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	37	53	8	-	-	792	1783	1783	826	95.9%	792	792
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	14	21	-	-	35	1843	1843	180	19.5%	35	35
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	535	Inf	Inf	Inf	0.0%	535	535
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	816	Inf	Inf	Inf	0.0%	816	816
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	22:82	26:0	48:82	-	-	997	2054:1982	2054	481+558	96.0 : 96.0%	997	997
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	1043	Inf	Inf	Inf	0.0%	1043	1043
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**88.4%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	25	30	55	-	-	444	1954	1954	770	57.7%	444	444
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	18	37	55	-	-	488	1709:1729	1709	492+72	86.6 : 86.6%	488	488
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	907	Inf	Inf	Inf	0.0%	907	907
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	37	60	31	-	-	1358	1868:1732	1868	826+710	88.4 : 88.4%	1358	1358
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	29	60	23	-	-	463	1774	1774	806	57.4%	463	463
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**91.6%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	52	41	23	-	-	1376	1984	1984	1502	91.6%	1376	1376
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1376	Inf	Inf	Inf	0.0%	1376	1376
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**76.3%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	50	4	54	-	-	463	1978	1978	1441	32.1%	463	463
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	4	54	-	-	1054	1897	1897	1382	76.3%	1054	1054
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	4	54	-	-	792	2037	2037	1484	53.4%	792	792
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**65.2%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	347	1598	1598	532	65.2%	347	347
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	246	Inf	Inf	Inf	0.0%	246	246
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	831	Inf	Inf	Inf	0.0%	831	831
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**37.8%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	158	1634	1634	418	37.8%	158	158
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	133	Inf	Inf	Inf	0.0%	133	133
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1351	Inf	Inf	Inf	0.0%	1351	1351

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**509**	**0**	**0**	**26.5**	**35.1**	**0.0**	**61.6**	**-**	**6389.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**96.0%**	**73.3**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**0.9**	**0.6**	**0.0**	**1.5**	**-**	**310.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**56.4%**	**2.1**	**-**
1/1	-	-	-	0.9	0.6	-	1.5	6.5	310.9	0.4	3.4	6.0	0.6	6.7	-	0.00	56.4%	2.1	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**4**	**0**	**0**	**9.8**	**17.8**	**0.0**	**27.6**	**-**	**1823.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**96.0%**	**30.9**	**-**
1/1	-	-	-	1.2	1.3	-	2.5	8.5	501.3	0.5	4.4	11.4	1.3	12.7	-	0.00	72.1%	3.4	-
1/2	-	-	-	4.7	7.9	-	12.6	57.2	763.0	1.0	9.2	17.4	7.9	25.3	-	0.00	95.9%	14.0	-
2/1	-	-	-	0.3	0.1	-	0.5	46.5	32.0	0.9	0.7	0.7	0.1	0.8	-	0.00	19.5%	0.5	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	4	0	0	3.6	8.5	0.0	12.0	43.5	527.4	0.5	7.3	11.6	8.5	20.0	-	0.00	96.0 : 96.0%	13.0	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**10.2**	**8.0**	**0.0**	**18.2**	**-**	**2032.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**88.4%**	**21.9**	**-**
1/1	-	-	-	1.9	0.7	-	2.6	21.2	343.1	0.8	4.7	6.3	0.7	7.0	-	0.00	57.7%	3.2	-
1/2+1/3	-	-	-	2.9	3.0	-	5.9	43.7	445.3	0.9	5.3	7.3	3.0	10.3	-	0.00	86.6 : 86.6%	6.7	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	3.6	3.7	-	7.3	19.3	906.9	0.7	5.3	9.1	3.7	12.8	-	0.00	88.4 : 88.4%	8.9	-
4/1	-	-	-	1.7	0.7	-	2.4	18.5	336.7	0.7	4.4	6.2	0.7	6.8	-	0.00	57.4%	3.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**2.6**	**5.0**	**0.0**	**7.6**	**-**	**1081.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**91.6%**	**9.6**	**-**
1/1	-	-	-	2.6	5.0	-	7.6	19.9	1081.1	0.8	5.7	21.0	5.0	26.1	-	0.00	91.6%	9.6	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**3.1**	**2.4**	**0.0**	**5.5**	**-**	**1141.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**76.3%**	**7.5**	**-**
1/1	-	-	-	0.4	0.2	-	0.7	5.2	158.7	0.3	2.2	3.1	0.2	3.3	-	0.00	32.1%	1.0	-
2/1	-	-	-	1.7	1.6	-	3.3	11.2	632.4	0.6	5.0	12.3	1.6	13.9	-	0.00	76.3%	4.4	-
2/2	-	-	-	0.9	0.6	-	1.5	6.8	350.7	0.4	3.7	6.8	0.6	7.4	-	0.00	53.4%	2.1	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**347**	**0**	**0**	**0.0**	**0.9**	**0.0**	**0.9**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**65.2%**	**0.9**	**-**
1/1	347	0	0	0.0	0.9	-	0.9	9.6	0.0	0.0	-	0.0	0.9	0.9	-	0.00	65.2%	0.9	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**158**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**37.8%**	**0.3**	**-**
1/1	158	0	0	0.0	0.3	-	0.3	6.9	0.0	0.0	-	0.0	0.3	0.3	-	0.00	37.8%	0.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	59.4	Total Delay for Signalled Lanes (pcuHr):	1.51	Cycle Time (s):	70
C2 - 14-0632	PRC for Signalled Lanes (%):	-6.6	Total Delay for Signalled Lanes (pcuHr):	27.56	Cycle Time (s):	82
C3 - 14-0633	PRC for Signalled Lanes (%):	1.8	Total Delay for Signalled Lanes (pcuHr):	18.20	Cycle Time (s):	66
C4 - 14-1129	PRC for Signalled Lanes (%):	-1.8	Total Delay for Signalled Lanes (pcuHr):	7.62	Cycle Time (s):	70
C5 - 14-1165	PRC for Signalled Lanes (%):	18.0	Total Delay for Signalled Lanes (pcuHr):	5.46	Cycle Time (s):	70
	PRC Over All Lanes (%):	-6.6	Total Delay Over All Lanes(pcuHr):	61.58		

Traffic Flows, Desired

Desired Flow :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	42	379	114	458	4	997
	B	22	0	78	21	34	3	158
	C	211	23	0	19	282	10	545
	D	177	21	18	0	128	3	347
	E	627	46	592	92	0	1	1358
	F	6	1	23	0	5	0	35
	Tot.	1043	133	1090	246	907	21	3440

Traffic Flows, Difference

Difference :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 8: '2044 8.5k DM PM' (FG8: '2044 8.5k DM PM', Plan 1: 'Network Control Plan 1')
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**99.9%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**78.2%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	41	11	52	-	-	1092	2061	2061	1396	78.2%	1092	1092
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**99.9%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	48	54	36	-	-	918	1846	1846	1371	67.0%	918	918
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	23	13	36	-	-	648	1783	1783	648	99.9%	648	648
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	42	49	-	-	37	1776	1776	215	17.2%	37	37
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	22	Inf	Inf	Inf	0.0%	22	22
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	550	Inf	Inf	Inf	0.0%	550	550
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	668	Inf	Inf	Inf	0.0%	668	668
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	20:66	54:0	8:66	-	-	1127	2052:1982	2052	579+552	99.6 : 99.6%	1127	1127
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	919	Inf	Inf	Inf	0.0%	919	919
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**83.7%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	29	54	18	-	-	746	1954	1954	902	82.7%	746	746
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	22	61	18	-	-	533	1709:1729	1709	605+148	70.8 : 70.8%	533	533
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	1317	Inf	Inf	Inf	0.0%	1317	1317
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	32	23	55	-	-	1033	1868:1732	1868	758+684	71.6 : 71.6%	1033	1033
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	24	23	47	-	-	571	1774	1774	682	83.7%	571	571
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**89.1%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	44	32	14	-	-	1283	1984	1984	1440	89.1%	1283	1283
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1283	Inf	Inf	Inf	0.0%	1283	1283
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.8%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	42	56	36	-	-	571	1978	1978	1372	41.6%	571	571
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	56	36	-	-	918	1897	1897	1316	69.8%	918	918
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	56	36	-	-	648	2037	2037	1413	45.9%	648	648
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**73.1%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	347	1598	1598	475	73.1%	347	347
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	160	Inf	Inf	Inf	0.0%	160	160
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1092	Inf	Inf	Inf	0.0%	1092	1092
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**68.7%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	307	1634	1634	447	68.7%	307	307
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	242	Inf	Inf	Inf	0.0%	242	242
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1218	Inf	Inf	Inf	0.0%	1218	1218

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**664**	**0**	**0**	**27.5**	**46.8**	**0.0**	**74.3**	**-**	**6992.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**99.9%**	**87.1**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**1.7**	**1.8**	**0.0**	**3.5**	**-**	**677.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**78.2%**	**4.8**	**-**
1/1	-	-	-	1.7	1.8	-	3.5	11.6	677.5	0.6	4.8	11.7	1.8	13.4	-	0.00	78.2%	4.8	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**10**	**0**	**0**	**8.7**	**29.6**	**0.0**	**38.2**	**-**	**1828.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**99.9%**	**41.6**	**-**
1/1	-	-	-	1.1	1.0	-	2.1	8.3	459.0	0.5	3.8	8.4	1.0	9.4	-	0.00	67.0%	3.0	-
1/2	-	-	-	3.8	12.6	-	16.4	91.2	638.2	1.0	7.2	11.7	12.6	24.3	-	0.00	99.9%	17.6	-
2/1	-	-	-	0.3	0.1	-	0.4	36.2	33.1	0.9	0.6	0.6	0.1	0.7	-	0.00	17.2%	0.4	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	10	0	0	3.5	15.8	0.0	19.3	61.7	697.9	0.6	6.9	12.2	15.8	28.0	-	0.00	99.6 : 99.6%	20.6	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**11.8**	**7.2**	**0.0**	**19.0**	**-**	**2299.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**83.7%**	**23.2**	**-**
1/1	-	-	-	3.2	2.3	-	5.5	26.5	642.7	0.9	6.8	11.6	2.3	13.9	-	0.00	82.7%	6.7	-
1/2+1/3	-	-	-	2.6	1.2	-	3.8	25.5	439.8	0.8	4.8	6.7	1.2	7.9	-	0.00	70.8 : 70.8%	4.6	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	3.2	1.3	-	4.4	15.4	707.6	0.7	4.5	6.8	1.3	8.0	-	0.00	71.6 : 71.6%	5.7	-
4/1	-	-	-	2.9	2.5	-	5.3	33.6	509.5	0.9	6.0	9.2	2.5	11.7	-	0.00	83.7%	6.3	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**2.4**	**3.9**	**0.0**	**6.2**	**-**	**993.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**89.1%**	**8.1**	**-**
1/1	-	-	-	2.4	3.9	-	6.2	17.5	993.3	0.8	5.3	17.1	3.9	21.0	-	0.00	89.1%	8.1	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**2.9**	**1.9**	**0.0**	**4.8**	**-**	**1054.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.8%**	**6.7**	**-**
1/1	-	-	-	0.6	0.4	-	1.0	6.3	239.5	0.4	2.7	4.1	0.4	4.5	-	0.00	41.6%	1.4	-
2/1	-	-	-	1.4	1.1	-	2.6	10.1	533.0	0.6	4.3	9.2	1.1	10.3	-	0.00	69.8%	3.6	-
2/2	-	-	-	0.8	0.4	-	1.2	6.6	282.2	0.4	3.1	4.9	0.4	5.3	-	0.00	45.9%	1.7	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**347**	**0**	**0**	**0.0**	**1.3**	**0.0**	**1.3**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**73.1%**	**1.3**	**-**
1/1	347	0	0	0.0	1.3	-	1.3	13.8	0.0	0.0	-	0.0	1.3	1.3	-	0.00	73.1%	1.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**307**	**0**	**0**	**0.1**	**1.1**	**0.0**	**1.2**	**-**	**139.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**68.7%**	**1.4**	**-**
1/1	307	0	0	0.1	1.1	-	1.2	14.0	139.5	0.5	-	2.6	1.1	3.6	-	0.00	68.7%	1.4	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	15.1	Total Delay for Signalled Lanes (pcuHr):	3.52	Cycle Time (s):	62
C2 - 14-0632	PRC for Signalled Lanes (%):	-11.0	Total Delay for Signalled Lanes (pcuHr):	38.23	Cycle Time (s):	66
C3 - 14-0633	PRC for Signalled Lanes (%):	7.5	Total Delay for Signalled Lanes (pcuHr):	19.01	Cycle Time (s):	65
C4 - 14-1129	PRC for Signalled Lanes (%):	1.0	Total Delay for Signalled Lanes (pcuHr):	6.24	Cycle Time (s):	62
C5 - 14-1165	PRC for Signalled Lanes (%):	29.0	Total Delay for Signalled Lanes (pcuHr):	4.78	Cycle Time (s):	62
	PRC Over All Lanes (%):	-11.0	Total Delay Over All Lanes(pcuHr):	74.31		

Traffic Flows, Desired

Desired Flow :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	89	382	79	567	10	1127
	B	42	0	160	25	79	1	307
	C	236	55	0	20	516	3	830
	D	141	29	21	0	151	5	347
	E	487	68	439	36	0	3	1033
	F	13	1	19	0	4	0	37
	Tot.	919	242	1021	160	1317	22	3681

Traffic Flows, Difference

Difference :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 9: '2044 8.5k DS AM' (FG9: '2044 8.5k DS AM ', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**97.2%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**63.0%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	49	11	60	-	-	927	2061	2061	1472	63.0%	927	927
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**97.2%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	64	5	69	-	-	1152	1846	1846	1463	78.7%	1152	1152
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	37	32	69	-	-	792	1783	1783	826	95.9%	792	792
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	75	0	-	-	35	1843	1843	180	19.5%	35	35
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	605	Inf	Inf	Inf	0.0%	605	605
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	816	Inf	Inf	Inf	0.0%	816	816
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	22:82	5:0	27:82	-	-	1067	2054:1982	2054	475+622	97.2 : 97.2%	1067	1067
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	1141	Inf	Inf	Inf	0.0%	1141	1141
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**93.4%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	27	39	0	-	-	444	1954	1954	829	53.6%	444	444
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	21	45	0	-	-	586	1709:1729	1709	570+67	92.0 : 92.0%	586	586
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	907	Inf	Inf	Inf	0.0%	907	907
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	34	5	39	-	-	1358	1868:1732	1868	781+672	93.4 : 93.4%	1358	1358
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	27	5	32	-	-	463	1774	1774	753	61.5%	463	463
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**96.3%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	52	38	20	-	-	1446	1984	1984	1502	96.3%	1446	1446
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1446	Inf	Inf	Inf	0.0%	1446	1446
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**83.4%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	50	7	57	-	-	463	1978	1978	1441	32.1%	463	463
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	7	57	-	-	1152	1897	1897	1382	83.4%	1152	1152
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	7	57	-	-	792	2037	2037	1484	53.4%	792	792
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**76.9%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	393	1598	1598	511	76.9%	393	393
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	290	Inf	Inf	Inf	0.0%	290	290
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	927	Inf	Inf	Inf	0.0%	927	927
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**39.3%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	158	1634	1634	402	39.3%	158	158
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	133	Inf	Inf	Inf	0.0%	133	133
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1421	Inf	Inf	Inf	0.0%	1421	1421

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**555**	**0**	**0**	**29.0**	**48.3**	**0.0**	**77.4**	**-**	**7283.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**97.2%**	**90.7**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**1.0**	**0.8**	**0.0**	**1.9**	**-**	**391.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**63.0%**	**2.6**	**-**
1/1	-	-	-	1.0	0.8	-	1.9	7.2	391.4	0.4	3.8	7.6	0.8	8.5	-	0.00	63.0%	2.6	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**4**	**0**	**0**	**10.1**	**20.2**	**0.0**	**30.3**	**-**	**1975.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**97.2%**	**33.9**	**-**
1/1	-	-	-	1.5	1.8	-	3.3	10.4	632.2	0.5	4.8	14.4	1.8	16.2	-	0.00	78.7%	4.5	-
1/2	-	-	-	4.7	7.9	-	12.6	57.2	763.0	1.0	9.2	17.4	7.9	25.3	-	0.00	95.9%	14.0	-
2/1	-	-	-	0.3	0.1	-	0.5	46.5	32.0	0.9	0.7	0.7	0.1	0.8	-	0.00	19.5%	0.5	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	4	0	0	3.6	10.4	0.0	14.0	47.1	548.0	0.5	7.3	12.1	10.4	22.4	-	0.00	97.2 : 97.2%	15.0	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**11.4**	**12.5**	**0.0**	**23.9**	**-**	**2336.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**93.4%**	**28.2**	**-**
1/1	-	-	-	1.7	0.6	-	2.3	18.8	329.6	0.7	4.4	6.0	0.6	6.6	-	0.00	53.6%	2.9	-
1/2+1/3	-	-	-	3.3	4.8	-	8.2	50.2	542.5	0.9	6.1	9.2	4.8	14.0	-	0.00	92.0 : 92.0%	9.2	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	4.4	6.3	-	10.7	28.3	1106.3	0.8	5.9	11.5	6.3	17.8	-	0.00	93.4 : 93.4%	12.7	-
4/1	-	-	-	1.9	0.8	-	2.7	21.0	357.8	0.8	4.6	6.6	0.8	7.4	-	0.00	61.5%	3.4	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**3.1**	**9.6**	**0.0**	**12.7**	**-**	**1280.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**96.3%**	**15.0**	**-**
1/1	-	-	-	3.1	9.6	-	12.7	31.5	1280.7	0.9	6.0	24.9	9.6	34.5	-	0.00	96.3%	15.0	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**3.5**	**3.3**	**0.0**	**6.7**	**-**	**1299.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**83.4%**	**9.1**	**-**
1/1	-	-	-	0.4	0.2	-	0.7	5.2	158.7	0.3	2.2	3.1	0.2	3.3	-	0.00	32.1%	1.0	-
2/1	-	-	-	2.1	2.5	-	4.6	14.2	789.9	0.7	5.4	15.4	2.5	17.8	-	0.00	83.4%	6.0	-
2/2	-	-	-	0.9	0.6	-	1.5	6.8	350.7	0.4	3.7	6.8	0.6	7.4	-	0.00	53.4%	2.1	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**393**	**0**	**0**	**0.0**	**1.6**	**0.0**	**1.6**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**76.9%**	**1.6**	**-**
1/1	393	0	0	0.0	1.6	-	1.6	14.8	0.0	0.0	-	0.0	1.6	1.6	-	0.00	76.9%	1.6	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**158**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**39.3%**	**0.3**	**-**
1/1	158	0	0	0.0	0.3	-	0.3	7.3	0.0	0.0	-	0.0	0.3	0.3	-	0.00	39.3%	0.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	42.9	Total Delay for Signalled Lanes (pcuHr):	1.85	Cycle Time (s):	70
C2 - 14-0632	PRC for Signalled Lanes (%):	-8.0	Total Delay for Signalled Lanes (pcuHr):	30.33	Cycle Time (s):	82
C3 - 14-0633	PRC for Signalled Lanes (%):	-3.8	Total Delay for Signalled Lanes (pcuHr):	23.88	Cycle Time (s):	66
C4 - 14-1129	PRC for Signalled Lanes (%):	-7.0	Total Delay for Signalled Lanes (pcuHr):	12.65	Cycle Time (s):	70
C5 - 14-1165	PRC for Signalled Lanes (%):	8.0	Total Delay for Signalled Lanes (pcuHr):	6.72	Cycle Time (s):	70
	PRC Over All Lanes (%):	-8.0	Total Delay Over All Lanes(pcuHr):	77.39		

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	42	405	158	458	4	1067
	B	22	0	78	21	34	3	158
	C	263	23	0	19	282	10	597
	D	223	21	18	0	128	3	393
	E	627	46	592	92	0	1	1358
	F	6	1	23	0	5	0	35
	Tot.	1141	133	1116	290	907	21	3608

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 10: '2044 8.5k DS PM' (FG10: '2044 8.5k DS PM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**100.5%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**87.2%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	41	11	52	-	-	1217	2061	2061	1396	87.2%	1217	1217
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**100.5%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	48	56	38	-	-	1018	1847	1847	1371	74.2%	1018	1018
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	23	15	38	-	-	650	1783	1783	648	100.3%	650	648
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	44	51	-	-	37	1776	1776	215	17.2%	37	37
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	23	Inf	Inf	Inf	0.0%	23	23
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	613	Inf	Inf	Inf	0.0%	613	613
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	670	Inf	Inf	Inf	0.0%	668	668
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	20:66	56:0	10:66	-	-	1190	2052:1982	2052	574+610	100.5 : 100.5%	1190	1187
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	1018	Inf	Inf	Inf	0.0%	1018	1018
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**86.7%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	30	55	20	-	-	756	1954	1954	932	81.1%	756	756
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	24	61	20	-	-	633	1709:1729	1709	653+130	80.9 : 80.9%	633	633
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	1327	Inf	Inf	Inf	0.0%	1324	1324
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	30	25	55	-	-	1035	1868:1732	1868	730+656	74.7 : 74.7%	1035	1035
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	23	25	48	-	-	571	1774	1774	655	86.7%	568	568
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**94.0%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	44	34	16	-	-	1355	1984	1984	1440	94.0%	1354	1354
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1355	Inf	Inf	Inf	0.0%	1354	1354
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.4%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	42	58	38	-	-	571	1978	1978	1372	41.4%	568	568
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	58	38	-	-	1018	1897	1897	1316	77.4%	1018	1018
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	58	38	-	-	650	2037	2037	1413	46.0%	650	650
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.0%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	389	1598	1598	447	87.0%	389	389
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	217	Inf	Inf	Inf	0.0%	217	217
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1217	Inf	Inf	Inf	0.0%	1217	1217
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**72.5%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	314	1634	1634	433	72.5%	314	314
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	242	Inf	Inf	Inf	0.0%	242	242
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1283	Inf	Inf	Inf	0.0%	1281	1281

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**713**	**0**	**0**	**30.1**	**59.1**	**0.0**	**89.2**	**-**	**7859.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**100.5%**	**103.6**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**2.2**	**3.3**	**0.0**	**5.5**	**-**	**875.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.2%**	**7.1**	**-**
1/1	-	-	-	2.2	3.3	-	5.5	16.3	875.3	0.7	5.4	15.1	3.3	18.3	-	0.00	87.2%	7.1	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**10**	**0**	**0**	**9.1**	**33.6**	**0.0**	**42.7**	**-**	**2019.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**100.5%**	**46.4**	**-**
1/1	-	-	-	1.4	1.4	-	2.8	9.9	570.7	0.6	4.2	10.5	1.4	11.9	-	0.00	74.2%	3.9	-
1/2	-	-	-	3.8	13.2	-	17.0	94.2	650.0	1.0	7.3	11.9	13.2	25.1	-	0.00	100.3%	18.2	-
2/1	-	-	-	0.3	0.1	-	0.4	36.2	33.1	0.9	0.6	0.6	0.1	0.7	-	0.00	17.2%	0.4	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	10	0	0	3.6	18.9	0.0	22.6	68.2	765.3	0.6	7.0	13.1	18.9	32.0	-	0.00	100.5 : 100.5%	24.0	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**12.6**	**8.7**	**0.0**	**21.3**	**-**	**2451.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.7%**	**25.8**	**-**
1/1	-	-	-	3.0	2.1	-	5.1	24.5	639.7	0.8	6.7	11.6	2.1	13.6	-	0.00	81.1%	6.3	-
1/2+1/3	-	-	-	3.0	2.1	-	5.1	28.8	530.9	0.8	5.6	8.4	2.1	10.4	-	0.00	80.9 : 80.9%	6.0	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	3.6	1.5	-	5.1	17.6	756.8	0.7	4.8	7.3	1.5	8.7	-	0.00	74.7 : 74.7%	6.4	-
4/1	-	-	-	3.0	3.0	-	6.1	38.4	524.3	0.9	6.2	9.5	3.0	12.5	-	0.00	86.7%	7.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**2.8**	**6.8**	**0.0**	**9.5**	**-**	**1157.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**94.0%**	**11.7**	**-**
1/1	-	-	-	2.8	6.8	-	9.5	25.4	1157.2	0.9	5.6	19.9	6.8	26.7	-	0.00	94.0%	11.7	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**3.2**	**2.5**	**0.0**	**5.7**	**-**	**1194.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.4%**	**7.8**	**-**
1/1	-	-	-	0.6	0.4	-	1.0	6.3	238.2	0.4	2.7	4.1	0.4	4.5	-	0.00	41.4%	1.4	-
2/1	-	-	-	1.8	1.7	-	3.5	12.3	673.2	0.7	4.8	11.6	1.7	13.3	-	0.00	77.4%	4.7	-
2/2	-	-	-	0.8	0.4	-	1.2	6.6	283.1	0.4	3.1	4.9	0.4	5.3	-	0.00	46.0%	1.7	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**389**	**0**	**0**	**0.0**	**3.0**	**0.0**	**3.0**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.0%**	**3.0**	**-**
1/1	389	0	0	0.0	3.0	-	3.0	28.0	0.0	0.0	-	0.0	3.0	3.0	-	0.00	87.0%	3.0	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**314**	**0**	**0**	**0.2**	**1.3**	**0.0**	**1.5**	**-**	**161.8**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**72.5%**	**1.7**	**-**
1/1	314	0	0	0.2	1.3	-	1.5	16.7	161.8	0.5	-	3.0	1.3	4.3	-	0.00	72.5%	1.7	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	3.3	Total Delay for Signalled Lanes (pcuHr):	5.52	Cycle Time (s):	62
C2 - 14-0632	PRC for Signalled Lanes (%):	-11.7	Total Delay for Signalled Lanes (pcuHr):	42.74	Cycle Time (s):	66
C3 - 14-0633	PRC for Signalled Lanes (%):	3.8	Total Delay for Signalled Lanes (pcuHr):	21.31	Cycle Time (s):	65
C4 - 14-1129	PRC for Signalled Lanes (%):	-4.5	Total Delay for Signalled Lanes (pcuHr):	9.54	Cycle Time (s):	62
C5 - 14-1165	PRC for Signalled Lanes (%):	16.3	Total Delay for Signalled Lanes (pcuHr):	5.66	Cycle Time (s):	62
	PRC Over All Lanes (%):	-11.7	Total Delay Over All Lanes(pcuHr):	89.25		

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	89	397	127	567	10	1190
	B	42	0	167	25	79	1	314
	C	293	55	22	29	526	4	929
	D	183	29	21	0	151	5	389
	E	487	68	441	36	0	3	1035
	F	13	1	19	0	4	0	37
	Tot.	1018	242	1067	217	1327	23	3894

Traffic Flows, Difference

Difference :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	-22	0	0	0	-22
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	-22	0	0	0	-22

Scenario 11: '2044 10k DM AM' (FG11: '2044 10k DM AM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**95.7%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**55.4%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	49	11	60	-	-	815	2061	2061	1472	55.4%	815	815
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**95.7%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	64	40	22	-	-	1036	1845	1845	1463	70.8%	1036	1036
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	37	67	22	-	-	777	1783	1783	826	94.0%	777	777
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	28	35	-	-	35	1843	1843	180	19.5%	35	35
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	532	Inf	Inf	Inf	0.0%	532	532
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	801	Inf	Inf	Inf	0.0%	801	801
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	22:82	40:0	62:82	-	-	993	2054:1982	2054	482+556	95.7 : 95.7%	993	993
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	1025	Inf	Inf	Inf	0.0%	1025	1025
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**87.0%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	25	28	53	-	-	437	1954	1954	770	56.8%	437	437
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	18	35	53	-	-	475	1709:1729	1709	492+71	84.4 : 84.4%	475	475
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	899	Inf	Inf	Inf	0.0%	899	899
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	37	58	29	-	-	1338	1868:1732	1868	825+714	87.0 : 87.0%	1338	1338
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	29	58	21	-	-	462	1774	1774	806	57.3%	462	462
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**90.5%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	52	38	20	-	-	1359	1984	1984	1502	90.5%	1359	1359
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1359	Inf	Inf	Inf	0.0%	1359	1359
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.0%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	50	6	56	-	-	462	1978	1978	1441	32.1%	462	462
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	6	56	-	-	1036	1897	1897	1382	75.0%	1036	1036
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	6	56	-	-	777	2037	2037	1484	52.4%	777	777
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**63.7%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	341	1598	1598	536	63.7%	341	341
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	244	Inf	Inf	Inf	0.0%	244	244
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	815	Inf	Inf	Inf	0.0%	815	815
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**36.8%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	155	1634	1634	422	36.8%	155	155
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	129	Inf	Inf	Inf	0.0%	129	129
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1333	Inf	Inf	Inf	0.0%	1333	1333

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**500**	**0**	**0**	**25.8**	**31.4**	**0.0**	**57.2**	**-**	**6205.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**95.7%**	**68.5**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**0.8**	**0.6**	**0.0**	**1.4**	**-**	**308.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**55.4%**	**2.0**	**-**
1/1	-	-	-	0.8	0.6	-	1.4	6.3	308.7	0.4	3.3	6.0	0.6	6.6	-	0.00	55.4%	2.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**4**	**0**	**0**	**9.6**	**15.8**	**0.0**	**25.4**	**-**	**1768.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**95.7%**	**28.6**	**-**
1/1	-	-	-	1.2	1.2	-	2.4	8.2	480.1	0.5	4.3	10.9	1.2	12.1	-	0.00	70.8%	3.2	-
1/2	-	-	-	4.5	6.3	-	10.8	50.0	729.6	0.9	9.1	16.6	6.3	22.9	-	0.00	94.0%	12.1	-
2/1	-	-	-	0.3	0.1	-	0.5	46.5	32.0	0.9	0.7	0.7	0.1	0.8	-	0.00	19.5%	0.5	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	4	0	0	3.6	8.2	0.0	11.7	42.5	526.9	0.5	7.3	11.6	8.2	19.7	-	0.00	95.7 : 95.7%	12.7	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**10.0**	**7.1**	**0.0**	**17.1**	**-**	**2000.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.0%**	**20.7**	**-**
1/1	-	-	-	1.9	0.7	-	2.6	21.0	337.7	0.8	4.6	6.2	0.7	6.8	-	0.00	56.8%	3.2	-
1/2+1/3	-	-	-	2.8	2.5	-	5.4	40.8	433.5	0.9	5.2	7.1	2.5	9.7	-	0.00	84.4 : 84.4%	6.2	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	3.5	3.2	-	6.7	18.2	893.5	0.7	5.2	9.0	3.2	12.2	-	0.00	87.0 : 87.0%	8.4	-
4/1	-	-	-	1.7	0.7	-	2.4	18.5	336.0	0.7	4.4	6.2	0.7	6.8	-	0.00	57.3%	3.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**2.5**	**4.5**	**0.0**	**6.9**	**-**	**1029.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**90.5%**	**8.8**	**-**
1/1	-	-	-	2.5	4.5	-	6.9	18.4	1029.0	0.8	5.7	20.0	4.5	24.5	-	0.00	90.5%	8.8	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**3.0**	**2.3**	**0.0**	**5.2**	**-**	**1098.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.0%**	**7.2**	**-**
1/1	-	-	-	0.4	0.2	-	0.7	5.2	158.4	0.3	2.2	3.1	0.2	3.3	-	0.00	32.1%	1.0	-
2/1	-	-	-	1.6	1.5	-	3.1	10.8	606.8	0.6	4.9	11.8	1.5	13.3	-	0.00	75.0%	4.2	-
2/2	-	-	-	0.9	0.5	-	1.4	6.7	333.0	0.4	3.7	6.5	0.5	7.0	-	0.00	52.4%	2.1	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**341**	**0**	**0**	**0.0**	**0.9**	**0.0**	**0.9**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**63.7%**	**0.9**	**-**
1/1	341	0	0	0.0	0.9	-	0.9	9.2	0.0	0.0	-	0.0	0.9	0.9	-	0.00	63.7%	0.9	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**155**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**36.8%**	**0.3**	**-**
1/1	155	0	0	0.0	0.3	-	0.3	6.7	0.0	0.0	-	0.0	0.3	0.3	-	0.00	36.8%	0.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	62.6	Total Delay for Signalled Lanes (pcuHr):	1.43	Cycle Time (s):	70
C2 - 14-0632	PRC for Signalled Lanes (%):	-6.3	Total Delay for Signalled Lanes (pcuHr):	25.35	Cycle Time (s):	82
C3 - 14-0633	PRC for Signalled Lanes (%):	3.5	Total Delay for Signalled Lanes (pcuHr):	17.06	Cycle Time (s):	66
C4 - 14-1129	PRC for Signalled Lanes (%):	-0.5	Total Delay for Signalled Lanes (pcuHr):	6.94	Cycle Time (s):	70
C5 - 14-1165	PRC for Signalled Lanes (%):	20.1	Total Delay for Signalled Lanes (pcuHr):	5.24	Cycle Time (s):	70
	PRC Over All Lanes (%):	-6.3	Total Delay Over All Lanes(pcuHr):	57.17		

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	41	377	114	457	4	993
	B	22	0	76	21	33	3	155
	C	204	22	0	19	277	10	532
	D	173	20	18	0	127	3	341
	E	620	45	582	90	0	1	1338
	F	6	1	23	0	5	0	35
	Tot.	1025	129	1076	244	899	21	3394

Traffic Flows, Difference

Difference :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 12: '2044 10k DM PM' (FG12: '2044 10k DM PM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**98.6%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**76.9%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	41	11	52	-	-	1073	2061	2061	1396	76.9%	1073	1073
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**98.6%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	48	55	37	-	-	912	1847	1847	1371	66.5%	912	912
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	23	14	37	-	-	635	1783	1783	648	97.9%	635	635
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	43	50	-	-	37	1776	1776	215	17.2%	37	37
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	543	Inf	Inf	Inf	0.0%	543	543
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	655	Inf	Inf	Inf	0.0%	655	655
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	20:66	55:0	9:66	-	-	1114	2052:1982	2052	579+551	98.6 : 98.6%	1114	1114
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	914	Inf	Inf	Inf	0.0%	914	914
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**82.8%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	29	27	56	-	-	732	1954	1954	902	81.2%	732	732
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	22	34	56	-	-	527	1709:1729	1709	605+147	70.1 : 70.1%	527	527
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	1297	Inf	Inf	Inf	0.0%	1297	1297
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	32	61	28	-	-	1020	1868:1732	1868	757+694	70.3 : 70.3%	1020	1020
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	24	61	20	-	-	565	1774	1774	682	82.8%	565	565
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**87.6%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	44	34	16	-	-	1262	1984	1984	1440	87.6%	1262	1262
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1262	Inf	Inf	Inf	0.0%	1262	1262
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.3%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	42	59	39	-	-	565	1978	1978	1372	41.2%	565	565
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	59	39	-	-	912	1897	1897	1316	69.3%	912	912
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	59	39	-	-	635	2037	2037	1413	44.9%	635	635
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**71.4%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	342	1598	1598	479	71.4%	342	342
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	156	Inf	Inf	Inf	0.0%	156	156
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1073	Inf	Inf	Inf	0.0%	1073	1073
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**66.7%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	301	1634	1634	451	66.7%	301	301
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	237	Inf	Inf	Inf	0.0%	237	237
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1198	Inf	Inf	Inf	0.0%	1198	1198

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**653**	**0**	**0**	**26.8**	**39.9**	**0.0**	**66.7**	**-**	**6774.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**98.6%**	**79.1**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**1.7**	**1.6**	**0.0**	**3.3**	**-**	**643.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**76.9%**	**4.5**	**-**
1/1	-	-	-	1.7	1.6	-	3.3	11.2	643.9	0.6	4.8	11.1	1.6	12.7	-	0.00	76.9%	4.5	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**10**	**0**	**0**	**8.5**	**24.0**	**0.0**	**32.4**	**-**	**1776.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**98.6%**	**35.7**	**-**
1/1	-	-	-	1.1	1.0	-	2.1	8.2	456.0	0.5	3.8	8.4	1.0	9.3	-	0.00	66.5%	2.9	-
1/2	-	-	-	3.7	9.7	-	13.4	75.7	625.4	1.0	7.1	11.5	9.7	21.2	-	0.00	97.9%	14.5	-
2/1	-	-	-	0.3	0.1	-	0.4	36.2	33.1	0.9	0.6	0.6	0.1	0.7	-	0.00	17.2%	0.4	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	10	0	0	3.4	13.2	0.0	16.6	53.7	662.1	0.6	6.8	11.6	13.2	24.7	-	0.00	98.6 : 98.6%	17.8	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**11.6**	**6.8**	**0.0**	**18.3**	**-**	**2242.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.8%**	**22.4**	**-**
1/1	-	-	-	3.1	2.1	-	5.2	25.4	619.4	0.8	6.7	11.2	2.1	13.3	-	0.00	81.2%	6.3	-
1/2+1/3	-	-	-	2.5	1.2	-	3.7	25.3	428.5	0.8	4.7	6.5	1.2	7.6	-	0.00	70.1 : 70.1%	4.5	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	3.1	1.2	-	4.3	15.2	690.5	0.7	4.4	6.5	1.2	7.7	-	0.00	70.3 : 70.3%	5.6	-
4/1	-	-	-	2.8	2.3	-	5.2	32.8	504.2	0.9	6.0	9.1	2.3	11.4	-	0.00	82.8%	6.1	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**2.2**	**3.4**	**0.0**	**5.7**	**-**	**936.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.6%**	**7.4**	**-**
1/1	-	-	-	2.2	3.4	-	5.7	16.1	936.3	0.7	5.3	16.1	3.4	19.5	-	0.00	87.6%	7.4	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**2.8**	**1.9**	**0.0**	**4.7**	**-**	**1043.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.3%**	**6.6**	**-**
1/1	-	-	-	0.6	0.3	-	1.0	6.3	236.9	0.4	2.7	4.1	0.3	4.4	-	0.00	41.2%	1.4	-
2/1	-	-	-	1.4	1.1	-	2.5	10.0	529.5	0.6	4.3	9.1	1.1	10.2	-	0.00	69.3%	3.5	-
2/2	-	-	-	0.7	0.4	-	1.2	6.5	276.5	0.4	3.0	4.8	0.4	5.2	-	0.00	44.9%	1.7	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**342**	**0**	**0**	**0.0**	**1.2**	**0.0**	**1.2**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**71.4%**	**1.2**	**-**
1/1	342	0	0	0.0	1.2	-	1.2	12.9	0.0	0.0	-	0.0	1.2	1.2	-	0.00	71.4%	1.2	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**301**	**0**	**0**	**0.1**	**1.0**	**0.0**	**1.1**	**-**	**132.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**66.7%**	**1.3**	**-**
1/1	301	0	0	0.1	1.0	-	1.1	12.9	132.3	0.4	-	2.4	1.0	3.4	-	0.00	66.7%	1.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	17.1	Total Delay for Signalled Lanes (pcuHr):	3.34	Cycle Time (s):	62
C2 - 14-0632	PRC for Signalled Lanes (%):	-9.5	Total Delay for Signalled Lanes (pcuHr):	32.43	Cycle Time (s):	66
C3 - 14-0633	PRC for Signalled Lanes (%):	8.7	Total Delay for Signalled Lanes (pcuHr):	18.31	Cycle Time (s):	65
C4 - 14-1129	PRC for Signalled Lanes (%):	2.7	Total Delay for Signalled Lanes (pcuHr):	5.66	Cycle Time (s):	62
C5 - 14-1165	PRC for Signalled Lanes (%):	29.8	Total Delay for Signalled Lanes (pcuHr):	4.69	Cycle Time (s):	62
	PRC Over All Lanes (%):	-9.5	Total Delay Over All Lanes(pcuHr):	66.73		

Traffic Flows, Desired

Desired Flow :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	87	378	78	561	10	1114
	B	42	0	157	24	77	1	301
	C	234	54	0	19	506	3	816
	D	140	28	21	0	149	4	342
	E	485	67	430	35	0	3	1020
	F	13	1	19	0	4	0	37
	Tot.	914	237	1005	156	1297	21	3630

Traffic Flows, Difference

Difference :

	Destination							
Origin		A	B	C	D	E	F	Tot.
	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 13: '2044 10k DS AM' (FG13: '2044 10k DS AM', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**94.5%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**61.1%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	49	11	60	-	-	900	2061	2061	1472	61.1%	900	900
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**91.3%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	64	57	39	-	-	1099	1846	1846	1463	75.1%	1099	1099
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	38	1	39	-	-	771	1783	1783	848	90.9%	771	771
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	45	52	-	-	31	1831	1831	179	17.4%	31	31
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	19	Inf	Inf	Inf	0.0%	19	19
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	598	Inf	Inf	Inf	0.0%	598	598
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	791	Inf	Inf	Inf	0.0%	791	791
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	21:82	57:0	78:82	-	-	1019	2054:1982	2054	461+655	91.3 : 91.3%	1019	1019
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	1090	Inf	Inf	Inf	0.0%	1090	1090
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**90.7%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	27	43	4	-	-	431	1954	1954	829	52.0%	431	431
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	21	49	4	-	-	566	1709:1729	1709	570+65	89.2 : 89.2%	566	566
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	853	Inf	Inf	Inf	0.0%	853	853
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	34	9	43	-	-	1304	1868:1732	1868	786+652	90.7 : 90.7%	1304	1304
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	27	9	36	-	-	422	1774	1774	753	56.1%	422	422
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**94.5%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	52	38	20	-	-	1419	1984	1984	1502	94.5%	1419	1419
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1419	Inf	Inf	Inf	0.0%	1419	1419
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**79.5%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	50	23	3	-	-	422	1978	1978	1441	29.3%	422	422
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	23	3	-	-	1099	1897	1897	1382	79.5%	1099	1099
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	50	23	3	-	-	771	2037	2037	1484	52.0%	771	771
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.2%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	389	1598	1598	517	75.2%	389	389
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	292	Inf	Inf	Inf	0.0%	292	292
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	900	Inf	Inf	Inf	0.0%	900	900
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**36.9%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	151	1634	1634	409	36.9%	151	151
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	121	Inf	Inf	Inf	0.0%	121	121
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1389	Inf	Inf	Inf	0.0%	1389	1389

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**544**	**0**	**0**	**26.8**	**32.8**	**0.0**	**59.6**	**-**	**6552.8**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**94.5%**	**71.6**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**0.9**	**0.8**	**0.0**	**1.7**	**-**	**365.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**61.1%**	**2.4**	**-**
1/1	-	-	-	0.9	0.8	-	1.7	6.9	365.3	0.4	3.6	7.1	0.8	7.9	-	0.00	61.1%	2.4	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**4**	**0**	**0**	**9.1**	**10.9**	**0.0**	**20.0**	**-**	**1685.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**91.3%**	**23.1**	**-**
1/1	-	-	-	1.3	1.5	-	2.8	9.3	562.9	0.5	4.6	12.8	1.5	14.3	-	0.00	75.1%	3.9	-
1/2	-	-	-	4.3	4.5	-	8.7	40.8	705.2	0.9	8.8	16.1	4.5	20.5	-	0.00	90.9%	10.0	-
2/1	-	-	-	0.3	0.1	-	0.4	46.2	28.4	0.9	0.6	0.6	0.1	0.8	-	0.00	17.4%	0.4	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	4	0	0	3.2	4.8	0.0	8.0	28.3	389.1	0.4	6.8	8.8	4.8	13.5	-	0.00	91.3 : 91.3%	8.7	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**10.7**	**9.5**	**0.0**	**20.2**	**-**	**2124.3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**90.7%**	**24.1**	**-**
1/1	-	-	-	1.7	0.5	-	2.2	18.6	313.5	0.7	4.3	5.7	0.5	6.3	-	0.00	52.0%	2.8	-
1/2+1/3	-	-	-	3.2	3.7	-	6.9	43.9	516.8	0.9	5.9	8.7	3.7	12.5	-	0.00	89.2 : 89.2%	7.9	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	4.1	4.6	-	8.7	24.1	980.8	0.8	5.7	10.0	4.6	14.5	-	0.00	90.7 : 90.7%	10.5	-
4/1	-	-	-	1.7	0.6	-	2.3	19.8	313.3	0.7	4.2	5.7	0.6	6.4	-	0.00	56.1%	2.9	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**2.9**	**7.3**	**0.0**	**10.1**	**-**	**1196.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**94.5%**	**12.3**	**-**
1/1	-	-	-	2.9	7.3	-	10.1	25.7	1196.0	0.8	5.9	23.3	7.3	30.5	-	0.00	94.5%	12.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**3.1**	**2.7**	**0.0**	**5.8**	**-**	**1181.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**79.5%**	**8.0**	**-**
1/1	-	-	-	0.4	0.2	-	0.6	5.0	144.7	0.3	2.0	2.8	0.2	3.0	-	0.00	29.3%	0.9	-
2/1	-	-	-	1.9	1.9	-	3.8	12.4	706.5	0.6	5.2	13.7	1.9	15.7	-	0.00	79.5%	5.1	-
2/2	-	-	-	0.9	0.5	-	1.4	6.7	330.4	0.4	3.6	6.4	0.5	7.0	-	0.00	52.0%	2.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**389**	**0**	**0**	**0.0**	**1.5**	**0.0**	**1.5**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.2%**	**1.5**	**-**
1/1	389	0	0	0.0	1.5	-	1.5	13.7	0.0	0.0	-	0.0	1.5	1.5	-	0.00	75.2%	1.5	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**151**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**36.9%**	**0.3**	**-**
1/1	151	0	0	0.0	0.3	-	0.3	7.0	0.0	0.0	-	0.0	0.3	0.3	-	0.00	36.9%	0.3	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	47.2	Total Delay for Signalled Lanes (pcuHr):	1.73	Cycle Time (s):	70
C2 - 14-0632	PRC for Signalled Lanes (%):	-1.4	Total Delay for Signalled Lanes (pcuHr):	19.98	Cycle Time (s):	82
C3 - 14-0633	PRC for Signalled Lanes (%):	-0.8	Total Delay for Signalled Lanes (pcuHr):	20.16	Cycle Time (s):	66
C4 - 14-1129	PRC for Signalled Lanes (%):	-5.0	Total Delay for Signalled Lanes (pcuHr):	10.12	Cycle Time (s):	70
C5 - 14-1165	PRC for Signalled Lanes (%):	13.2	Total Delay for Signalled Lanes (pcuHr):	5.81	Cycle Time (s):	70
	PRC Over All Lanes (%):	-5.0	Total Delay Over All Lanes(pcuHr):	59.58		

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	37	399	162	417	4	1019
	B	20	0	76	21	31	3	151
	C	253	20	0	19	273	8	573
	D	221	20	18	0	127	3	389
	E	590	43	580	90	0	1	1304
	F	6	1	19	0	5	0	31
	Tot.	1090	121	1092	292	853	19	3467

Traffic Flows, Difference

Difference :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 14: '2044 10k DS PM' (FG14: '2044 10k DS PM', Plan 1: 'Network Control Plan 1')
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**98.1%**	-	-
J1: A259 Dymchurch Road near Portland Road (14/0024)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**84.9%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C1:A		1	41	11	52	-	-	1185	2061	2061	1396	84.9%	1185	1185
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**98.1%**	-	-
1/1	A259 Scalons Bridge Rd NB Left Ahead	U	N/A	N/A	C2:C		1	48	63	45	-	-	994	1847	1847	1371	72.5%	994	994
1/2	A259 Scalons Bridge Rd NB Right	U	N/A	N/A	C2:D		1	23	22	45	-	-	634	1783	1783	648	97.8%	634	634
2/1	Green Lane Right Ahead Left	U	N/A	N/A	C2:B		1	7	51	58	-	-	35	1768	1768	214	16.3%	35	35
3/1	Green Lane	U	N/A	N/A	-		-	-	-	-	-	-	21	Inf	Inf	Inf	0.0%	21	21
4/1	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	600	Inf	Inf	Inf	0.0%	600	600
4/2	Military Road Ahead	U	N/A	N/A	-		-	-	-	-	-	-	652	Inf	Inf	Inf	0.0%	652	652
5/2+5/1	London Road Ahead Right Left	O+U	N/A	N/A	C2:A C2:E		1	20:66	63:0	17:66	-	-	1163	2052:1982	2052	574+611	98.1 : 98.1%	1163	1163
6/1	London Road	U	N/A	N/A	-		-	-	-	-	-	-	996	Inf	Inf	Inf	0.0%	996	996
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**85.0%**	-	-
1/1	Dymchurch Road Ahead	U	N/A	N/A	C3:D		1	30	32	62	-	-	730	1954	1954	932	78.3%	730	730
1/2+1/3	Dymchurch Road Right	U	N/A	N/A	C3:C		1	24	38	62	-	-	627	1709:1729	1709	653+128	80.3 : 80.3%	627	627
2/1	Dymchurch Road	U	N/A	N/A	-		-	-	-	-	-	-	1287	Inf	Inf	Inf	0.0%	1287	1287
3/2+3/1	Dymchurch Road Left	U	N/A	N/A	C3:A		1	30	2	32	-	-	1001	1868:1732	1868	731+647	72.6 : 72.6%	1001	1001
4/1	A259 Scalons Birdge Rd SB Right	U	N/A	N/A	C3:B		1	23	2	25	-	-	557	1774	1774	655	85.0%	557	557
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J4: A261 Military Road near Sainsbury's (14/1129)	-	-	**N/A**	-	-		-	-	-	-	-	-	-	-	-	-	**91.6%**	-	-

1/1	Military Road Ahead	U	N/A	N/A	C4:A		1	44	35	17	-	-	1319	1984	1984	1440	91.6%	1319	1319
2/1	Military Road U-Turn	U	N/A	N/A	-		-	-	-	-	-	-	1319	Inf	Inf	Inf	0.0%	1319	1319
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.6%**	**-**	**-**
1/1	A259 Scalons Bridge Rd SB Ahead	U	N/A	N/A	C5:A		1	42	59	39	-	-	557	1978	1978	1372	40.6%	557	557
2/1	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	59	39	-	-	994	1897	1897	1316	75.6%	994	994
2/2	A259 Scalons Bridge Rd NB Ahead	U	N/A	N/A	C5:B		1	42	59	39	-	-	634	2037	2037	1413	44.9%	634	634
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	-	-	-	0	-	-	0	0.0%	0	0
J6: Portland Road / Dymchurh Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**84.5%**	**-**	**-**
1/1	Portland Road Left	O	N/A	N/A	-		-	-	-	-	-	-	384	1598	1598	454	84.5%	384	384
2/1	Portland Road	U	N/A	N/A	-		-	-	-	-	-	-	212	Inf	Inf	Inf	0.0%	212	212
3/1	Dymchurch Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1185	Inf	Inf	Inf	0.0%	1185	1185
J7: Sir John Moore Ave / Military Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.2%**	**-**	**-**
1/1	Sir John Moore Ave Left	O	N/A	N/A	-		-	-	-	-	-	-	304	1634	1634	440	69.2%	304	304
2/1	Sir John Moore Ave	U	N/A	N/A	-		-	-	-	-	-	-	237	Inf	Inf	Inf	0.0%	237	237
3/1	Military Road Ahead Left	U	N/A	N/A	-		-	-	-	-	-	-	1252	Inf	Inf	Inf	0.0%	1252	1252

Item	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Back of Uniform Q At End of Red(pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	De-sliver Threshold (pcu)	Average Excess Queue (pcu)	Weighted Deg Sat (%)	Weighted Total Delay (pcuHr)	Ignoring Random Delay ?
Network: J15 A259/ Dymchurch Rd/ Military Rd gyratory	**698**	**0**	**0**	**28.6**	**44.7**	**0.0**	**73.4**	**-**	**7367.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**98.1%**	**86.8**	**-**
J1: A259 Dymchurch Road near Portland Road (14/0024)	**0**	**0**	**0**	**2.1**	**2.7**	**0.0**	**4.8**	**-**	**809.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**84.9%**	**6.3**	**-**
1/1	-	-	-	2.1	2.7	-	4.8	14.7	809.6	0.7	5.3	13.9	2.7	16.7	-	0.00	84.9%	6.3	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J2: A259 Scanlons Bridge Road/ A261 London Road (14/0632)	**10**	**0**	**0**	**8.6**	**23.3**	**0.0**	**31.9**	**-**	**1866.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**98.1%**	**35.3**	**-**
1/1	-	-	-	1.3	1.3	-	2.6	9.5	542.2	0.5	4.1	9.9	1.3	11.2	-	0.00	72.5%	3.6	-
1/2	-	-	-	3.7	9.5	-	13.2	74.7	624.4	1.0	7.0	11.4	9.5	20.9	-	0.00	97.8%	14.3	-
2/1	-	-	-	0.3	0.1	-	0.4	36.1	31.3	0.9	0.5	0.6	0.1	0.7	-	0.00	16.3%	0.4	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
4/2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
5/2+5/1	10	0	0	3.3	12.4	0.0	15.7	48.7	668.7	0.6	6.7	11.7	12.4	24.1	-	0.00	98.1 : 98.1%	17.0	-
6/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J3: A259 Scanlons Bridge Rd / Dymchurch Rd (14/0633)	**0**	**0**	**0**	**12.2**	**7.8**	**0.0**	**20.0**	**-**	**2354.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**85.0%**	**24.3**	**-**
1/1	-	-	-	2.9	1.8	-	4.7	23.0	606.5	0.8	6.5	11.0	1.8	12.7	-	0.00	78.3%	5.8	-
1/2+1/3	-	-	-	3.0	2.0	-	4.9	28.4	526.1	0.8	5.5	8.3	2.0	10.3	-	0.00	80.3 : 80.3%	5.9	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/2+3/1	-	-	-	3.4	1.3	-	4.7	17.1	716.6	0.7	4.7	6.9	1.3	8.2	-	0.00	72.6 : 72.6%	6.1	-
4/1	-	-	-	2.9	2.7	-	5.6	36.3	505.6	0.9	6.0	9.1	2.7	11.8	-	0.00	85.0%	6.5	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
Ped Link: P2	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J4: A261 Military Road near Sainsbury's (14/1129)	**0**	**0**	**0**	**2.5**	**5.0**	**0.0**	**7.6**	**-**	**1063.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**91.6%**	**9.5**	**-**
1/1	-	-	-	2.5	5.0	-	7.6	20.7	1063.7	0.8	5.5	18.3	5.0	23.4	-	0.00	91.6%	9.5	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-
J5: Scanlons Bridge Rd near the Royal Military Canal (14/1165)	**0**	**0**	**0**	**3.1**	**2.3**	**0.0**	**5.3**	**-**	**1134.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.6%**	**7.4**	**-**
1/1	-	-	-	0.6	0.3	-	1.0	6.3	233.6	0.4	2.6	4.0	0.3	4.4	-	0.00	40.6%	1.4	-
2/1	-	-	-	1.7	1.5	-	3.2	11.7	625.3	0.6	4.7	10.8	1.5	12.3	-	0.00	75.6%	4.4	-
2/2	-	-	-	0.7	0.4	-	1.2	6.5	276.1	0.4	3.0	4.8	0.4	5.2	-	0.00	44.9%	1.7	-
Ped Link: P1	-	-	-	-	-	-	Inf	Inf	-	-	-	-	-	Inf	-	-	0.0%	-	-

J6: Portland Road / Dymchurh Rd	**384**	**0**	**0**	**0.0**	**2.5**	**0.0**	**2.5**	**-**	**0.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**84.5%**	**2.5**	**-**
1/1	384	0	0	0.0	2.5	-	2.5	23.9	0.0	0.0	-	0.0	2.5	2.5	-	0.00	84.5%	2.5	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
J7: Sir John Moore Ave / Military Road	**304**	**0**	**0**	**0.1**	**1.1**	**0.0**	**1.2**	**-**	**138.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**69.2%**	**1.5**	**-**
1/1	304	0	0	0.1	1.1	-	1.2	14.5	138.2	0.5	-	2.5	1.1	3.6	-	0.00	69.2%	1.5	-
2/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-
3/1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.00	0.0%	0.0	-

C1 - 14-0024	PRC for Signalled Lanes (%):	6.0	Total Delay for Signalled Lanes (pcuHr):	4.83	Cycle Time (s):	62
C2 - 14-0632	PRC for Signalled Lanes (%):	-9.0	Total Delay for Signalled Lanes (pcuHr):	31.87	Cycle Time (s):	66
C3 - 14-0633	PRC for Signalled Lanes (%):	5.8	Total Delay for Signalled Lanes (pcuHr):	19.95	Cycle Time (s):	65
C4 - 14-1129	PRC for Signalled Lanes (%):	-1.8	Total Delay for Signalled Lanes (pcuHr):	7.58	Cycle Time (s):	62
C5 - 14-1165	PRC for Signalled Lanes (%):	19.1	Total Delay for Signalled Lanes (pcuHr):	5.34	Cycle Time (s):	62
	PRC Over All Lanes (%):	-9.0	Total Delay Over All Lanes(pcuHr):	73.35		

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	87	384	129	553	10	1163
	B	42	0	160	24	77	1	304
	C	292	54	8	24	504	3	885
	D	182	28	21	0	149	4	384
	E	467	67	429	35	0	3	1001
	F	13	1	17	0	4	0	35
	Tot.	996	237	1019	212	1287	21	3772

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	-8	0	0	0	-8
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	-8	0	0	0	-8

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

Filename: J16 A259-Prospect Rd-Station Rd.j9
Path: \\arcadiso365.sharepoint.com@SSL\DavWWWRoot\teams\project-10029956\Shared Documents\17 Transport\D-Calcs\Modelling\Junction Modelling\2 - Models\J16 Prospect Rd - Seabrook Rd - Station Rd - High Street
Report generation date: 10/11/2021 17:05:44

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018									
Arm A	D1	0.6	5.15	0.36	A	D2	0.6	5.44	0.38	A
Arm B		0.7	4.10	0.40	A		1.0	4.82	0.50	A
Arm C		2.2	8.59	0.69	A		2.5	9.47	0.72	A
	2037 DM									
Arm A	D3	0.7	5.50	0.40	A	D4	0.8	6.02	0.45	A
Arm B		0.7	4.19	0.42	A		1.2	5.36	0.55	A
Arm C		4.6	16.10	0.83	C		2.5	9.29	0.72	A
	2037 DS									
Arm A	D5	0.8	5.91	0.43	A	D6	0.9	6.33	0.47	A
Arm B		0.8	4.40	0.44	A		1.3	5.72	0.57	A
Arm C		4.9	17.00	0.84	C		2.2	8.63	0.70	A
	2044 8.5k DM									
Arm A	D7	0.7	5.73	0.42	A	D8	0.9	6.26	0.47	A
Arm B		0.8	4.35	0.44	A		1.3	5.57	0.57	A
Arm C		5.5	18.79	0.85	C		2.7	9.79	0.73	A
	2044 8.5k DS									
Arm A	D9	0.8	6.18	0.45	A	D10	1.0	6.97	0.51	A
Arm B		0.9	4.63	0.47	A		1.5	6.11	0.60	A
Arm C		6.5	21.73	0.88	C		2.9	10.57	0.75	B
	2044 10k DM									
Arm A		0.7	5.59	0.40	A		0.8	6.11	0.46	A

Arm B	D11	0.8	4.26	0.43	A	D12	1.2	5.42	0.55	A
Arm C		4.9	17.03	0.84	C		2.6	9.55	0.72	A
	2044 10k DS									
Arm A	D13	0.8	6.00	0.43	A	D14	1.0	6.72	0.49	A
Arm B		0.8	4.51	0.46	A		1.4	5.92	0.59	A
Arm C		5.9	20.02	0.86	C		2.7	9.86	0.73	A

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

File summary

File Description

Title	J16 Otterpool Park_Base Model AM PEAK
Location	A259 - High St - Station Rd - Prospect Rd
Site number	
Date	08/08/2017
Version	
Status	Base
Identifier	
Client	
Jobnumber	
Enumerator	dma78191 [C8Z9W0G2]
Description	

Units

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

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
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	ONE HOUR	16:30	18:00	15	✓
D3	2037 DM	AM	ONE HOUR	07:45	09:15	15	✓
D4	2037 DM	PM	ONE HOUR	16:30	18:00	15	✓
D5	2037 DS	AM	ONE HOUR	07:45	09:15	15	✓
D6	2037 DS	PM	ONE HOUR	16:30	18:00	15	✓
D7	2044 8.5k DM	AM	ONE HOUR	07:45	09:15	15	✓
D8	2044 8.5k DM	PM	ONE HOUR	16:30	18:00	15	✓
D9	2044 8.5k DS	AM	ONE HOUR	07:45	09:15	15	✓
D10	2044 8.5k DS	PM	ONE HOUR	16:30	18:00	15	✓
D11	2044 10k DM	AM	ONE HOUR	07:45	09:15	15	✓
D12	2044 10k DM	PM	ONE HOUR	16:30	18:00	15	✓
D13	2044 10k DS	AM	ONE HOUR	07:45	09:15	15	✓
D14	2044 10k DS	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	6.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Station Road	
B	A259 Seabrook Rd	
C	Prospect Road	
D	High Street	

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
A	3.02	5.90	18.6	23.0	29.1	34.0	
B	2.85	6.90	26.2	49.2	29.1	31.0	
C	2.91	5.20	26.4	46.0	29.1	20.0	
D							✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.613	1487
B	0.672	1728
C	0.640	1514
D		

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	2018	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	361	100.000
B		ONE HOUR	✓	539	100.000
C		ONE HOUR	✓	841	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	2	117	215	27
	B	145	14	350	30
	C	244	493	56	48
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	0
	B	1	0	3	0
	C	0	1	2	6
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.36	5.15	0.6	A	331	497
B	0.40	4.10	0.7	A	495	742
C	0.69	8.59	2.2	A	772	1158
D						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	272	68	422	1219	0.223	271	293	0.0	0.3	3.791	A
B	406	101	225	1541	0.263	404	467	0.0	0.4	3.164	A
C	633	158	164	1394	0.454	630	466	0.0	0.8	4.695	A
D			715				79				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	325	81	505	1167	0.278	324	351	0.3	0.4	4.266	A
B	485	121	269	1511	0.321	484	560	0.4	0.5	3.503	A
C	756	189	196	1373	0.551	755	558	0.8	1.2	5.807	A

D			856				94				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	397	99	617	1098	0.362	397	429	0.4	0.6	5.125	A
B	593	148	330	1471	0.403	593	685	0.5	0.7	4.095	A
C	926	231	240	1345	0.688	922	683	1.2	2.1	8.439	A
D			1047				115				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	397	99	620	1097	0.362	397	430	0.6	0.6	5.146	A
B	593	148	330	1471	0.404	593	687	0.7	0.7	4.104	A
C	926	231	240	1345	0.689	926	684	2.1	2.2	8.587	A
D			1050				116				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	325	81	509	1165	0.278	325	353	0.6	0.4	4.288	A
B	485	121	270	1510	0.321	485	563	0.7	0.5	3.514	A
C	756	189	196	1373	0.551	760	559	2.2	1.2	5.911	A
D			861				95				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	272	68	425	1217	0.223	272	295	0.4	0.3	3.811	A
B	406	101	226	1540	0.264	406	471	0.5	0.4	3.179	A
C	633	158	164	1393	0.455	635	468	1.2	0.8	4.757	A
D			720				79				

2018, 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		A, B, C, D	7.05	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	2018	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	369	100.000
B		ONE HOUR	✓	683	100.000
C		ONE HOUR	✓	876	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	4	126	224	15
	B	134	26	476	48
	C	229	539	50	58
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	1	0
	C	0	1	2	0
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.38	5.44	0.6	A	339	508
B	0.50	4.82	1.0	A	627	941
C	0.72	9.47	2.5	A	804	1206
D						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	278	69	460	1202	0.231	277	275	0.0	0.3	3.884	A
B	515	129	219	1569	0.328	513	517	0.0	0.5	3.403	A
C	659	165	170	1395	0.473	656	562	0.0	0.9	4.850	A
D			735				91				

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	332	83	551	1146	0.289	331	330	0.3	0.4	4.416	A
B	614	154	263	1540	0.399	614	620	0.5	0.7	3.886	A
C	788	197	204	1373	0.573	786	673	0.9	1.3	6.108	A
D			881				109				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	406	102	673	1070	0.380	405	403	0.4	0.6	5.407	A
B	752	188	322	1500	0.502	751	757	0.7	1.0	4.796	A
C	964	241	249	1344	0.717	960	823	1.3	2.5	9.256	A
D			1076				133				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	406	102	676	1069	0.380	406	404	0.6	0.6	5.435	A
B	752	188	322	1500	0.502	752	760	1.0	1.0	4.817	A
C	964	241	250	1344	0.718	964	825	2.5	2.5	9.468	A
D			1081				133				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	332	83	555	1143	0.290	333	332	0.6	0.4	4.445	A
B	614	154	264	1539	0.399	616	624	1.0	0.7	3.906	A
C	788	197	204	1373	0.574	792	675	2.5	1.4	6.246	A
D			887				109				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	278	69	464	1200	0.231	278	277	0.4	0.3	3.908	A
B	515	129	221	1568	0.328	515	521	0.7	0.5	3.421	A
C	659	165	171	1394	0.473	661	565	1.4	0.9	4.926	A
D			741				91				

2037 DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	10.41	B

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
D3	2037 DM	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	392	100.000
B		ONE HOUR	✓	576	100.000
C		ONE HOUR	✓	973	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	118	201	73
	B	137	0	352	87
	C	255	581	0	137
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	0
	B	1	0	3	0
	C	0	1	0	2
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.40	5.50	0.7	A	360	540
B	0.42	4.19	0.7	A	529	793
C	0.83	16.10	4.6	C	893	1339
D						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	295	74	435	1212	0.243	294	294	0.0	0.3	3.915	A
B	434	108	205	1556	0.279	432	523	0.0	0.4	3.198	A
C	733	183	223	1359	0.539	728	415	0.0	1.2	5.669	A
D			728				222				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	352	88	521	1159	0.304	352	352	0.3	0.4	4.458	A
B	518	129	246	1529	0.339	517	627	0.4	0.5	3.555	A
C	875	219	267	1331	0.657	872	497	1.2	1.9	7.799	A
D			872				266				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	432	108	634	1090	0.396	431	429	0.4	0.6	5.458	A
B	634	159	301	1493	0.425	633	763	0.5	0.7	4.184	A
C	1071	268	326	1292	0.829	1061	608	1.9	4.4	14.937	B
D			1062				325				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	432	108	639	1086	0.397	432	431	0.6	0.7	5.499	A
B	634	159	302	1492	0.425	634	769	0.7	0.7	4.194	A
C	1071	268	327	1292	0.829	1071	609	4.4	4.6	16.098	C
D			1071				327				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	352	88	529	1154	0.305	353	355	0.7	0.4	4.500	A
B	518	129	247	1529	0.339	519	635	0.7	0.5	3.569	A
C	875	219	267	1330	0.658	885	498	4.6	2.0	8.280	A
D			884				269				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	295	74	439	1209	0.244	296	296	0.4	0.3	3.942	A
B	434	108	207	1555	0.279	434	528	0.5	0.4	3.211	A
C	733	183	224	1358	0.539	736	417	2.0	1.2	5.816	A
D			735				224				

2037 DM, 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		A, B, C, D	7.17	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
D4	2037 DM	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	447	100.000
B		ONE HOUR	✓	746	100.000
C		ONE HOUR	✓	884	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	145	284	18
	B	139	0	559	48
	C	240	583	0	61
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	1	0
	C	0	1	0	0
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.45	6.02	0.8	A	410	615
B	0.55	5.36	1.2	A	685	1027
C	0.72	9.29	2.5	A	811	1217
D						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	337	84	437	1217	0.277	335	284	0.0	0.4	4.075	A
B	562	140	226	1564	0.359	559	545	0.0	0.6	3.577	A
C	666	166	154	1406	0.473	662	632	0.0	0.9	4.815	A
D			721				95				

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	402	100	523	1164	0.345	401	340	0.4	0.5	4.719	A
B	671	168	271	1534	0.437	670	653	0.6	0.8	4.162	A
C	795	199	184	1387	0.573	793	757	0.9	1.3	6.044	A
D			863				114				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	492	123	639	1092	0.451	491	416	0.5	0.8	5.981	A
B	821	205	332	1493	0.550	820	798	0.8	1.2	5.329	A
C	973	243	225	1361	0.715	969	926	1.3	2.4	9.086	A
D			1055				139				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	492	123	642	1090	0.451	492	417	0.8	0.8	6.020	A
B	821	205	332	1493	0.550	821	801	1.2	1.2	5.360	A
C	973	243	226	1360	0.716	973	928	2.4	2.5	9.288	A
D			1059				140				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	402	100	527	1161	0.346	403	342	0.8	0.5	4.757	A
B	671	168	272	1533	0.437	672	658	1.2	0.8	4.192	A
C	795	199	185	1386	0.573	799	760	2.5	1.4	6.175	A
D			869				115				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	337	84	440	1215	0.277	337	286	0.5	0.4	4.105	A
B	562	140	228	1563	0.359	563	549	0.8	0.6	3.601	A
C	666	166	155	1405	0.474	667	636	1.4	0.9	4.890	A
D			726				96				

2037 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	10.91	B

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
D5	2037 DS	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	418	100.000
B		ONE HOUR	✓	594	100.000
C		ONE HOUR	✓	984	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	118	227	73
	B	137	0	370	87
	C	241	606	0	137
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	0
	B	1	0	3	0
	C	0	1	0	2
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.43	5.91	0.8	A	384	575
B	0.44	4.40	0.8	A	545	818
C	0.84	17.00	4.9	C	903	1354
D						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	315	79	453	1200	0.262	313	283	0.0	0.4	4.052	A
B	447	112	225	1543	0.290	446	542	0.0	0.4	3.277	A
C	741	185	223	1358	0.545	736	448	0.0	1.2	5.742	A
D			736				222				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	376	94	543	1145	0.328	375	339	0.4	0.5	4.673	A
B	534	133	269	1513	0.353	533	649	0.4	0.5	3.671	A
C	885	221	267	1330	0.665	882	536	1.2	1.9	7.967	A
D			882				266				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	460	115	660	1073	0.429	459	413	0.5	0.7	5.858	A
B	654	164	330	1473	0.444	653	790	0.5	0.8	4.382	A
C	1083	271	326	1292	0.838	1072	656	1.9	4.7	15.635	C
D			1074				325				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	460	115	667	1069	0.431	460	416	0.7	0.8	5.914	A
B	654	164	330	1473	0.444	654	797	0.8	0.8	4.395	A
C	1083	271	327	1292	0.839	1083	657	4.7	4.9	17.001	C
D			1083				327				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	376	94	552	1140	0.330	377	343	0.8	0.5	4.725	A
B	534	133	270	1513	0.353	535	658	0.8	0.5	3.687	A
C	885	221	268	1330	0.665	896	538	4.9	2.0	8.512	A
D			895				269				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	315	79	458	1197	0.263	315	286	0.5	0.4	4.084	A
B	447	112	226	1542	0.290	448	547	0.5	0.4	3.290	A
C	741	185	224	1358	0.546	744	450	2.0	1.2	5.900	A
D			744				224				

2037 DS, 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		A, B, C, D	7.05	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
D6	2037 DS	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	465	100.000
B		ONE HOUR	✓	772	100.000
C		ONE HOUR	✓	865	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	145	302	18
	B	139	0	585	48
	C	201	603	0	61
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	1	0
	C	0	0	0	0
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.47	6.33	0.9	A	427	640
B	0.57	5.72	1.3	A	708	1063
C	0.70	8.63	2.2	A	794	1191
D						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	350	88	452	1211	0.289	348	255	0.0	0.4	4.168	A
B	581	145	240	1555	0.374	579	560	0.0	0.6	3.680	A
C	651	163	154	1415	0.460	648	665	0.0	0.8	4.670	A
D			706				95				

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	418	105	541	1156	0.362	417	305	0.4	0.6	4.871	A
B	694	174	287	1523	0.456	693	671	0.6	0.8	4.334	A
C	778	194	184	1396	0.557	776	796	0.8	1.2	5.792	A
D			846				114				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	512	128	661	1082	0.473	511	373	0.6	0.9	6.286	A
B	850	212	351	1480	0.574	848	820	0.8	1.3	5.676	A
C	952	238	225	1370	0.695	948	974	1.2	2.2	8.470	A
D			1034				139				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	512	128	664	1081	0.474	512	374	0.9	0.9	6.331	A
B	850	212	352	1480	0.575	850	823	1.3	1.3	5.717	A
C	952	238	226	1369	0.696	952	977	2.2	2.2	8.625	A
D			1038				140				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	418	105	545	1153	0.362	419	307	0.9	0.6	4.913	A
B	694	174	289	1522	0.456	696	676	1.3	0.8	4.367	A
C	778	194	185	1395	0.557	782	800	2.2	1.3	5.900	A
D			852				115				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	350	88	455	1208	0.290	351	257	0.6	0.4	4.201	A
B	581	145	241	1554	0.374	582	564	0.8	0.6	3.708	A
C	651	163	155	1415	0.460	653	669	1.3	0.9	4.737	A
D			712				96				

2044 8.5k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	11.81	B

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
D7	2044 8.5k DM	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	407	100.000
B		ONE HOUR	✓	597	100.000
C		ONE HOUR	✓	997	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	122	210	75
	B	142	0	365	90
	C	262	595	0	140
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	0
	B	1	0	3	0
	C	0	1	0	2
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.42	5.73	0.7	A	373	560
B	0.44	4.35	0.8	A	548	822
C	0.85	18.79	5.5	C	915	1372
D						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	306	77	445	1206	0.254	305	302	0.0	0.3	3.992	A
B	449	112	214	1551	0.290	448	536	0.0	0.4	3.260	A
C	751	188	230	1354	0.554	746	431	0.0	1.2	5.874	A
D			747				228				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	366	91	533	1151	0.318	365	362	0.3	0.5	4.576	A
B	537	134	256	1523	0.352	536	642	0.4	0.5	3.647	A
C	896	224	276	1325	0.677	893	516	1.2	2.0	8.274	A
D			895				274				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	448	112	648	1081	0.415	447	441	0.5	0.7	5.672	A
B	657	164	313	1485	0.443	656	782	0.5	0.8	4.340	A
C	1098	274	337	1285	0.854	1085	632	2.0	5.2	16.985	C
D			1089				334				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	448	112	654	1077	0.416	448	444	0.7	0.7	5.726	A
B	657	164	314	1484	0.443	657	789	0.8	0.8	4.352	A
C	1098	274	338	1285	0.854	1097	633	5.2	5.5	18.794	C
D			1099				336				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	366	91	543	1145	0.319	367	367	0.7	0.5	4.630	A
B	537	134	257	1522	0.353	538	653	0.8	0.5	3.662	A
C	896	224	277	1324	0.677	910	518	5.5	2.2	8.946	A
D			910				276				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	306	77	450	1203	0.255	307	305	0.5	0.3	4.023	A
B	449	112	215	1550	0.290	450	542	0.5	0.4	3.273	A
C	751	188	231	1353	0.555	754	433	2.2	1.3	6.046	A
D			755				230				

2044 8.5k DM, 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		A, B, C, D	7.51	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
D8	2044 8.5k DM	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	460	100.000
B		ONE HOUR	✓	764	100.000
C		ONE HOUR	✓	907	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	150	292	18
	B	143	0	572	49
	C	243	601	0	63
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	1	0
	C	0	0	0	0
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.47	6.26	0.9	A	422	633
B	0.57	5.57	1.3	A	701	1052
C	0.73	9.79	2.7	A	832	1248
D						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	346	87	450	1212	0.286	345	289	0.0	0.4	4.145	A
B	575	144	232	1560	0.369	573	562	0.0	0.6	3.641	A
C	683	171	157	1413	0.483	679	648	0.0	0.9	4.882	A
D			739				97				

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	414	103	539	1157	0.357	413	346	0.4	0.6	4.834	A
B	687	172	278	1529	0.449	686	674	0.6	0.8	4.265	A
C	815	204	189	1393	0.585	814	776	0.9	1.4	6.192	A
D			885				117				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	506	127	658	1084	0.467	505	423	0.6	0.9	6.208	A
B	841	210	340	1488	0.565	839	823	0.8	1.3	5.536	A
C	999	250	231	1366	0.731	994	949	1.4	2.6	9.543	A
D			1082				143				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	506	127	662	1082	0.468	506	425	0.9	0.9	6.255	A
B	841	210	341	1487	0.566	841	827	1.3	1.3	5.573	A
C	999	250	231	1366	0.731	998	951	2.6	2.7	9.787	A
D			1087				143				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	414	103	544	1154	0.358	415	349	0.9	0.6	4.878	A
B	687	172	280	1528	0.449	689	679	1.3	0.8	4.298	A
C	815	204	189	1393	0.586	820	779	2.7	1.4	6.345	A
D			892				117				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	346	87	454	1209	0.286	347	291	0.6	0.4	4.179	A
B	575	144	234	1559	0.369	576	567	0.8	0.6	3.669	A
C	683	171	158	1412	0.483	685	652	1.4	0.9	4.961	A
D			745				98				

2044 8.5k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	13.33	B

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
D9	2044 8.5k DS	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	428	100.000
B		ONE HOUR	✓	628	100.000
C		ONE HOUR	✓	1022	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	122	231	75
	B	142	0	396	90
	C	253	629	0	140
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	0
	B	1	0	3	0
	C	0	1	0	2
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.45	6.18	0.8	A	393	589
B	0.47	4.63	0.9	A	576	864
C	0.88	21.73	6.5	C	938	1407
D						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	322	81	470	1190	0.271	321	296	0.0	0.4	4.136	A
B	473	118	229	1540	0.307	471	562	0.0	0.4	3.362	A
C	769	192	230	1354	0.568	764	470	0.0	1.3	6.051	A
D			766				228				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	385	96	563	1133	0.340	384	354	0.4	0.5	4.807	A
B	565	141	275	1510	0.374	564	673	0.4	0.6	3.805	A
C	919	230	276	1325	0.694	915	563	1.3	2.2	8.712	A
D			917				274				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	471	118	683	1059	0.445	470	431	0.5	0.8	6.105	A
B	691	173	336	1469	0.471	690	817	0.6	0.9	4.617	A
C	1125	281	337	1285	0.875	1110	689	2.2	6.0	19.055	C
D			1114				333				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	471	118	691	1054	0.447	471	434	0.8	0.8	6.180	A
B	691	173	337	1468	0.471	691	826	0.9	0.9	4.633	A
C	1125	281	338	1285	0.876	1123	690	6.0	6.5	21.732	C
D			1126				336				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	385	96	576	1125	0.342	386	359	0.8	0.5	4.877	A
B	565	141	276	1509	0.374	566	686	0.9	0.6	3.820	A
C	919	230	277	1324	0.694	935	565	6.5	2.3	9.624	A
D			935				277				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	322	81	476	1186	0.272	323	299	0.5	0.4	4.171	A
B	473	118	231	1539	0.307	473	568	0.6	0.4	3.383	A
C	769	192	231	1353	0.569	773	473	2.3	1.3	6.254	A
D			775				230				

2044 8.5k DS, 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		A, B, C, D	8.18	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
D10	2044 8.5k DS	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	479	100.000
B		ONE HOUR	✓	799	100.000
C		ONE HOUR	✓	928	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	150	311	18
	B	143	0	607	49
	C	211	636	18	63
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	17	0
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.51	6.97	1.0	A	440	659
B	0.60	6.11	1.5	A	733	1100
C	0.75	10.57	2.9	B	852	1277
D						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	361	90	490	1186	0.304	359	265	0.0	0.4	4.344	A
B	602	150	260	1551	0.388	599	589	0.0	0.6	3.771	A
C	699	175	157	1408	0.496	695	702	0.0	1.0	5.019	A
D			755				97				

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	431	108	587	1126	0.382	430	318	0.4	0.6	5.164	A
B	718	180	311	1516	0.474	717	705	0.6	0.9	4.499	A
C	834	209	189	1388	0.601	832	840	1.0	1.5	6.449	A
D			904				117				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	527	132	716	1046	0.504	526	388	0.6	1.0	6.894	A
B	880	220	381	1469	0.599	877	861	0.9	1.5	6.057	A
C	1022	255	231	1362	0.750	1016	1028	1.5	2.9	10.254	B
D			1104				143				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	527	132	720	1044	0.505	527	390	1.0	1.0	6.966	A
B	880	220	382	1468	0.599	880	865	1.5	1.5	6.113	A
C	1022	255	231	1361	0.751	1021	1030	2.9	2.9	10.574	B
D			1110				143				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	431	108	592	1123	0.383	432	320	1.0	0.6	5.222	A
B	718	180	313	1515	0.474	721	711	1.5	0.9	4.542	A
C	834	209	189	1388	0.601	840	844	2.9	1.5	6.636	A
D			912				117				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	361	90	494	1183	0.305	361	267	0.6	0.4	4.383	A
B	602	150	262	1550	0.388	603	593	0.9	0.6	3.806	A
C	699	175	158	1408	0.496	701	706	1.5	1.0	5.109	A
D			761				98				

2044 10k DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	10.89	B

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
D11	2044 10k DM	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	398	100.000
B		ONE HOUR	✓	585	100.000
C		ONE HOUR	✓	982	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	120	204	74
	B	139	0	358	88
	C	257	587	0	138
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	0
	B	1	0	3	0
	C	0	1	0	2
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.40	5.59	0.7	A	365	548
B	0.43	4.26	0.8	A	537	805
C	0.84	17.03	4.9	C	901	1352
D						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	300	75	439	1209	0.248	298	297	0.0	0.3	3.946	A
B	440	110	208	1554	0.283	439	529	0.0	0.4	3.223	A
C	739	185	226	1357	0.545	735	421	0.0	1.2	5.744	A
D			736				225				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	358	89	526	1156	0.310	357	355	0.3	0.4	4.505	A
B	526	131	250	1527	0.344	525	634	0.4	0.5	3.592	A
C	883	221	270	1328	0.665	880	505	1.2	1.9	7.973	A
D			881				269				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	438	110	640	1086	0.404	437	433	0.4	0.7	5.543	A
B	644	161	305	1490	0.432	643	772	0.5	0.8	4.247	A
C	1081	270	331	1290	0.838	1070	618	1.9	4.7	15.663	C
D			1073				328				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	438	110	646	1082	0.405	438	436	0.7	0.7	5.590	A
B	644	161	306	1489	0.432	644	778	0.8	0.8	4.258	A
C	1081	270	331	1289	0.839	1080	619	4.7	4.9	17.033	C
D			1082				330				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	358	89	535	1151	0.311	359	359	0.7	0.5	4.552	A
B	526	131	251	1526	0.345	527	643	0.8	0.5	3.604	A
C	883	221	271	1328	0.665	894	506	4.9	2.0	8.516	A
D			894				272				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	300	75	444	1206	0.248	300	299	0.5	0.3	3.974	A
B	440	110	210	1553	0.284	441	534	0.5	0.4	3.239	A
C	739	185	227	1356	0.545	743	424	2.0	1.2	5.902	A
D			743				226				

2044 10k DM, 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		A, B, C, D	7.33	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
D12	2044 10k DM	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	451	100.000
B		ONE HOUR	✓	751	100.000
C		ONE HOUR	✓	893	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	147	286	18
	B	140	0	563	48
	C	242	589	0	62
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	1	0
	C	0	1	0	0
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.46	6.11	0.8	A	414	621
B	0.55	5.42	1.2	A	689	1034
C	0.72	9.55	2.6	A	819	1229
D						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	340	85	441	1214	0.280	338	286	0.0	0.4	4.102	A
B	565	141	228	1563	0.362	563	551	0.0	0.6	3.594	A
C	672	168	154	1406	0.478	669	637	0.0	0.9	4.863	A
D			727				96				

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	405	101	528	1160	0.349	405	343	0.4	0.5	4.758	A
B	675	169	273	1533	0.441	674	660	0.6	0.8	4.189	A
C	803	201	185	1386	0.579	801	762	0.9	1.4	6.134	A
D			871				115				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	497	124	645	1088	0.456	495	419	0.5	0.8	6.064	A
B	827	207	334	1492	0.554	825	807	0.8	1.2	5.385	A
C	983	246	226	1360	0.723	979	933	1.4	2.5	9.327	A
D			1064				140				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	497	124	648	1086	0.457	497	421	0.8	0.8	6.106	A
B	827	207	335	1491	0.554	827	810	1.2	1.2	5.416	A
C	983	246	227	1360	0.723	983	935	2.5	2.6	9.548	A
D			1069				141				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	405	101	533	1158	0.350	407	345	0.8	0.5	4.802	A
B	675	169	274	1532	0.441	677	665	1.2	0.8	4.219	A
C	803	201	186	1386	0.579	807	765	2.6	1.4	6.274	A
D			878				116				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	340	85	445	1212	0.280	340	288	0.5	0.4	4.132	A
B	565	141	229	1562	0.362	566	556	0.8	0.6	3.618	A
C	672	168	155	1405	0.479	674	640	1.4	0.9	4.938	A
D			733				97				

2044 10k DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	12.47	B

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
D13	2044 10k DS	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 (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	415	100.000
B		ONE HOUR	✓	616	100.000
C		ONE HOUR	✓	1012	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	120	221	74
	B	139	0	389	88
	C	250	624	0	138
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	0
	B	1	0	3	0
	C	0	1	0	2
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.43	6.00	0.8	A	381	571
B	0.46	4.51	0.8	A	565	848
C	0.86	20.02	5.9	C	929	1393
D						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	312	78	467	1192	0.262	311	291	0.0	0.4	4.079	A
B	464	116	221	1545	0.300	462	557	0.0	0.4	3.314	A
C	762	190	226	1356	0.562	757	457	0.0	1.3	5.954	A
D			758				225				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	373	93	559	1135	0.329	373	349	0.4	0.5	4.716	A
B	554	138	265	1516	0.365	553	667	0.4	0.6	3.737	A
C	910	227	270	1328	0.685	906	548	1.3	2.1	8.467	A
D			908				269				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	457	114	679	1062	0.430	456	425	0.5	0.7	5.933	A
B	678	170	324	1477	0.459	677	810	0.6	0.8	4.497	A
C	1114	279	331	1290	0.864	1100	670	2.1	5.6	17.862	C
D			1103				328				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	457	114	686	1057	0.432	457	428	0.7	0.8	5.998	A
B	678	170	325	1476	0.459	678	818	0.8	0.8	4.510	A
C	1114	279	331	1289	0.864	1113	672	5.6	5.9	20.019	C
D			1114				330				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	373	93	570	1128	0.331	374	354	0.8	0.5	4.778	A
B	554	138	266	1515	0.365	555	678	0.8	0.6	3.751	A
C	910	227	271	1328	0.685	924	550	5.9	2.2	9.236	A
D			924				272				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	312	78	472	1189	0.263	313	294	0.5	0.4	4.112	A
B	464	116	222	1544	0.300	464	563	0.6	0.4	3.337	A
C	762	190	227	1356	0.562	766	460	2.2	1.3	6.138	A
D			766				227				

2044 10k DS, 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		A, B, C, D	7.75	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
D14	2044 10k DS	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	472	100.000
B		ONE HOUR	✓	789	100.000
C		ONE HOUR	✓	908	100.000
D					

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	147	307	18
	B	140	0	601	48
	C	209	626	11	62
	D	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	27	0
	D	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.49	6.72	1.0	A	433	650
B	0.59	5.92	1.4	A	724	1086
C	0.73	9.86	2.7	A	833	1250
D						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	355	89	477	1194	0.298	354	261	0.0	0.4	4.277	A
B	594	149	252	1557	0.382	592	579	0.0	0.6	3.720	A
C	684	171	154	1410	0.485	680	689	0.0	0.9	4.905	A
D			738				96				

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	424	106	571	1136	0.374	424	313	0.4	0.6	5.053	A
B	709	177	302	1523	0.466	708	693	0.6	0.9	4.413	A
C	816	204	185	1391	0.587	814	825	0.9	1.4	6.226	A
D			884				115				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	520	130	698	1058	0.491	518	383	0.6	1.0	6.657	A
B	869	217	369	1477	0.588	867	847	0.9	1.4	5.872	A
C	1000	250	226	1364	0.733	995	1009	1.4	2.6	9.617	A
D			1081				140				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	520	130	701	1056	0.492	520	384	1.0	1.0	6.716	A
B	869	217	370	1477	0.588	869	851	1.4	1.4	5.920	A
C	1000	250	227	1364	0.733	1000	1012	2.6	2.7	9.861	A
D			1085				141				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	424	106	576	1133	0.375	426	315	1.0	0.6	5.104	A
B	709	177	303	1522	0.466	711	699	1.4	0.9	4.452	A
C	816	204	186	1390	0.587	821	829	2.7	1.4	6.382	A
D			891				116				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	355	89	481	1191	0.298	356	263	0.6	0.4	4.315	A
B	594	149	253	1556	0.382	595	584	0.9	0.6	3.753	A
C	684	171	155	1410	0.485	686	693	1.4	1.0	4.985	A
D			744				97				