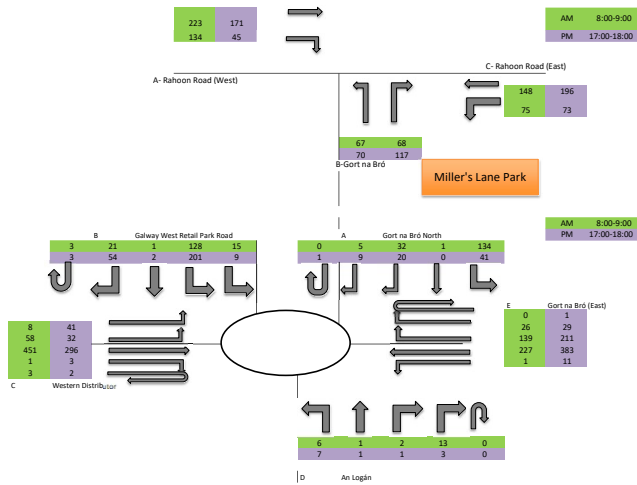
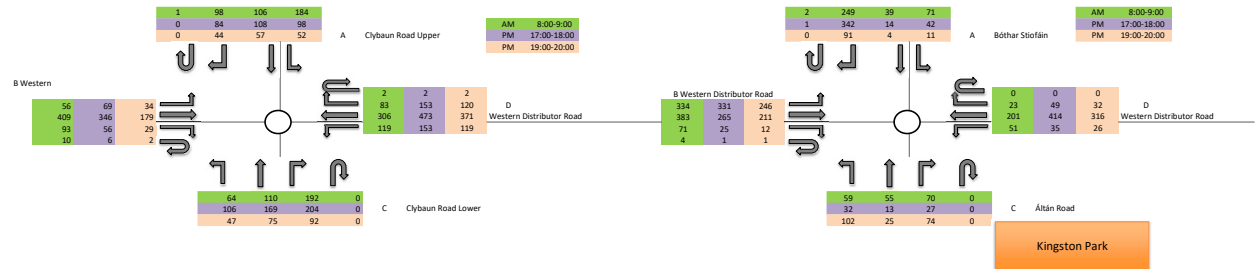


## **Appendix A      Traffic Survey Data**

Scenario - Surveyed data: Year 2023



## **Appendix B      TRICS Data**

Calculation Reference: AUDIT-434201-250815-0844

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE  
Category : C - LEISURE CENTRE  
TOTAL VEHICLES

|                                    |                                          |                  |
|------------------------------------|------------------------------------------|------------------|
| <u>Selected regions and areas:</u> |                                          |                  |
| 01                                 | GREATER LONDON<br>EN ENFIELD             | 1 days           |
| 02                                 | SOUTH EAST<br>EX ESSEX<br>WS WEST SUSSEX | 2 days<br>1 days |
| 05                                 | EAST MIDLANDS<br>NG NOTTINGHAM           | 1 days           |
| 06                                 | WEST MIDLANDS<br>WM WEST MIDLANDS        | 1 days           |
| 13                                 | MUNSTER<br>TI TIPPERARY                  | 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: 2210 to 3789 (units: sqm)  
 Range Selected by User: 2000 to 4000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/10/15 to 20/07/25

*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  | 4 days |
| Friday    | 1 days |

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

Selected survey types:

|                       |        |
|-----------------------|--------|
| Manual count          | 7 days |
| Directional ATC Count | 0 days |

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

Selected Locations:

|                                          |   |
|------------------------------------------|---|
| Suburban Area (PPS6 Out of Centre)       | 1 |
| Edge of Town                             | 4 |
| Neighbourhood Centre (PPS6 Local Centre) | 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 | 3 |
| Village          | 1 |
| No Sub Category  | 3 |

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

Inclusion of Servicing Vehicles Counts:

|                             |                   |
|-----------------------------|-------------------|
| Servicing vehicles Included | 3 days - Selected |
| Servicing vehicles Excluded | 4 days - Selected |

Secondary Filtering selection:

Use Class:

|      |        |
|------|--------|
| n/a  | 5 days |
| E(d) | 2 days |

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

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

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

Population within 5 miles:

|                    |        |
|--------------------|--------|
| 5,001 to 25,000    | 1 days |
| 75,001 to 100,000  | 1 days |
| 250,001 to 500,000 | 3 days |
| 500,001 or More    | 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 | 4 days |
| 1.1 to 1.5 | 2 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 | 1 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 | 6 days |
| 4 Good          | 1 days |

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

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

LIST OF SITES relevant to selection parameters

|   |                                          |                |                     |
|---|------------------------------------------|----------------|---------------------|
| 1 | EN-07-C-01                               | LEISURE CENTRE | ENFIELD             |
|   | WINCHMORE HILL ROAD                      |                |                     |
|   | SOUTHGATE                                |                |                     |
|   | Neighbourhood Centre (PPS6 Local Centre) |                |                     |
|   | No Sub Category                          |                |                     |
|   | Total Gross floor area:                  | 3350 sqm       |                     |
|   | Survey date: THURSDAY                    | 18/11/21       | Survey Type: MANUAL |
| 2 | EX-07-C-01                               | LEISURE CENTRE | ESSEX               |
|   | CREST AVENUE                             |                |                     |
|   | BASILDON                                 |                |                     |
|   | Edge of Town                             |                |                     |
|   | Residential Zone                         |                |                     |
|   | Total Gross floor area:                  | 3364 sqm       |                     |
|   | Survey date: THURSDAY                    | 30/09/21       | Survey Type: MANUAL |
| 3 | EX-07-C-02                               | LEISURE CENTRE | ESSEX               |
|   | PRIORY CHASE                             |                |                     |
|   | RAYLEIGH                                 |                |                     |
|   | Edge of Town                             |                |                     |
|   | No Sub Category                          |                |                     |
|   | Total Gross floor area:                  | 3297 sqm       |                     |
|   | Survey date: TUESDAY                     | 28/09/21       | Survey Type: MANUAL |
| 4 | NG-07-C-04                               | LEISURE CENTRE | NOTTINGHAM          |
|   | DENMAN STREET CENTRAL                    |                |                     |
|   | NOTTINGHAM                               |                |                     |
|   | RADFORD                                  |                |                     |
|   | Suburban Area (PPS6 Out of Centre)       |                |                     |
|   | Residential Zone                         |                |                     |
|   | Total Gross floor area:                  | 2210 sqm       |                     |
|   | Survey date: FRIDAY                      | 02/12/16       | Survey Type: MANUAL |
| 5 | TI-07-C-02                               | LEISURE CENTRE | TIPPERARY           |
|   | DUBLIN ROAD                              |                |                     |
|   | NENAGH                                   |                |                     |
|   | Edge of Town                             |                |                     |
|   | No Sub Category                          |                |                     |
|   | Total Gross floor area:                  | 2980 sqm       |                     |
|   | Survey date: THURSDAY                    | 26/05/16       | Survey Type: MANUAL |
| 6 | WM-07-C-02                               | LEISURE CENTRE | WEST MIDLANDS       |
|   | BEECHES ROAD                             |                |                     |
|   | BIRMINGHAM                               |                |                     |
|   | Edge of Town                             |                |                     |
|   | Residential Zone                         |                |                     |
|   | Total Gross floor area:                  | 2600 sqm       |                     |
|   | Survey date: THURSDAY                    | 26/09/19       | Survey Type: MANUAL |
| 7 | WS-07-C-06                               | LEISURE CENTRE | WEST SUSSEX         |
|   | WICKHURST LANE                           |                |                     |
|   | HORSHAM                                  |                |                     |
|   | BROADBRIDGE HEATH                        |                |                     |
|   | Neighbourhood Centre (PPS6 Local Centre) |                |                     |
|   | Village                                  |                |                     |
|   | Total Gross floor area:                  | 3789 sqm       |                     |
|   | Survey date: WEDNESDAY                   | 16/06/21       | 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 07 - LEISURE/C - LEISURE CENTRE  
**TOTAL VEHICLES**  
 Calculation factor: 100 sqm  
 BOLD print indicates peak (busiest) period

| Time Range    | ARRIVALS |          |           | DEPARTURES |          |           | TOTALS   |          |           |
|---------------|----------|----------|-----------|------------|----------|-----------|----------|----------|-----------|
|               | No. Days | Ave. GFA | Trip Rate | No. Days   | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00 - 01:00 |          |          |           |            |          |           |          |          |           |
| 01:00 - 02:00 |          |          |           |            |          |           |          |          |           |
| 02:00 - 03:00 |          |          |           |            |          |           |          |          |           |
| 03:00 - 04:00 |          |          |           |            |          |           |          |          |           |
| 04:00 - 05:00 |          |          |           |            |          |           |          |          |           |
| 05:00 - 06:00 | 1        | 3350     | 0.328     | 1          | 3350     | 0.000     | 1        | 3350     | 0.328     |
| 06:00 - 07:00 | 5        | 3063     | 0.594     | 5          | 3063     | 0.078     | 5        | 3063     | 0.672     |
| 07:00 - 08:00 | 7        | 3084     | 0.496     | 7          | 3084     | 0.426     | 7        | 3084     | 0.922     |
| 08:00 - 09:00 | 7        | 3084     | 0.667     | 7          | 3084     | 0.421     | 7        | 3084     | 1.088     |
| 09:00 - 10:00 | 7        | 3084     | 0.584     | 7          | 3084     | 0.435     | 7        | 3084     | 1.019     |
| 10:00 - 11:00 | 7        | 3084     | 0.463     | 7          | 3084     | 0.426     | 7        | 3084     | 0.889     |
| 11:00 - 12:00 | 7        | 3084     | 0.394     | 7          | 3084     | 0.523     | 7        | 3084     | 0.917     |
| 12:00 - 13:00 | 7        | 3084     | 0.463     | 7          | 3084     | 0.421     | 7        | 3084     | 0.884     |
| 13:00 - 14:00 | 7        | 3084     | 0.500     | 7          | 3084     | 0.523     | 7        | 3084     | 1.023     |
| 14:00 - 15:00 | 7        | 3084     | 0.449     | 7          | 3084     | 0.496     | 7        | 3084     | 0.945     |
| 15:00 - 16:00 | 7        | 3084     | 0.658     | 7          | 3084     | 0.477     | 7        | 3084     | 1.135     |
| 16:00 - 17:00 | 7        | 3084     | 0.899     | 7          | 3084     | 0.676     | 7        | 3084     | 1.575     |
| 17:00 - 18:00 | 7        | 3084     | 1.107     | 7          | 3084     | 1.010     | 7        | 3084     | 2.117     |
| 18:00 - 19:00 | 7        | 3084     | 0.977     | 7          | 3084     | 1.075     | 7        | 3084     | 2.052     |
| 19:00 - 20:00 | 7        | 3084     | 0.750     | 7          | 3084     | 0.977     | 7        | 3084     | 1.727     |
| 20:00 - 21:00 | 7        | 3084     | 0.296     | 7          | 3084     | 0.746     | 7        | 3084     | 1.042     |
| 21:00 - 22:00 | 6        | 3049     | 0.142     | 6          | 3049     | 0.558     | 6        | 3049     | 0.700     |
| 22:00 - 23:00 | 2        | 2790     | 0.090     | 2          | 2790     | 0.233     | 2        | 2790     | 0.323     |
| 23:00 - 24:00 |          |          |           |            |          |           |          |          |           |
| Total Rates:  |          |          | 9.857     |            |          | 9.501     |          |          | 19.358    |

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

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

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Parameter summary

|                                               |                          |
|-----------------------------------------------|--------------------------|
| Trip rate parameter range selected:           | 2210 - 3789 (units: sqm) |
| Survey date range:                            | 01/10/15 - 20/07/25      |
| Number of weekdays (Monday-Friday):           | 7                        |
| 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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



Calculation Reference: AUDIT-434201-250806-0850

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE  
Category : Q - COMMUNITY CENTRE  
TOTAL VEHICLES

Selected regions and areas:

|    |                                |        |
|----|--------------------------------|--------|
| 06 | WEST MIDLANDS                  |        |
|    | WM WEST MIDLANDS               | 1 days |
| 07 | YORKSHIRE & NORTH LINCOLNSHIRE |        |
|    | NY NORTH YORKSHIRE             | 1 days |
| 08 | NORTH WEST                     |        |
|    | EC CHESHIRE EAST               | 1 days |
|    | GM GREATER MANCHESTER          | 1 days |
| 09 | NORTH                          |        |
|    | TW TYNE & WEAR                 | 1 days |
| 13 | MUNSTER                        |        |
|    | TI TIPPERARY                   | 1 days |
| 15 | GREATER DUBLIN                 |        |
|    | DL DUBLIN                      | 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: 100 to 1800 (units: sqm)  
 Range Selected by User: 100 to 1800 (units: sqm)

Parking Spaces Range: All Surveys Included

**Public Transport Provision:**

Selection by: Include all surveys

Date Range: 01/01/16 to 24/04/24

*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   | 2 days |
| Wednesday | 2 days |
| Thursday  | 2 days |
| Friday    | 1 days |

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

**Selected survey types:**

|                       |        |
|-----------------------|--------|
| Manual count          | 7 days |
| Directional ATC Count | 0 days |

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

**Selected Locations:**

|                                          |   |
|------------------------------------------|---|
| Suburban Area (PPS6 Out of Centre)       | 2 |
| Edge of Town                             | 2 |
| Neighbourhood Centre (PPS6 Local Centre) | 3 |

*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 | 5 |
| Village          | 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.*

**Inclusion of Servicing Vehicles Counts:**

|                             |                   |
|-----------------------------|-------------------|
| Servicing vehicles Included | 2 days - Selected |
| Servicing vehicles Excluded | 5 days - Selected |

**Secondary Filtering selection:****Use Class:**

|       |        |
|-------|--------|
| F2(b) | 7 days |
|-------|--------|

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

**Population within 500m Range:**

All Surveys Included

## Secondary Filtering selection (Cont.):

Population within 1 mile:

|                  |        |
|------------------|--------|
| 1,000 or Less    | 1 days |
| 5,001 to 10,000  | 1 days |
| 10,001 to 15,000 | 1 days |
| 15,001 to 20,000 | 2 days |
| 25,001 to 50,000 | 2 days |

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

Population within 5 miles:

|                    |        |
|--------------------|--------|
| 5,001 to 25,000    | 1 days |
| 50,001 to 75,000   | 3 days |
| 125,001 to 250,000 | 1 days |
| 250,001 to 500,000 | 1 days |
| 500,001 or More    | 1 days |

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

Car ownership within 5 miles:

|            |        |
|------------|--------|
| 0.6 to 1.0 | 4 days |
| 1.1 to 1.5 | 3 days |

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

Travel Plan:

|    |        |
|----|--------|
| No | 7 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 | 7 days |
|-----------------|--------|

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

LIST OF SITES relevant to selection parameters

|   |                                          |                  |                     |
|---|------------------------------------------|------------------|---------------------|
| 1 | DL-07-Q-01                               | COMMUNITY CENTRE | DUBLIN              |
|   | BALLYBOUGH ROAD                          |                  |                     |
|   | DUBLIN                                   |                  |                     |
|   | BALLYBOUGH                               |                  |                     |
|   | Suburban Area (PPS6 Out of Centre)       |                  |                     |
|   | Residential Zone                         |                  |                     |
|   | Total Gross floor area:                  | 1800 sqm         |                     |
|   | Survey date: WEDNESDAY                   | 23/11/16         | Survey Type: MANUAL |
| 2 | EC-07-Q-01                               | COMMUNITY CENTRE | CHESHIRE EAST       |
|   | WARRINGTON ROAD                          |                  |                     |
|   | MERE                                     |                  |                     |
|   | Neighbourhood Centre (PPS6 Local Centre) |                  |                     |
|   | Village                                  |                  |                     |
|   | Total Gross floor area:                  | 100 sqm          |                     |
|   | Survey date: TUESDAY                     | 07/11/17         | Survey Type: MANUAL |
| 3 | GM-07-Q-01                               | COMMUNITY CENTRE | GREATER MANCHESTER  |
|   | MOODY STREET                             |                  |                     |
|   | STANDISH                                 |                  |                     |
|   | Edge of Town                             |                  |                     |
|   | Residential Zone                         |                  |                     |
|   | Total Gross floor area:                  | 270 sqm          |                     |
|   | Survey date: THURSDAY                    | 28/04/22         | Survey Type: MANUAL |
| 4 | NY-07-Q-01                               | COMMUNITY CENTRE | NORTH YORKSHIRE     |
|   | SHUTE ROAD                               |                  |                     |
|   | CATTERRICK GARRISON                      |                  |                     |
|   | Neighbourhood Centre (PPS6 Local Centre) |                  |                     |
|   | No Sub Category                          |                  |                     |
|   | Total Gross floor area:                  | 316 sqm          |                     |
|   | Survey date: WEDNESDAY                   | 10/05/17         | Survey Type: MANUAL |
| 5 | TI-07-Q-01                               | COMMUNITY CENTRE | TIPPERARY           |
|   | ORMOND DRIVE                             |                  |                     |
|   | NENAGH                                   |                  |                     |
|   | TYONE                                    |                  |                     |
|   | Edge of Town                             |                  |                     |
|   | Residential Zone                         |                  |                     |
|   | Total Gross floor area:                  | 160 sqm          |                     |
|   | Survey date: THURSDAY                    | 13/10/22         | Survey Type: MANUAL |
| 6 | TW-07-Q-03                               | COMMUNITY CENTRE | TYNE & WEAR         |
|   | ASKEW ROAD W                             |                  |                     |
|   | GATESHEAD                                |                  |                     |
|   | TEAMS                                    |                  |                     |
|   | Suburban Area (PPS6 Out of Centre)       |                  |                     |
|   | Residential Zone                         |                  |                     |
|   | Total Gross floor area:                  | 750 sqm          |                     |
|   | Survey date: FRIDAY                      | 24/05/19         | Survey Type: MANUAL |
| 7 | WM-07-Q-01                               | COMMUNITY CENTRE | WEST MIDLANDS       |
|   | PRIOR DERAM WALK                         |                  |                     |
|   | COVENTRY                                 |                  |                     |
|   | CANLEY                                   |                  |                     |
|   | Neighbourhood Centre (PPS6 Local Centre) |                  |                     |
|   | Residential Zone                         |                  |                     |
|   | Total Gross floor area:                  | 560 sqm          |                     |
|   | Survey date: TUESDAY                     | 18/10/22         | 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 07 - LEISURE/Q - COMMUNITY CENTRE

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

| Time Range    | ARRIVALS |          |           | DEPARTURES |          |           | TOTALS   |          |           |
|---------------|----------|----------|-----------|------------|----------|-----------|----------|----------|-----------|
|               | No. Days | Ave. GFA | Trip Rate | No. Days   | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00 - 01:00 |          |          |           |            |          |           |          |          |           |
| 01:00 - 02:00 |          |          |           |            |          |           |          |          |           |
| 02:00 - 03:00 |          |          |           |            |          |           |          |          |           |
| 03:00 - 04:00 |          |          |           |            |          |           |          |          |           |
| 04:00 - 05:00 |          |          |           |            |          |           |          |          |           |
| 05:00 - 06:00 |          |          |           |            |          |           |          |          |           |
| 06:00 - 07:00 | 1        | 270      | 0.000     | 1          | 270      | 0.000     | 1        | 270      | 0.000     |
| 07:00 - 08:00 | 4        | 312      | 0.482     | 4          | 312      | 0.000     | 4        | 312      | 0.482     |
| 08:00 - 09:00 | 7        | 565      | 0.379     | 7          | 565      | 0.253     | 7        | 565      | 0.632     |
| 09:00 - 10:00 | 7        | 565      | 0.683     | 7          | 565      | 0.329     | 7        | 565      | 1.012     |
| 10:00 - 11:00 | 7        | 565      | 0.354     | 7          | 565      | 0.404     | 7        | 565      | 0.758     |
| 11:00 - 12:00 | 7        | 565      | 0.379     | 7          | 565      | 0.354     | 7        | 565      | 0.733     |
| 12:00 - 13:00 | 7        | 565      | 0.329     | 7          | 565      | 0.329     | 7        | 565      | 0.658     |
| 13:00 - 14:00 | 7        | 565      | 0.354     | 7          | 565      | 0.278     | 7        | 565      | 0.632     |
| 14:00 - 15:00 | 7        | 565      | 0.354     | 7          | 565      | 0.354     | 7        | 565      | 0.708     |
| 15:00 - 16:00 | 7        | 565      | 0.455     | 7          | 565      | 0.430     | 7        | 565      | 0.885     |
| 16:00 - 17:00 | 6        | 607      | 0.302     | 6          | 607      | 0.549     | 6        | 607      | 0.851     |
| 17:00 - 18:00 | 6        | 607      | 0.275     | 6          | 607      | 0.247     | 6        | 607      | 0.522     |
| 18:00 - 19:00 | 5        | 578      | 0.657     | 5          | 578      | 0.519     | 5        | 578      | 1.176     |
| 19:00 - 20:00 | 5        | 578      | 1.038     | 5          | 578      | 0.415     | 5        | 578      | 1.453     |
| 20:00 - 21:00 | 4        | 655      | 0.038     | 4          | 655      | 0.305     | 4        | 655      | 0.343     |
| 21:00 - 22:00 | 3        | 687      | 0.000     | 3          | 687      | 1.068     | 3        | 687      | 1.068     |
| 22:00 - 23:00 |          |          |           |            |          |           |          |          |           |
| 23:00 - 24:00 |          |          |           |            |          |           |          |          |           |
| Total Rates:  |          |          | 6.079     |            |          | 5.834     |          |          | 11.913    |

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

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

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#### Parameter summary

Trip rate parameter range selected: 100 - 1800 (units: sqm)  
 Survey date range: 01/01/16 - 24/04/24  
 Number of weekdays (Monday-Friday): 7  
 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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-434201-250819-0848

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE  
Category : C - LEISURE CENTRE  
TOTAL VEHICLES

Selected regions and areas:

|    |                   |        |
|----|-------------------|--------|
| 03 | SOUTH WEST        |        |
|    | DV DEVON          | 1 days |
| 04 | EAST ANGLIA       |        |
|    | CA CAMBRIDGESHIRE | 1 days |
| 09 | NORTH             |        |
|    | CU CUMBERLAND     | 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: 1450 to 1900 (units: sqm)  
Range Selected by User: 360 to 2000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:  
Selection by: Include all surveys

Date Range: 01/01/16 to 18/05/24

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

Selected survey days:  
Wednesday 2 days  
Thursday 1 days

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

Selected survey types:  
Manual count 3 days  
Directional ATC Count 0 days

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

Selected Locations:  
Edge of Town 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 1  
Built-Up 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.*

Inclusion of Servicing Vehicles Counts:  
Servicing vehicles Included X days - Selected  
Servicing vehicles Excluded 3 days - Selected

Secondary Filtering selection:

Use Class:  
n/a 3 days

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

Population within 500m Range:  
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

|                  |        |
|------------------|--------|
| 5,001 to 10,000  | 1 days |
| 25,001 to 50,000 | 2 days |

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

Population within 5 miles:

|                    |        |
|--------------------|--------|
| 25,001 to 50,000   | 1 days |
| 75,001 to 100,000  | 1 days |
| 125,001 to 250,000 | 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 |
| 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 | 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 | CA-07-C-02<br>BACK LANE<br>CAMBOURNE                                                                        | LEISURE CENTRE            | CAMBRIDGESHIRE      |
|   | Edge of Town<br>Residential Zone<br>Total Gross floor area: 1502 sqm<br>Survey date: THURSDAY 07/06/18      |                           | Survey Type: MANUAL |
| 2 | CU-07-C-03<br>JAMES STREET<br>CARLISLE                                                                      | SWIMMING & FITNESS CENTRE | CUMBERLAND          |
|   | Edge of Town Centre<br>Built-Up Zone<br>Total Gross floor area: 2500 sqm<br>Survey date: WEDNESDAY 22/06/16 |                           | Survey Type: MANUAL |
| 3 | DV-07-C-02<br>HEAVITREE ROAD<br>EXETER                                                                      | LEISURE CENTRE            | DEVON               |
|   | Edge of Town Centre<br>Built-Up Zone<br>Total Gross floor area: 1450 sqm<br>Survey date: WEDNESDAY 05/07/17 |                           | 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 07 - LEISURE/C - LEISURE CENTRE  
TOTAL VEHICLES  
Calculation factor: 100 sqm  
BOLD print indicates peak (busiest) period

| Time Range    | ARRIVALS |          |           | DEPARTURES |          |           | TOTALS   |          |           |
|---------------|----------|----------|-----------|------------|----------|-----------|----------|----------|-----------|
|               | No. Days | Ave. GFA | Trip Rate | No. Days   | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00 - 01:00 |          |          |           |            |          |           |          |          |           |
| 01:00 - 02:00 |          |          |           |            |          |           |          |          |           |
| 02:00 - 03:00 |          |          |           |            |          |           |          |          |           |
| 03:00 - 04:00 |          |          |           |            |          |           |          |          |           |
| 04:00 - 05:00 |          |          |           |            |          |           |          |          |           |
| 05:00 - 06:00 |          |          |           |            |          |           |          |          |           |
| 06:00 - 07:00 | 1        | 1450     | 1.103     | 1          | 1450     | 0.207     | 1        | 1450     | 1.310     |
| 07:00 - 08:00 | 3        | 1617     | 0.969     | 3          | 1617     | 0.453     | 3        | 1617     | 1.422     |
| 08:00 - 09:00 | 3        | 1617     | 1.092     | 3          | 1617     | 0.639     | 3        | 1617     | 1.731     |
| 09:00 - 10:00 | 3        | 1617     | 1.216     | 3          | 1617     | 0.927     | 3        | 1617     | 2.143     |
| 10:00 - 11:00 | 3        | 1617     | 0.948     | 3          | 1617     | 1.051     | 3        | 1617     | 1.999     |
| 11:00 - 12:00 | 3        | 1617     | 0.824     | 3          | 1617     | 1.195     | 3        | 1617     | 2.019     |
| 12:00 - 13:00 | 3        | 1617     | 0.680     | 3          | 1617     | 1.113     | 3        | 1617     | 1.793     |
| 13:00 - 14:00 | 3        | 1617     | 0.701     | 3          | 1617     | 0.412     | 3        | 1617     | 1.113     |
| 14:00 - 15:00 | 3        | 1617     | 0.598     | 3          | 1617     | 0.556     | 3        | 1617     | 1.154     |
| 15:00 - 16:00 | 3        | 1617     | 1.134     | 3          | 1617     | 0.515     | 3        | 1617     | 1.649     |
| 16:00 - 17:00 | 3        | 1617     | 2.741     | 3          | 1617     | 1.525     | 3        | 1617     | 4.266     |
| 17:00 - 18:00 | 3        | 1617     | 2.040     | 3          | 1617     | 2.947     | 3        | 1617     | 4.987     |
| 18:00 - 19:00 | 3        | 1617     | 2.803     | 3          | 1617     | 2.803     | 3        | 1617     | 5.606     |
| 19:00 - 20:00 | 3        | 1617     | 1.360     | 3          | 1617     | 1.690     | 3        | 1617     | 3.050     |
| 20:00 - 21:00 | 3        | 1617     | 0.907     | 3          | 1617     | 1.628     | 3        | 1617     | 2.535     |
| 21:00 - 22:00 | 2        | 1675     | 0.179     | 2          | 1675     | 1.075     | 2        | 1675     | 1.254     |
| 22:00 - 23:00 | 1        | 1450     | 0.000     | 1          | 1450     | 0.000     | 1        | 1450     | 0.000     |
| 23:00 - 24:00 |          |          |           |            |          |           |          |          |           |
| Total Rates:  |          |          | 19.295    |            |          | 18.736    |          |          | 38.031    |

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

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

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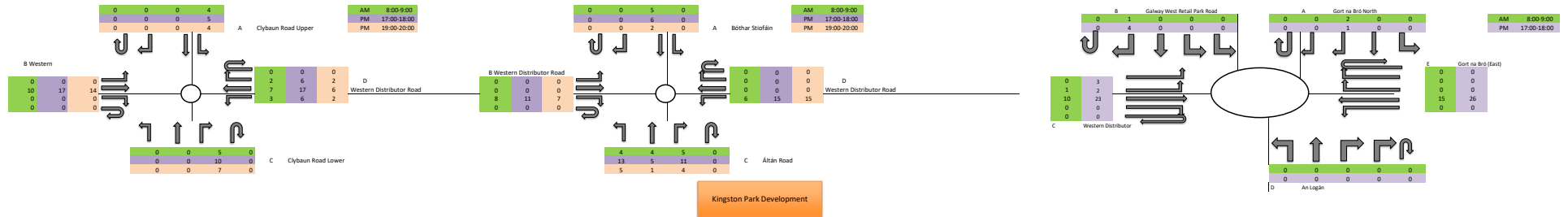
Parameter summary

|                                               |                          |
|-----------------------------------------------|--------------------------|
| Trip rate parameter range selected:           | 1450 - 1900 (units: sqm) |
| Survey date range:                            | 01/01/16 - 18/05/24      |
| Number of weekdays (Monday-Friday):           | 3                        |
| 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.

## **Appendix C      Development Junction Distribution Model**

Peak Traffic : Year 2023



## **Appendix D      Junction Analysis**

| <b>Junctions 9</b>                                                                                                                                               |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>ARCADY 9 - Roundabout Module</b>                                                                                                                              |  |
| Version: 9.5.0.6896<br>© Copyright TRL Limited, 2018                                                                                                             |  |
| For sales and distribution information, program advice and maintenance, contact TRL:<br>+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk              |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |

**Filename:** Junction 1- Clybaun-Western Distributor Roundabout-peak count+GFA FINAL.j9  
**Path:** I:\DWGS\233\101-150\233114\3.0 Calculations\1. Civils\233114-PUNCH-XX-XX-CA-C-0002 Design Calculations\2.0 Traffic Calculations\Junction 1- Clybaun-Western distributor Roundabout  
**Report generation date:** 17/09/2025 16:27:08

- 
- »Clybaun Roundabout - 2023- Existing , AM
  - »Clybaun Roundabout - 2023- Existing, PM
  - »Clybaun Roundabout - 2028-Do Nothing , AM
  - »Clybaun Roundabout - 2028-Do Nothing , PM
  - »Clybaun Roundabout - 2033- Do Nothing , AM
  - »Clybaun Roundabout - 2033- Do Nothing , PM
  - »Clybaun Roundabout - 2043- Do Nothing , AM
  - »Clybaun Roundabout - 2043- Do Nothing , PM
  - »Clybaun Roundabout - 2028- Do Something, AM
  - »Clybaun Roundabout - 2028- Do Something, PM
  - »Clybaun Roundabout - 2033- Do Something, AM
  - »Clybaun Roundabout - 2033- Do Something, PM
  - »Clybaun Roundabout - 2043- Do Something, AM
  - »Clybaun Roundabout - 2043- Do Something, PM
  - »Clybaun Roundabout - 2043-Do Something+AT, AM
  - »Clybaun Roundabout - 2043-Do Something+AT, PM
  - »Clybaun Roundabout - 2043-Do Something+Ring Road, AM
  - »Clybaun Roundabout - 2043-Do Something+Ring Road, PM

## Summary of junction performance

|                                                  | AM          |           |      |     | PM          |           |      |     |
|--------------------------------------------------|-------------|-----------|------|-----|-------------|-----------|------|-----|
|                                                  | Queue (PCU) | Delay (s) | RFC  | LOS | Queue (PCU) | Delay (s) | RFC  | LOS |
| Clybaun Roundabout - 2023- Existing              |             |           |      |     |             |           |      |     |
| Arm 1                                            | 13.2        | 88.55     | 0.97 | F   | 201.6       | 1187.73   | 1.48 | F   |
| Arm 2                                            | 2.0         | 18.60     | 0.68 | C   | 9.9         | 72.22     | 0.94 | F   |
| Arm 3                                            | 63.2        | 404.53    | 1.21 | F   | 32.6        | 214.35    | 1.10 | F   |
| Arm 4                                            | 31.8        | 267.54    | 1.13 | F   | 3.1         | 36.70     | 0.77 | E   |
| Clybaun Roundabout - 2028-Do Nothing             |             |           |      |     |             |           |      |     |
| Arm 1                                            | 28.1        | 161.27    | 1.06 | F   | 293.0       | 1736.23   | 1.62 | F   |
| Arm 2                                            | 3.1         | 26.83     | 0.77 | D   | 22.0        | 137.01    | 1.03 | F   |
| Arm 3                                            | 111.8       | 736.22    | 1.35 | F   | 59.8        | 455.02    | 1.22 | F   |
| Arm 4                                            | 64.4        | 606.76    | 1.29 | F   | 4.8         | 53.31     | 0.85 | F   |
| Clybaun Roundabout - 2033- Do Nothing            |             |           |      |     |             |           |      |     |
| Arm 1                                            | 45.9        | 268.94    | 1.12 | F   | 376.2       | 2210.76   | 1.75 | F   |
| Arm 2                                            | 4.2         | 34.26     | 0.82 | D   | 37.6        | 212.65    | 1.10 | F   |
| Arm 3                                            | 159.0       | 1045.46   | 1.47 | F   | 90.4        | 672.86    | 1.30 | F   |
| Arm 4                                            | 93.6        | 850.78    | 1.38 | F   | 7.1         | 74.74     | 0.91 | F   |
| Clybaun Roundabout - 2043- Do Nothing            |             |           |      |     |             |           |      |     |
| Arm 1                                            | 84.3        | 528.55    | 1.23 | F   | 508.0       | 2988.80   | 1.94 | F   |
| Arm 2                                            | 7.8         | 58.87     | 0.91 | F   | 72.3        | 477.25    | 1.22 | F   |
| Arm 3                                            | 246.2       | 1674.69   | 1.66 | F   | 145.9       | 1130.06   | 1.43 | F   |
| Arm 4                                            | 146.9       | 1386.58   | 1.55 | F   | 16.0        | 143.88    | 1.02 | F   |
| Clybaun Roundabout - 2028- Do Something          |             |           |      |     |             |           |      |     |
| Arm 1                                            | 33.2        | 184.88    | 1.08 | F   | 330.5       | 1942.40   | 1.68 | F   |
| Arm 2                                            | 3.3         | 28.27     | 0.78 | D   | 26.2        | 157.31    | 1.05 | F   |
| Arm 3                                            | 122.7       | 802.59    | 1.38 | F   | 75.6        | 565.55    | 1.26 | F   |
| Arm 4                                            | 66.4        | 626.24    | 1.29 | F   | 5.1         | 57.20     | 0.86 | F   |
| Clybaun Roundabout - 2033- Do Something          |             |           |      |     |             |           |      |     |
| Arm 1                                            | 51.8        | 310.42    | 1.14 | F   | 410.3       | 2399.33   | 1.79 | F   |
| Arm 2                                            | 4.4         | 35.89     | 0.83 | E   | 42.9        | 251.90    | 1.12 | F   |
| Arm 3                                            | 171.0       | 1126.97   | 1.50 | F   | 107.3       | 797.00    | 1.34 | F   |
| Arm 4                                            | 101.4       | 920.39    | 1.41 | F   | 8.7         | 89.19     | 0.94 | F   |
| Clybaun Roundabout - 2043- Do Something          |             |           |      |     |             |           |      |     |
| Arm 1                                            | 93.6        | 579.25    | 1.25 | F   | 546.8       | 3215.98   | 1.99 | F   |
| Arm 2                                            | 8.3         | 61.70     | 0.92 | F   | 79.9        | 523.50    | 1.24 | F   |
| Arm 3                                            | 261.0       | 1772.05   | 1.69 | F   | 166.0       | 1287.76   | 1.47 | F   |
| Arm 4                                            | 155.8       | 1478.18   | 1.58 | F   | 19.6        | 170.83    | 1.04 | F   |
| Clybaun Roundabout - 2043-Do Something+AT        |             |           |      |     |             |           |      |     |
| Arm 1                                            | 87.9        | 541.69    | 1.24 | F   | 532.7       | 3081.72   | 1.96 | F   |
| Arm 2                                            | 5.6         | 43.32     | 0.87 | E   | 53.9        | 335.56    | 1.16 | F   |
| Arm 3                                            | 228.5       | 1553.28   | 1.62 | F   | 147.0       | 1143.92   | 1.44 | F   |
| Arm 4                                            | 135.4       | 1302.49   | 1.53 | F   | 14.4        | 138.40    | 1.01 | F   |
| Clybaun Roundabout - 2043-Do Something+Ring Road |             |           |      |     |             |           |      |     |
| Arm 1                                            | 79.0        | 483.52    | 1.22 | F   | 512.4       | 2910.27   | 1.91 | F   |
| Arm 2                                            | 3.5         | 29.29     | 0.79 | D   | 24.2        | 146.25    | 1.04 | F   |
| Arm 3                                            | 186.7       | 1241.71   | 1.53 | F   | 122.1       | 866.21    | 1.39 | F   |
| Arm 4                                            | 107.0       | 1045.60   | 1.46 | F   | 9.0         | 100.44    | 0.95 | F   |

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

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

## File summary

### File Description

|             |               |
|-------------|---------------|
| Title       |               |
| Location    |               |
| Site number |               |
| Date        | 10/06/2025    |
| Version     |               |
| Status      | (new file)    |
| Identifier  |               |
| Client      |               |
| Jobnumber   |               |
| Enumerator  | MPPNET\WNCube |
| Description |               |

## Units

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

## Analysis Options

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

## Demand Set Summary

| ID  | Scenario name               | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|-----------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1  | 2023- Existing              | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D2  | 2023- Existing              | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D3  | 2028-Do Nothing             | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D4  | 2028-Do Nothing             | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D5  | 2033- Do Nothing            | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D6  | 2033- Do Nothing            | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D7  | 2043- Do Nothing            | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D8  | 2043- Do Nothing            | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D9  | 2028- Do Something          | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D10 | 2028- Do Something          | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D11 | 2033- Do Something          | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D12 | 2033- Do Something          | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D13 | 2043- Do Something          | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D14 | 2043- Do Something          | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D15 | 2043-Do Something+AT        | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D16 | 2043-Do Something+AT        | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D17 | 2043-Do Something+Ring Road | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D18 | 2043-Do Something+Ring Road | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

## Analysis Set Details

| ID | Name               | Include in report | Network flow scaling factor (%) | Network capacity scaling factor (%) |
|----|--------------------|-------------------|---------------------------------|-------------------------------------|
| A1 | Clybaun Roundabout | ✓                 | 100.000                         | 100.000                             |



# Clybaun Roundabout - 2023- Existing , AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 210.48             | F            |

### Junction Network Options

| Driving side | Lighting       |
|--------------|----------------|
| Left         | Normal/unknown |

## Arms

### Arms

| Arm | Name | Description               |
|-----|------|---------------------------|
| 1   | D    | Western Distrubutor- West |
| 2   | C    | Clybaun North             |
| 3   | B    | Western Distributor East  |
| 4   | A    | Clybaun- South            |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit only |
|-----|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|-----------|
| 1   | 3.00                             | 3.00                | 0.0                             | 3.2                  | 47.5                              | 29.0                               |           |
| 2   | 3.00                             | 4.00                | 19.3                            | 3.0                  | 13.0                              | 0.0                                |           |
| 3   | 3.00                             | 3.00                | 0.0                             | 3.2                  | 47.5                              | 31.0                               |           |
| 4   | 3.00                             | 3.00                | 0.0                             | 3.0                  | 47.5                              | 0.0                                |           |

### Zebra Crossings

| Arm | Space between crossing and junction entry (Zebra) (PCU) | Vehicles queueing on exit (Zebra) (PCU) | Central Refuge | Crossing data type | Crossing length (entry side) (m) | Crossing time (entry side) (s) | Crossing length (exit side) (m) | Crossing time (exit side) (s) |
|-----|---------------------------------------------------------|-----------------------------------------|----------------|--------------------|----------------------------------|--------------------------------|---------------------------------|-------------------------------|
| 1   | 1.00                                                    | 1.00                                    | ✓              | Distance           | 5.95                             | 4.25                           | 5.38                            | 3.84                          |
| 3   | 1.00                                                    | 1.00                                    | ✓              | Distance           | 7.63                             | 5.45                           | 7.11                            | 5.08                          |
| 4   | 1.00                                                    | 1.00                                    | ✓              | Distance           | 5.03                             | 3.60                           | 4.07                            | 2.90                          |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Final slope | Final intercept (PCU/hr) |
|-----|-------------|--------------------------|
| 1   | 0.348       | 679                      |
| 2   | 0.460       | 967                      |
| 3   | 0.345       | 672                      |
| 4   | 0.386       | 752                      |

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 | 2023- Existing | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 510                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 366                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 568                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 389                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 31.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 41.00                            |
| 4   | [ONEHOUR]    | 11.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 2   | 119 | 306 | 83  |
|      | 2  | 192 | 0   | 64  | 110 |
|      | 3  | 409 | 93  | 10  | 56  |
|      | 4  | 184 | 106 | 98  | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.97    | 88.55         | 13.2            | F       | 468                     | 702                           |
| 2   | 0.68    | 18.60         | 2.0             | C       | 336                     | 504                           |
| 3   | 1.21    | 404.53        | 63.2            | F       | 521                     | 782                           |
| 4   | 1.13    | 267.54        | 31.8            | F       | 357                     | 535                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 384                   | 96                      | 227                       | 23.34                      | 600               | 0.640 | 377                 | 580                             | 0.0               | 1.7             | 15.751    | C                             |
| 2   | 276                   | 69                      | 369                       |                            | 712               | 0.387 | 273                 | 234                             | 0.0               | 0.6             | 8.164     | A                             |
| 3   | 428                   | 107                     | 289                       | 30.87                      | 568               | 0.753 | 417                 | 354                             | 0.0               | 2.8             | 22.419    | C                             |
| 4   | 293                   | 73                      | 520                       | 8.28                       | 475               | 0.617 | 287                 | 185                             | 0.0               | 1.5             | 18.595    | C                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 458                   | 115                     | 268                       | 27.87                      | 585               | 0.784 | 452                 | 688                             | 1.7               | 3.2             | 25.955    | D                             |
| 2   | 329                   | 82                      | 442                       |                            | 658               | 0.500 | 328                 | 279                             | 0.6               | 1.0             | 10.857    | B                             |
| 3   | 511                   | 128                     | 347                       | 36.86                      | 546               | 0.935 | 491                 | 423                             | 2.8               | 7.6             | 52.281    | F                             |
| 4   | 350                   | 87                      | 616                       | 9.89                       | 418               | 0.838 | 340                 | 221                             | 1.5               | 4.0             | 41.695    | E                             |

#### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 562                   | 140                     | 288                       | 34.13                      | 578               | 0.972 | 534                 | 756                             | 3.2               | 10.0            | 60.137    | F                             |
| 2   | 403                   | 101                     | 513                       |                            | 604               | 0.667 | 399                 | 309                             | 1.0               | 1.9             | 17.295    | C                             |
| 3   | 625                   | 156                     | 419                       | 45.14                      | 519               | 1.206 | 513                 | 493                             | 7.6               | 35.7            | 170.930   | F                             |
| 4   | 428                   | 107                     | 674                       | 12.11                      | 382               | 1.122 | 370                 | 259                             | 4.0               | 18.7            | 134.131   | F                             |

#### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 562                   | 140                     | 291                       | 34.13                      | 577               | 0.974 | 549                 | 762                             | 10.0              | 13.2            | 88.555    | F                             |
| 2   | 403                   | 101                     | 525                       |                            | 595               | 0.677 | 403                 | 315                             | 1.9               | 2.0             | 18.595    | C                             |
| 3   | 625                   | 156                     | 425                       | 45.14                      | 517               | 1.210 | 516                 | 503                             | 35.7              | 63.2            | 354.958   | F                             |
| 4   | 428                   | 107                     | 678                       | 12.11                      | 379               | 1.131 | 376                 | 262                             | 18.7              | 31.8            | 260.233   | F                             |

#### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 458                   | 115                     | 297                       | 27.87                      | 575               | 0.797 | 493                 | 740                             | 13.2              | 4.6             | 51.952    | F                             |
| 2   | 329                   | 82                      | 484                       |                            | 629               | 0.523 | 333                 | 306                             | 2.0               | 1.1             | 12.301    | B                             |
| 3   | 511                   | 128                     | 358                       | 36.86                      | 542               | 0.943 | 533                 | 459                             | 63.2              | 57.5            | 404.526   | F                             |
| 4   | 350                   | 87                      | 657                       | 9.89                       | 392               | 0.892 | 380                 | 234                             | 31.8              | 24.2            | 267.538   | F                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 384                   | 96                      | 298                       | 23.34                      | 575               | 0.668 | 394                 | 724                             | 4.6               | 2.1             | 20.869    | C                             |
| 2   | 276                   | 69                      | 407                       |                            | 684               | 0.403 | 277                 | 285                             | 1.1               | 0.7             | 8.882     | A                             |
| 3   | 428                   | 107                     | 295                       | 30.87                      | 565               | 0.757 | 555                 | 389                             | 57.5              | 25.7            | 274.260   | F                             |
| 4   | 293                   | 73                      | 647                       | 8.28                       | 400               | 0.732 | 375                 | 203                             | 24.2              | 3.7             | 136.321   | F                             |

# Clybaun Roundabout - 2023- Existing, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 530.39             | F            |

### 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 | 2023- Existing | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 781                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 479                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 477                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 290                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 47.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 35.00                            |
| 4   | [ONEHOUR]    | 11.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 2   | 153 | 473 | 153 |
|      | 2  | 204 | 0   | 106 | 169 |
|      | 3  | 346 | 56  | 6   | 69  |
|      | 4  | 98  | 108 | 84  | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.48    | 1187.73       | 201.6           | F       | 717                     | 1075                          |
| 2   | 0.94    | 72.22         | 9.9             | F       | 440                     | 659                           |
| 3   | 1.10    | 214.35        | 32.6            | F       | 438                     | 657                           |
| 4   | 0.77    | 36.70         | 3.1             | E       | 266                     | 399                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 588                   | 147                     | 188                       | 35.38                      | 612               | 0.960 | 552                 | 480                             | 0.0               | 9.1             | 45.717    | E                             |
| 2   | 361                   | 90                      | 510                       |                            | 614               | 0.588 | 355                 | 230                             | 0.0               | 1.4             | 13.652    | B                             |
| 3   | 359                   | 90                      | 386                       | 26.35                      | 529               | 0.679 | 351                 | 480                             | 0.0               | 2.0             | 19.490    | C                             |
| 4   | 218                   | 55                      | 453                       | 8.28                       | 518               | 0.421 | 215                 | 284                             | 0.0               | 0.7             | 11.780    | B                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 702                   | 176                     | 226                       | 42.25                      | 599               | 1.172 | 593                 | 574                             | 9.1               | 36.4            | 155.828   | F                             |
| 2   | 431                   | 108                     | 557                       |                            | 576               | 0.747 | 425                 | 262                             | 1.4               | 2.7             | 23.064    | C                             |
| 3   | 429                   | 107                     | 449                       | 31.46                      | 504               | 0.851 | 419                 | 533                             | 2.0               | 4.5             | 38.170    | E                             |
| 4   | 261                   | 65                      | 541                       | 9.89                       | 467               | 0.558 | 259                 | 327                             | 0.7               | 1.2             | 17.124    | C                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 860                   | 215                     | 268                       | 51.75                      | 584               | 1.472 | 584                 | 661                             | 36.4              | 105.4           | 449.137   | F                             |
| 2   | 527                   | 132                     | 566                       |                            | 561               | 0.941 | 506                 | 286                             | 2.7               | 8.0             | 52.268    | F                             |
| 3   | 525                   | 131                     | 510                       | 38.54                      | 480               | 1.093 | 466                 | 562                             | 4.5               | 19.4            | 112.956   | F                             |
| 4   | 319                   | 80                      | 615                       | 12.11                      | 420               | 0.759 | 313                 | 360                             | 1.2               | 2.8             | 31.822    | D                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 860                   | 215                     | 272                       | 51.75                      | 583               | 1.475 | 583                 | 673                             | 105.4             | 174.7           | 865.141   | F                             |
| 2   | 527                   | 132                     | 567                       |                            | 559               | 0.943 | 520                 | 288                             | 8.0               | 9.9             | 72.217    | F                             |
| 3   | 525                   | 131                     | 520                       | 38.54                      | 477               | 1.102 | 472                 | 566                             | 19.4              | 32.6            | 214.353   | F                             |
| 4   | 319                   | 80                      | 627                       | 12.11                      | 414               | 0.772 | 318                 | 366                             | 2.8               | 3.1             | 36.697    | E                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 702                   | 176                     | 239                       | 42.25                      | 595               | 1.181 | 595                 | 634                             | 174.7             | 201.6           | 1141.856  | F                             |
| 2   | 431                   | 108                     | 561                       |                            | 571               | 0.755 | 457                 | 272                             | 9.9               | 3.4             | 36.412    | E                             |
| 3   | 429                   | 107                     | 474                       | 31.46                      | 494               | 0.868 | 479                 | 544                             | 32.6              | 19.9            | 200.820   | F                             |
| 4   | 261                   | 65                      | 606                       | 9.89                       | 431               | 0.604 | 267                 | 347                             | 3.1               | 1.6             | 22.532    | C                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 588                   | 147                     | 202                       | 35.38                      | 608               | 0.968 | 605                 | 544                             | 201.6             | 197.4           | 1187.729  | F                             |
| 2   | 361                   | 90                      | 556                       |                            | 584               | 0.618 | 368                 | 251                             | 3.4               | 1.7             | 17.156    | C                             |
| 3   | 359                   | 90                      | 406                       | 26.35                      | 520               | 0.691 | 429                 | 517                             | 19.9              | 2.5             | 58.728    | F                             |
| 4   | 218                   | 55                      | 525                       | 8.28                       | 480               | 0.455 | 221                 | 310                             | 1.6               | 0.9             | 14.081    | B                             |

# Clybaun Roundabout - 2028-Do Nothing , AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 407.51             | F            |

### 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 | 2028-Do Nothing | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 554                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 400                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 617                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 431                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 61.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 82.00                            |
| 4   | [ONEHOUR]    | 21.00                            |

## Origin-Destination Data



### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      | 1  | 2   | 3   | 4   |     |
| From | 1  | 2   | 129 | 332 | 91  |
|      | 2  | 209 | 0   | 70  | 121 |
|      | 3  | 444 | 101 | 11  | 61  |
|      | 4  | 204 | 117 | 109 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      | 1  | 2 | 3 | 4 |   |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.06    | 161.27        | 28.1            | F       | 508                     | 763                           |
| 2   | 0.77    | 26.83         | 3.1             | D       | 367                     | 551                           |
| 3   | 1.35    | 736.22        | 111.8           | F       | 566                     | 849                           |
| 4   | 1.29    | 606.76        | 64.4            | F       | 395                     | 593                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 417                   | 104                     | 247                       | 45.92                      | 592               | 0.705 | 408                 | 629                             | 0.0               | 2.2             | 18.817    | C                             |
| 2   | 301                   | 75                      | 401                       |                            | 683               | 0.441 | 298                 | 254                             | 0.0               | 0.8             | 9.290     | A                             |
| 3   | 465                   | 116                     | 315                       | 61.73                      | 556               | 0.835 | 448                 | 384                             | 0.0               | 4.1             | 29.818    | D                             |
| 4   | 324                   | 81                      | 561                       | 15.81                      | 447               | 0.726 | 315                 | 202                             | 0.0               | 2.4             | 25.763    | D                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 498                   | 125                     | 282                       | 54.84                      | 579               | 0.860 | 487                 | 726                             | 2.2               | 4.9             | 35.597    | E                             |
| 2   | 360                   | 90                      | 475                       |                            | 625               | 0.575 | 357                 | 295                             | 0.8               | 1.3             | 13.337    | B                             |
| 3   | 555                   | 139                     | 378                       | 73.72                      | 532               | 1.042 | 509                 | 455                             | 4.1               | 15.5            | 88.524    | F                             |
| 4   | 387                   | 97                      | 648                       | 18.88                      | 393               | 0.985 | 361                 | 239                             | 2.4               | 9.1             | 77.803    | F                             |

### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 610                   | 152                     | 285                       | 67.16                      | 578               | 1.056 | 557                 | 764                             | 4.9               | 18.0            | 92.129    | F                             |
| 2   | 440                   | 110                     | 530                       |                            | 578               | 0.761 | 434                 | 312                             | 1.3               | 2.9             | 23.941    | C                             |
| 3   | 679                   | 170                     | 453                       | 90.28                      | 504               | 1.348 | 502                 | 512                             | 15.5              | 59.7            | 286.002   | F                             |
| 4   | 475                   | 119                     | 681                       | 23.12                      | 370               | 1.281 | 367                 | 273                             | 9.1               | 35.9            | 242.322   | F                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 610                   | 152                     | 285                       | 67.16                      | 577               | 1.056 | 570                 | 767                             | 18.0              | 28.1            | 161.271   | F                             |
| 2   | 440                   | 110                     | 540                       |                            | 572               | 0.771 | 439                 | 315                             | 2.9               | 3.1             | 26.833    | D                             |
| 3   | 679                   | 170                     | 459                       | 90.28                      | 501               | 1.355 | 501                 | 520                             | 59.7              | 104.3           | 590.286   | F                             |
| 4   | 475                   | 119                     | 683                       | 23.12                      | 369               | 1.285 | 369                 | 277                             | 35.9              | 62.3            | 491.190   | F                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 498                   | 125                     | 295                       | 54.84                      | 575               | 0.867 | 555                 | 750                             | 28.1              | 13.9            | 141.999   | F                             |
| 2   | 360                   | 90                      | 532                       |                            | 586               | 0.614 | 365                 | 318                             | 3.1               | 1.7             | 16.724    | C                             |
| 3   | 555                   | 139                     | 396                       | 73.72                      | 525               | 1.056 | 525                 | 502                             | 104.3             | 111.8           | 736.217   | F                             |
| 4   | 387                   | 97                      | 666                       | 18.88                      | 381               | 1.016 | 379                 | 254                             | 62.3              | 64.4            | 606.758   | F                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 417                   | 104                     | 302                       | 45.92                      | 573               | 0.728 | 461                 | 736                             | 13.9              | 3.0             | 40.676    | E                             |
| 2   | 301                   | 75                      | 461                       |                            | 640               | 0.470 | 304                 | 301                             | 1.7               | 0.9             | 10.810    | B                             |
| 3   | 465                   | 116                     | 329                       | 61.73                      | 551               | 0.844 | 546                 | 436                             | 111.8             | 91.5            | 671.484   | F                             |
| 4   | 324                   | 81                      | 652                       | 15.81                      | 391               | 0.830 | 385                 | 222                             | 64.4              | 49.2            | 532.682   | F                             |

# Clybaun Roundabout - 2028-Do Nothing , PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 816.53             | F            |

### 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 | 2028-Do Nothing | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 850                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 520                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 520                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 315                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 51.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 38.00                            |
| 4   | [ONEHOUR]    | 12.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 2   | 168 | 514 | 166 |
|      | 2  | 221 | 0   | 115 | 184 |
|      | 3  | 376 | 61  | 7   | 76  |
|      | 4  | 107 | 117 | 91  | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.62    | 1736.23       | 293.0           | F       | 780                     | 1170                          |
| 2   | 1.03    | 137.01        | 22.0            | F       | 477                     | 716                           |
| 3   | 1.22    | 455.02        | 59.8            | F       | 477                     | 716                           |
| 4   | 0.85    | 53.31         | 4.8             | F       | 289                     | 434                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 640                   | 160                     | 204                       | 38.40                      | 607               | 1.054 | 573                 | 519                             | 0.0               | 16.8            | 69.176    | F                             |
| 2   | 391                   | 98                      | 532                       |                            | 596               | 0.656 | 384                 | 245                             | 0.0               | 1.8             | 16.456    | C                             |
| 3   | 391                   | 98                      | 412                       | 28.61                      | 518               | 0.755 | 380                 | 504                             | 0.0               | 2.8             | 24.468    | C                             |
| 4   | 237                   | 59                      | 489                       | 9.03                       | 497               | 0.477 | 234                 | 303                             | 0.0               | 0.9             | 13.494    | B                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 764                   | 191                     | 243                       | 45.85                      | 593               | 1.289 | 591                 | 615                             | 16.8              | 60.1            | 250.362   | F                             |
| 2   | 467                   | 117                     | 561                       |                            | 570               | 0.821 | 459                 | 273                             | 1.8               | 3.9             | 30.474    | D                             |
| 3   | 467                   | 117                     | 474                       | 34.16                      | 494               | 0.946 | 447                 | 546                             | 2.8               | 7.9             | 58.847    | F                             |
| 4   | 283                   | 71                      | 578                       | 10.79                      | 445               | 0.637 | 280                 | 343                             | 0.9               | 1.7             | 21.496    | C                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 936                   | 234                     | 284                       | 56.15                      | 579               | 1.618 | 578                 | 680                             | 60.1              | 149.4           | 663.017   | F                             |
| 2   | 573                   | 143                     | 568                       |                            | 556               | 1.029 | 530                 | 294                             | 3.9               | 14.6            | 80.907    | F                             |
| 3   | 573                   | 143                     | 527                       | 41.84                      | 474               | 1.208 | 469                 | 571                             | 7.9               | 33.9            | 180.618   | F                             |
| 4   | 347                   | 87                      | 627                       | 13.21                      | 411               | 0.843 | 337                 | 369                             | 1.7               | 4.1             | 43.407    | E                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 936                   | 234                     | 289                       | 56.15                      | 577               | 1.623 | 577                 | 688                             | 149.4             | 239.2           | 1221.323  | F                             |
| 2   | 573                   | 143                     | 569                       |                            | 554               | 1.033 | 543                 | 297                             | 14.6              | 22.0            | 137.006   | F                             |
| 3   | 573                   | 143                     | 537                       | 41.84                      | 470               | 1.217 | 469                 | 575                             | 33.9              | 59.7            | 373.410   | F                             |
| 4   | 347                   | 87                      | 633                       | 13.21                      | 407               | 0.852 | 344                 | 373                             | 4.1               | 4.8             | 53.314    | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 764                   | 191                     | 255                       | 45.85                      | 589               | 1.297 | 589                 | 663                             | 239.2             | 283.0           | 1590.926  | F                             |
| 2   | 467                   | 117                     | 564                       |                            | 562               | 0.832 | 529                 | 280                             | 22.0              | 6.7             | 100.334   | F                             |
| 3   | 467                   | 117                     | 528                       | 34.16                      | 474               | 0.987 | 467                 | 564                             | 59.7              | 59.8            | 455.019   | F                             |
| 4   | 283                   | 71                      | 625                       | 10.79                      | 418               | 0.678 | 293                 | 370                             | 4.8               | 2.3             | 30.791    | D                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 640                   | 160                     | 225                       | 38.40                      | 600               | 1.067 | 600                 | 618                             | 283.0             | 293.0           | 1736.227  | F                             |
| 2   | 391                   | 98                      | 558                       |                            | 578               | 0.677 | 409                 | 267                             | 6.7               | 2.2             | 23.284    | C                             |
| 3   | 391                   | 98                      | 437                       | 28.61                      | 507               | 0.772 | 499                 | 530                             | 59.8              | 32.9            | 337.834   | F                             |
| 4   | 237                   | 59                      | 602                       | 9.03                       | 437               | 0.542 | 241                 | 335                             | 2.3               | 1.2             | 18.748    | C                             |

# Clybaun Roundabout - 2033- Do Nothing , AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 587.34             | F            |

### 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 | 2033- Do Nothing | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 590                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 424                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 658                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 459                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 61.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 82.00                            |
| 4   | [ONEHOUR]    | 21.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 2   | 137 | 354 | 97  |
|      | 2  | 222 | 0   | 74  | 128 |
|      | 3  | 473 | 108 | 12  | 65  |
|      | 4  | 217 | 125 | 116 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.12    | 268.94        | 45.9            | F       | 541                     | 812                           |
| 2   | 0.82    | 34.26         | 4.2             | D       | 389                     | 584                           |
| 3   | 1.47    | 1045.46       | 159.0           | F       | 604                     | 906                           |
| 4   | 1.38    | 850.78        | 93.6            | F       | 421                     | 632                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 444                   | 111                     | 261                       | 45.92                      | 587               | 0.757 | 433                 | 662                             | 0.0               | 2.8             | 22.027    | C                             |
| 2   | 319                   | 80                      | 426                       |                            | 665               | 0.480 | 316                 | 268                             | 0.0               | 0.9             | 10.211    | B                             |
| 3   | 495                   | 124                     | 334                       | 61.73                      | 549               | 0.902 | 471                 | 407                             | 0.0               | 6.0             | 38.627    | E                             |
| 4   | 346                   | 86                      | 591                       | 15.81                      | 429               | 0.806 | 332                 | 214                             | 0.0               | 3.4             | 33.641    | D                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 530                   | 133                     | 287                       | 54.84                      | 577               | 0.919 | 514                 | 743                             | 2.8               | 7.0             | 46.947    | E                             |
| 2   | 381                   | 95                      | 497                       |                            | 609               | 0.626 | 378                 | 304                             | 0.9               | 1.6             | 15.442    | C                             |
| 3   | 592                   | 148                     | 399                       | 73.72                      | 524               | 1.128 | 514                 | 476                             | 6.0               | 25.4            | 130.731   | F                             |
| 4   | 413                   | 103                     | 663                       | 18.88                      | 384               | 1.074 | 367                 | 250                             | 3.4               | 14.8            | 112.942   | F                             |

**08:30 - 08:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 650                   | 162                     | 283                       | 67.16                      | 578               | 1.123 | 568                 | 771                             | 7.0               | 27.4            | 127.327   | F                             |
| 2   | 467                   | 117                     | 538                       |                            | 572               | 0.817 | 458                 | 313                             | 1.6               | 3.8             | 29.629    | D                             |
| 3   | 724                   | 181                     | 474                       | 90.28                      | 496               | 1.460 | 495                 | 522                             | 25.4              | 82.7            | 407.905   | F                             |
| 4   | 505                   | 126                     | 688                       | 23.12                      | 367               | 1.378 | 365                 | 281                             | 14.8              | 49.8            | 338.368   | F                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 650                   | 162                     | 283                       | 67.16                      | 578               | 1.123 | 576                 | 773                             | 27.4              | 45.9            | 243.925   | F                             |
| 2   | 467                   | 117                     | 544                       |                            | 567               | 0.823 | 465                 | 314                             | 3.8               | 4.2             | 34.256    | D                             |
| 3   | 724                   | 181                     | 481                       | 90.28                      | 493               | 1.468 | 493                 | 528                             | 82.7              | 140.5           | 806.343   | F                             |
| 4   | 505                   | 126                     | 690                       | 23.12                      | 366               | 1.382 | 365                 | 285                             | 49.8              | 84.8            | 669.286   | F                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 530                   | 133                     | 293                       | 54.84                      | 575               | 0.922 | 563                 | 756                             | 45.9              | 37.7            | 268.940   | F                             |
| 2   | 381                   | 95                      | 538                       |                            | 581               | 0.657 | 390                 | 318                             | 4.2               | 2.0             | 19.649    | C                             |
| 3   | 592                   | 148                     | 417                       | 73.72                      | 518               | 1.143 | 517                 | 511                             | 140.5             | 159.0           | 1045.459  | F                             |
| 4   | 413                   | 103                     | 672                       | 18.88                      | 378               | 1.092 | 377                 | 262                             | 84.8              | 93.6            | 850.785   | F                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 444                   | 111                     | 301                       | 45.92                      | 573               | 0.775 | 558                 | 738                             | 37.7              | 9.2             | 159.967   | F                             |
| 2   | 319                   | 80                      | 537                       |                            | 589               | 0.542 | 322                 | 323                             | 2.0               | 1.2             | 13.684    | B                             |
| 3   | 495                   | 124                     | 361                       | 61.73                      | 539               | 0.920 | 535                 | 498                             | 159.0             | 149.0           | 1036.197  | F                             |
| 4   | 346                   | 86                      | 653                       | 15.81                      | 390               | 0.886 | 386                 | 243                             | 93.6              | 83.5            | 826.438   | F                             |



# Clybaun Roundabout - 2033- Do Nothing , PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 1073.69            | F            |

### 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 | 2033- Do Nothing | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 908                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 553                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 553                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 335                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 51.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 38.00                            |
| 4   | [ONEHOUR]    | 12.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      | 1  | 2   | 3   | 4   |     |
| From | 1  | 2   | 179 | 548 | 179 |
|      | 2  | 236 | 0   | 122 | 195 |
|      | 3  | 400 | 65  | 7   | 81  |
|      | 4  | 113 | 125 | 97  | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      | 1  | 2 | 3 | 4 |   |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.75    | 2210.76       | 376.2           | F       | 833                     | 1250                          |
| 2   | 1.10    | 212.65        | 37.6            | F       | 507                     | 761                           |
| 3   | 1.30    | 672.86        | 90.4            | F       | 507                     | 761                           |
| 4   | 0.91    | 74.74         | 7.1             | F       | 307                     | 461                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 684                   | 171                     | 217                       | 38.40                      | 603               | 1.134 | 580                 | 549                             | 0.0               | 25.9            | 95.125    | F                             |
| 2   | 416                   | 104                     | 543                       |                            | 588               | 0.708 | 407                 | 254                             | 0.0               | 2.3             | 19.085    | C                             |
| 3   | 416                   | 104                     | 433                       | 28.61                      | 510               | 0.816 | 402                 | 517                             | 0.0               | 3.7             | 29.981    | D                             |
| 4   | 252                   | 63                      | 518                       | 9.03                       | 481               | 0.525 | 248                 | 317                             | 0.0               | 1.1             | 15.207    | C                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 816                   | 204                     | 257                       | 45.85                      | 588               | 1.387 | 588                 | 641                             | 25.9              | 83.0            | 349.256   | F                             |
| 2   | 497                   | 124                     | 564                       |                            | 566               | 0.878 | 485                 | 281                             | 2.3               | 5.4             | 39.113    | E                             |
| 3   | 497                   | 124                     | 495                       | 34.16                      | 486               | 1.022 | 460                 | 553                             | 3.7               | 12.9            | 84.471    | F                             |
| 4   | 301                   | 75                      | 601                       | 10.79                      | 431               | 0.699 | 297                 | 354                             | 1.1               | 2.1             | 26.076    | D                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1000                  | 250                     | 296                       | 56.15                      | 574               | 1.740 | 574                 | 690                             | 83.0              | 189.4           | 864.410   | F                             |
| 2   | 609                   | 152                     | 570                       |                            | 554               | 1.099 | 540                 | 300                             | 5.4               | 22.5            | 112.046   | F                             |
| 3   | 609                   | 152                     | 536                       | 41.84                      | 471               | 1.293 | 468                 | 574                             | 12.9              | 48.0            | 252.340   | F                             |
| 4   | 369                   | 92                      | 632                       | 13.21                      | 407               | 0.906 | 354                 | 372                             | 2.1               | 5.8             | 56.174    | F                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1000                  | 250                     | 302                       | 56.15                      | 572               | 1.747 | 572                 | 697                             | 189.4             | 296.3           | 1535.906  | F                             |
| 2   | 609                   | 152                     | 571                       |                            | 553               | 1.102 | 549                 | 304                             | 22.5              | 37.6            | 212.654   | F                             |
| 3   | 609                   | 152                     | 542                       | 41.84                      | 469               | 1.299 | 468                 | 578                             | 48.0              | 83.2            | 517.833   | F                             |
| 4   | 369                   | 92                      | 635                       | 13.21                      | 404               | 0.912 | 364                 | 375                             | 5.8               | 7.1             | 74.744    | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 816                   | 204                     | 271                       | 45.85                      | 583               | 1.399 | 583                 | 679                             | 296.3             | 354.5           | 1990.401  | F                             |
| 2   | 497                   | 124                     | 566                       |                            | 559               | 0.889 | 545                 | 288                             | 37.6              | 25.7            | 212.117   | F                             |
| 3   | 497                   | 124                     | 541                       | 34.16                      | 469               | 1.060 | 468                 | 570                             | 83.2              | 90.4            | 672.862   | F                             |
| 4   | 301                   | 75                      | 633                       | 10.79                      | 411               | 0.733 | 317                 | 376                             | 7.1               | 3.1             | 42.755    | E                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 684                   | 171                     | 233                       | 38.40                      | 597               | 1.145 | 597                 | 647                             | 354.5             | 376.2           | 2210.764  | F                             |
| 2   | 416                   | 104                     | 560                       |                            | 569               | 0.732 | 506                 | 270                             | 25.7              | 3.2             | 82.834    | F                             |
| 3   | 416                   | 104                     | 514                       | 28.61                      | 479               | 0.869 | 474                 | 553                             | 90.4              | 76.0            | 633.244   | F                             |
| 4   | 252                   | 63                      | 622                       | 9.03                       | 424               | 0.595 | 258                 | 366                             | 3.1               | 1.5             | 22.480    | C                             |

# Clybaun Roundabout - 2043- Do Nothing , AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 972.78             | F            |

### 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 | 2043- Do Nothing | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 650                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 468                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 723                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 505                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 61.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 82.00                            |
| 4   | [ONEHOUR]    | 21.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 3   | 151 | 389 | 107 |
|      | 2  | 245 | 0   | 82  | 141 |
|      | 3  | 520 | 118 | 13  | 72  |
|      | 4  | 239 | 137 | 128 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.23    | 528.55        | 84.3            | F       | 596                     | 895                           |
| 2   | 0.91    | 58.87         | 7.8             | F       | 429                     | 644                           |
| 3   | 1.66    | 1674.69       | 246.2           | F       | 663                     | 995                           |
| 4   | 1.55    | 1386.58       | 146.9           | F       | 463                     | 695                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 489                   | 122                     | 276                       | 45.92                      | 582               | 0.841 | 472                 | 708                             | 0.0               | 4.3             | 29.411    | D                             |
| 2   | 352                   | 88                      | 462                       |                            | 638               | 0.552 | 348                 | 286                             | 0.0               | 1.2             | 12.203    | B                             |
| 3   | 544                   | 136                     | 367                       | 61.73                      | 537               | 1.014 | 496                 | 442                             | 0.0               | 12.1            | 61.877    | F                             |
| 4   | 380                   | 95                      | 631                       | 15.81                      | 405               | 0.939 | 353                 | 233                             | 0.0               | 6.8             | 54.718    | F                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 584                   | 146                     | 287                       | 54.84                      | 578               | 1.012 | 548                 | 761                             | 4.3               | 13.4            | 75.491    | F                             |
| 2   | 421                   | 105                     | 524                       |                            | 588               | 0.715 | 416                 | 310                             | 1.2               | 2.3             | 20.376    | C                             |
| 3   | 650                   | 162                     | 437                       | 73.72                      | 511               | 1.273 | 508                 | 504                             | 12.1              | 47.6            | 231.747   | F                             |
| 4   | 454                   | 113                     | 678                       | 18.88                      | 375               | 1.210 | 370                 | 267                             | 6.8               | 27.9            | 193.608   | F                             |

### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 716                   | 179                     | 277                       | 67.16                      | 580               | 1.234 | 577                 | 782                             | 13.4              | 48.1            | 208.069   | F                             |
| 2   | 515                   | 129                     | 544                       |                            | 565               | 0.911 | 498                 | 311                             | 2.3               | 6.6             | 44.997    | E                             |
| 3   | 796                   | 199                     | 509                       | 90.28                      | 484               | 1.646 | 483                 | 533                             | 47.6              | 125.8           | 659.954   | F                             |
| 4   | 556                   | 139                     | 699                       | 23.12                      | 361               | 1.541 | 360                 | 294                             | 27.9              | 76.8            | 541.445   | F                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 716                   | 179                     | 276                       | 67.16                      | 581               | 1.233 | 580                 | 785                             | 48.1              | 82.0            | 416.357   | F                             |
| 2   | 515                   | 129                     | 546                       |                            | 563               | 0.915 | 510                 | 310                             | 6.6               | 7.8             | 58.874    | F                             |
| 3   | 796                   | 199                     | 520                       | 90.28                      | 480               | 1.659 | 480                 | 536                             | 125.8             | 204.8           | 1250.397  | F                             |
| 4   | 556                   | 139                     | 702                       | 23.12                      | 359               | 1.549 | 359                 | 298                             | 76.8              | 126.1           | 1011.864  | F                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 584                   | 146                     | 286                       | 54.84                      | 578               | 1.011 | 575                 | 769                             | 82.0              | 84.3            | 528.548   | F                             |
| 2   | 421                   | 105                     | 545                       |                            | 573               | 0.735 | 440                 | 316                             | 7.8               | 3.0             | 30.135    | D                             |
| 3   | 650                   | 162                     | 461                       | 73.72                      | 502               | 1.295 | 502                 | 524                             | 204.8             | 241.9           | 1577.120  | F                             |
| 4   | 454                   | 113                     | 685                       | 18.88                      | 371               | 1.225 | 371                 | 278                             | 126.1             | 146.9           | 1323.735  | F                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 489                   | 122                     | 296                       | 45.92                      | 575               | 0.852 | 568                 | 749                             | 84.3              | 64.6            | 473.173   | F                             |
| 2   | 352                   | 88                      | 543                       |                            | 583               | 0.605 | 358                 | 321                             | 3.0               | 1.6             | 16.421    | C                             |
| 3   | 544                   | 136                     | 392                       | 61.73                      | 527               | 1.032 | 527                 | 509                             | 241.9             | 246.2           | 1674.687  | F                             |
| 4   | 380                   | 95                      | 665                       | 15.81                      | 384               | 0.991 | 381                 | 255                             | 146.9             | 146.8           | 1386.578  | F                             |

# Clybaun Roundabout - 2043- Do Nothing , PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 1552.58            | F            |

### 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 | 2043- Do Nothing | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 997                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 608                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 608                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 370                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 60.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 44.00                            |
| 4   | [ONEHOUR]    | 14.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 3   | 194 | 603 | 197 |
|      | 2  | 259 | 0   | 134 | 215 |
|      | 3  | 440 | 71  | 8   | 89  |
|      | 4  | 125 | 138 | 107 | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.94    | 2988.80       | 508.0           | F       | 915                     | 1372                          |
| 2   | 1.22    | 477.25        | 72.3            | F       | 558                     | 837                           |
| 3   | 1.43    | 1130.06       | 145.9           | F       | 558                     | 837                           |
| 4   | 1.02    | 143.88        | 16.0            | F       | 340                     | 509                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 751                   | 188                     | 237                       | 45.17                      | 595               | 1.261 | 582                 | 596                             | 0.0               | 42.3            | 143.195   | F                             |
| 2   | 458                   | 114                     | 553                       |                            | 577               | 0.793 | 444                 | 265                             | 0.0               | 3.4             | 25.103    | D                             |
| 3   | 458                   | 114                     | 463                       | 33.13                      | 499               | 0.918 | 432                 | 534                             | 0.0               | 6.5             | 44.059    | E                             |
| 4   | 279                   | 70                      | 560                       | 10.54                      | 455               | 0.612 | 273                 | 335                             | 0.0               | 1.5             | 19.154    | C                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 896                   | 224                     | 276                       | 53.94                      | 581               | 1.542 | 581                 | 671                             | 42.3              | 121.1           | 521.663   | F                             |
| 2   | 547                   | 137                     | 568                       |                            | 558               | 0.979 | 518                 | 289                             | 3.4               | 10.4            | 63.992    | F                             |
| 3   | 547                   | 137                     | 521                       | 39.56                      | 476               | 1.147 | 468                 | 566                             | 6.5               | 26.2            | 146.413   | F                             |
| 4   | 333                   | 83                      | 622                       | 12.59                      | 415               | 0.801 | 325                 | 367                             | 1.5               | 3.4             | 37.079    | E                             |



**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1098                  | 274                     | 310                       | 66.06                      | 569               | 1.930 | 569                 | 700                             | 121.1             | 253.3           | 1195.516  | F                             |
| 2   | 669                   | 167                     | 573                       |                            | 549               | 1.219 | 545                 | 306                             | 10.4              | 41.5            | 189.007   | F                             |
| 3   | 669                   | 167                     | 539                       | 48.44                      | 469               | 1.426 | 469                 | 579                             | 26.2              | 76.4            | 408.947   | F                             |
| 4   | 407                   | 102                     | 634                       | 15.41                      | 402               | 1.013 | 377                 | 374                             | 3.4               | 11.0            | 89.904    | F                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1098                  | 274                     | 318                       | 66.06                      | 566               | 1.938 | 566                 | 705                             | 253.3             | 386.1           | 2040.028  | F                             |
| 2   | 669                   | 167                     | 574                       |                            | 548               | 1.222 | 547                 | 309                             | 41.5              | 72.1            | 386.204   | F                             |
| 3   | 669                   | 167                     | 540                       | 48.44                      | 469               | 1.428 | 469                 | 581                             | 76.4              | 126.6           | 790.731   | F                             |
| 4   | 407                   | 102                     | 635                       | 15.41                      | 400               | 1.017 | 388                 | 374                             | 11.0              | 16.0            | 143.883   | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 896                   | 224                     | 307                       | 53.94                      | 571               | 1.571 | 571                 | 699                             | 386.1             | 467.6           | 2644.550  | F                             |
| 2   | 547                   | 137                     | 573                       |                            | 552               | 0.991 | 546                 | 304                             | 72.1              | 72.3            | 477.254   | F                             |
| 3   | 547                   | 137                     | 540                       | 39.56                      | 469               | 1.165 | 469                 | 579                             | 126.6             | 145.9           | 1057.296  | F                             |
| 4   | 333                   | 83                      | 635                       | 12.59                      | 404               | 0.823 | 372                 | 374                             | 16.0              | 6.2             | 108.465   | F                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 751                   | 188                     | 255                       | 45.17                      | 589               | 1.275 | 589                 | 672                             | 467.6             | 508.0           | 2988.799  | F                             |
| 2   | 458                   | 114                     | 566                       |                            | 560               | 0.818 | 552                 | 278                             | 72.3              | 48.6            | 396.320   | F                             |
| 3   | 458                   | 114                     | 549                       | 33.13                      | 466               | 0.982 | 463                 | 569                             | 145.9             | 144.7           | 1130.057  | F                             |
| 4   | 279                   | 70                      | 632                       | 10.54                      | 414               | 0.674 | 294                 | 379                             | 6.2               | 2.2             | 33.361    | D                             |

# Clybaun Roundabout - 2028- Do Something, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 438.46             | F            |

### 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 | 2028- Do Something | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 566                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 404                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 627                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 431                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 61.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 82.00                            |
| 4   | [ONEHOUR]    | 21.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 2   | 132 | 339 | 93  |
|      | 2  | 213 | 0   | 70  | 121 |
|      | 3  | 454 | 101 | 11  | 61  |
|      | 4  | 204 | 117 | 109 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.08    | 184.88        | 33.2            | F       | 519                     | 779                           |
| 2   | 0.78    | 28.27         | 3.3             | D       | 371                     | 556                           |
| 3   | 1.38    | 802.59        | 122.7           | F       | 575                     | 863                           |
| 4   | 1.29    | 626.24        | 66.4            | F       | 395                     | 593                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 426                   | 107                     | 247                       | 45.92                      | 592               | 0.720 | 417                 | 638                             | 0.0               | 2.4             | 19.621    | C                             |
| 2   | 304                   | 76                      | 408                       |                            | 678               | 0.448 | 301                 | 256                             | 0.0               | 0.8             | 9.462     | A                             |
| 3   | 472                   | 118                     | 319                       | 61.73                      | 555               | 0.851 | 454                 | 389                             | 0.0               | 4.5             | 31.633    | D                             |
| 4   | 324                   | 81                      | 570                       | 15.81                      | 441               | 0.735 | 315                 | 203                             | 0.0               | 2.5             | 26.643    | D                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 509                   | 127                     | 281                       | 54.84                      | 580               | 0.878 | 497                 | 732                             | 2.4               | 5.4             | 38.524    | E                             |
| 2   | 363                   | 91                      | 482                       |                            | 621               | 0.585 | 361                 | 296                             | 0.8               | 1.4             | 13.726    | B                             |
| 3   | 564                   | 141                     | 383                       | 73.72                      | 531               | 1.062 | 511                 | 460                             | 4.5               | 17.6            | 97.403    | F                             |
| 4   | 387                   | 97                      | 654                       | 18.88                      | 390               | 0.994 | 359                 | 240                             | 2.5               | 9.5             | 81.244    | F                             |

### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 623                   | 156                     | 282                       | 67.16                      | 579               | 1.077 | 562                 | 769                             | 5.4               | 20.7            | 101.937   | F                             |
| 2   | 445                   | 111                     | 533                       |                            | 577               | 0.771 | 438                 | 311                             | 1.4               | 3.0             | 24.848    | C                             |
| 3   | 690                   | 173                     | 457                       | 90.28                      | 502               | 1.375 | 501                 | 514                             | 17.6              | 64.9            | 312.368   | F                             |
| 4   | 475                   | 119                     | 685                       | 23.12                      | 368               | 1.289 | 365                 | 273                             | 9.5               | 36.8            | 250.551   | F                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 623                   | 156                     | 282                       | 67.16                      | 578               | 1.077 | 573                 | 771                             | 20.7              | 33.2            | 184.878   | F                             |
| 2   | 445                   | 111                     | 542                       |                            | 571               | 0.780 | 444                 | 314                             | 3.0               | 3.3             | 28.268    | D                             |
| 3   | 690                   | 173                     | 464                       | 90.28                      | 500               | 1.381 | 500                 | 521                             | 64.9              | 112.6           | 638.719   | F                             |
| 4   | 475                   | 119                     | 687                       | 23.12                      | 367               | 1.293 | 366                 | 277                             | 36.8              | 63.9            | 506.007   | F                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 509                   | 127                     | 292                       | 54.84                      | 576               | 0.884 | 559                 | 754                             | 33.2              | 20.7            | 177.722   | F                             |
| 2   | 363                   | 91                      | 534                       |                            | 585               | 0.621 | 369                 | 317                             | 3.3               | 1.7             | 17.175    | C                             |
| 3   | 564                   | 141                     | 400                       | 73.72                      | 524               | 1.076 | 523                 | 503                             | 112.6             | 122.7           | 802.588   | F                             |
| 4   | 387                   | 97                      | 669                       | 18.88                      | 379               | 1.022 | 378                 | 254                             | 63.9              | 66.4            | 626.236   | F                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 426                   | 107                     | 299                       | 45.92                      | 574               | 0.743 | 496                 | 739                             | 20.7              | 3.3             | 64.496    | F                             |
| 2   | 304                   | 76                      | 488                       |                            | 622               | 0.489 | 307                 | 307                             | 1.7               | 1.0             | 11.517    | B                             |
| 3   | 472                   | 118                     | 338                       | 61.73                      | 547               | 0.863 | 543                 | 457                             | 122.7             | 105.0           | 755.476   | F                             |
| 4   | 324                   | 81                      | 654                       | 15.81                      | 390               | 0.832 | 384                 | 227                             | 66.4              | 51.5            | 553.928   | F                             |

# Clybaun Roundabout - 2028- Do Something, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 934.31             | F            |

### 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 | 2028- Do Something | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 879                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 530                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 537                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 315                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 52.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 38.00                            |
| 4   | [ONEHOUR]    | 12.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      | 1  | 2   | 3   | 4   |     |
| From | 1  | 2   | 171 | 532 | 174 |
|      | 2  | 231 | 0   | 115 | 184 |
|      | 3  | 393 | 61  | 7   | 76  |
|      | 4  | 107 | 117 | 91  | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      | 1  | 2 | 3 | 4 |   |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.68    | 1942.40       | 330.5           | F       | 807                     | 1210                          |
| 2   | 1.05    | 157.31        | 26.2            | F       | 486                     | 730                           |
| 3   | 1.26    | 565.55        | 75.6            | F       | 493                     | 739                           |
| 4   | 0.86    | 57.20         | 5.1             | F       | 289                     | 434                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 662                   | 165                     | 204                       | 39.15                      | 607               | 1.090 | 579                 | 538                             | 0.0               | 20.7            | 80.106    | F                             |
| 2   | 399                   | 100                     | 539                       |                            | 593               | 0.673 | 391                 | 244                             | 0.0               | 1.9             | 17.285    | C                             |
| 3   | 404                   | 101                     | 422                       | 28.61                      | 515               | 0.785 | 392                 | 508                             | 0.0               | 3.2             | 26.966    | D                             |
| 4   | 237                   | 59                      | 508                       | 9.03                       | 487               | 0.487 | 233                 | 306                             | 0.0               | 0.9             | 14.032    | B                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 790                   | 198                     | 242                       | 46.75                      | 593               | 1.332 | 592                 | 633                             | 20.7              | 70.2            | 292.316   | F                             |
| 2   | 476                   | 119                     | 564                       |                            | 568               | 0.838 | 467                 | 271                             | 1.9               | 4.3             | 32.779    | D                             |
| 3   | 483                   | 121                     | 484                       | 34.16                      | 491               | 0.984 | 455                 | 546                             | 3.2               | 10.1            | 70.425    | F                             |
| 4   | 283                   | 71                      | 596                       | 10.79                      | 434               | 0.652 | 280                 | 344                             | 0.9               | 1.8             | 22.818    | C                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 968                   | 242                     | 281                       | 57.25                      | 579               | 1.671 | 579                 | 691                             | 70.2              | 167.4           | 749.201   | F                             |
| 2   | 584                   | 146                     | 570                       |                            | 556               | 1.050 | 534                 | 291                             | 4.3               | 16.7            | 89.323    | F                             |
| 3   | 591                   | 148                     | 534                       | 41.84                      | 472               | 1.253 | 468                 | 570                             | 10.1              | 40.8            | 214.882   | F                             |
| 4   | 347                   | 87                      | 636                       | 13.21                      | 405               | 0.856 | 336                 | 366                             | 1.8               | 4.4             | 46.117    | E                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 968                   | 242                     | 286                       | 57.25                      | 578               | 1.676 | 578                 | 698                             | 167.4             | 265.0           | 1355.790  | F                             |
| 2   | 584                   | 146                     | 571                       |                            | 554               | 1.053 | 546                 | 293                             | 16.7              | 26.2            | 157.308   | F                             |
| 3   | 591                   | 148                     | 543                       | 41.84                      | 469               | 1.262 | 468                 | 573                             | 40.8              | 71.7            | 446.863   | F                             |
| 4   | 347                   | 87                      | 641                       | 13.21                      | 402               | 0.863 | 344                 | 370                             | 4.4               | 5.1             | 57.198    | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 790                   | 198                     | 253                       | 46.75                      | 590               | 1.340 | 590                 | 680                             | 265.0             | 315.1           | 1762.732  | F                             |
| 2   | 476                   | 119                     | 566                       |                            | 561               | 0.850 | 543                 | 277                             | 26.2              | 9.5             | 129.060   | F                             |
| 3   | 483                   | 121                     | 543                       | 34.16                      | 469               | 1.030 | 467                 | 566                             | 71.7              | 75.6            | 565.552   | F                             |
| 4   | 283                   | 71                      | 639                       | 10.79                      | 409               | 0.692 | 294                 | 371                             | 5.1               | 2.5             | 33.486    | D                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 662                   | 165                     | 222                       | 39.15                      | 601               | 1.102 | 600                 | 632                             | 315.1             | 330.5           | 1942.404  | F                             |
| 2   | 399                   | 100                     | 560                       |                            | 576               | 0.693 | 427                 | 263                             | 9.5               | 2.4             | 27.873    | D                             |
| 3   | 404                   | 101                     | 455                       | 28.61                      | 501               | 0.806 | 495                 | 532                             | 75.6              | 52.9            | 469.586   | F                             |
| 4   | 237                   | 59                      | 612                       | 9.03                       | 430               | 0.551 | 242                 | 337                             | 2.5               | 1.3             | 19.534    | C                             |

# Clybaun Roundabout - 2033- Do Something, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 639.00             | F            |

### 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 | 2033- Do Something | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 602                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 429                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 668                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 464                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 61.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 82.00                            |
| 4   | [ONEHOUR]    | 21.00                            |

## Origin-Destination Data



### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      | 1  | 2   | 3   | 4   |     |
| From | 1  | 2   | 140 | 361 | 99  |
|      | 2  | 227 | 0   | 74  | 128 |
|      | 3  | 483 | 108 | 12  | 65  |
|      | 4  | 222 | 125 | 116 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      | 1  | 2 | 3 | 4 |   |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.14    | 310.42        | 51.8            | F       | 552                     | 829                           |
| 2   | 0.83    | 35.89         | 4.4             | E       | 394                     | 590                           |
| 3   | 1.50    | 1126.97       | 171.0           | F       | 613                     | 919                           |
| 4   | 1.41    | 920.39        | 101.4           | F       | 426                     | 639                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 453                   | 113                     | 260                       | 45.92                      | 587               | 0.772 | 441                 | 675                             | 0.0               | 3.0             | 23.059    | C                             |
| 2   | 323                   | 81                      | 431                       |                            | 661               | 0.489 | 319                 | 270                             | 0.0               | 0.9             | 10.430    | B                             |
| 3   | 503                   | 126                     | 339                       | 61.73                      | 548               | 0.918 | 476                 | 412                             | 0.0               | 6.7             | 41.350    | E                             |
| 4   | 349                   | 87                      | 600                       | 15.81                      | 423               | 0.826 | 334                 | 215                             | 0.0               | 3.8             | 36.230    | E                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 541                   | 135                     | 283                       | 54.84                      | 579               | 0.935 | 522                 | 751                             | 3.0               | 7.8             | 50.854    | F                             |
| 2   | 386                   | 96                      | 502                       |                            | 606               | 0.637 | 383                 | 303                             | 0.9               | 1.7             | 15.941    | C                             |
| 3   | 601                   | 150                     | 405                       | 73.72                      | 522               | 1.150 | 514                 | 480                             | 6.7               | 28.4            | 143.197   | F                             |
| 4   | 417                   | 104                     | 668                       | 18.88                      | 381               | 1.096 | 366                 | 251                             | 3.8               | 16.5            | 123.763   | F                             |

### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 663                   | 166                     | 278                       | 67.16                      | 580               | 1.143 | 572                 | 777                             | 7.8               | 30.6            | 139.042   | F                             |
| 2   | 472                   | 118                     | 539                       |                            | 571               | 0.827 | 463                 | 310                             | 1.7               | 4.0             | 30.855    | D                             |
| 3   | 735                   | 184                     | 480                       | 90.28                      | 494               | 1.488 | 494                 | 522                             | 28.4              | 88.8            | 441.769   | F                             |
| 4   | 511                   | 128                     | 693                       | 23.12                      | 364               | 1.405 | 363                 | 281                             | 16.5              | 53.6            | 367.798   | F                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 663                   | 166                     | 277                       | 67.16                      | 580               | 1.142 | 578                 | 780                             | 30.6              | 51.8            | 270.785   | F                             |
| 2   | 472                   | 118                     | 544                       |                            | 567               | 0.832 | 471                 | 311                             | 4.0               | 4.4             | 35.887    | E                             |
| 3   | 735                   | 184                     | 487                       | 90.28                      | 492               | 1.496 | 491                 | 527                             | 88.8              | 149.8           | 862.933   | F                             |
| 4   | 511                   | 128                     | 695                       | 23.12                      | 362               | 1.410 | 362                 | 284                             | 53.6              | 90.7            | 721.441   | F                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 541                   | 135                     | 288                       | 54.84                      | 577               | 0.938 | 566                 | 763                             | 51.8              | 45.5            | 310.422   | F                             |
| 2   | 386                   | 96                      | 538                       |                            | 580               | 0.664 | 395                 | 316                             | 4.4               | 2.1             | 20.281    | C                             |
| 3   | 601                   | 150                     | 423                       | 73.72                      | 516               | 1.164 | 516                 | 511                             | 149.8             | 171.0           | 1120.223  | F                             |
| 4   | 417                   | 104                     | 676                       | 18.88                      | 375               | 1.113 | 375                 | 262                             | 90.7              | 101.4           | 920.392   | F                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 453                   | 113                     | 296                       | 45.92                      | 575               | 0.789 | 562                 | 744                             | 45.5              | 18.2            | 209.750   | F                             |
| 2   | 323                   | 81                      | 538                       |                            | 588               | 0.549 | 326                 | 320                             | 2.1               | 1.3             | 13.934    | B                             |
| 3   | 503                   | 126                     | 365                       | 61.73                      | 537               | 0.936 | 534                 | 499                             | 171.0             | 163.2           | 1126.974  | F                             |
| 4   | 349                   | 87                      | 657                       | 15.81                      | 388               | 0.901 | 384                 | 243                             | 101.4             | 92.8            | 911.196   | F                             |

# Clybaun Roundabout - 2033- Do Something, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 1191.28            | F            |

### 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 | 2033- Do Something | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 934                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 563                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 570                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 340                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 52.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 38.00                            |
| 4   | [ONEHOUR]    | 12.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 2   | 182 | 565 | 185 |
|      | 2  | 246 | 0   | 122 | 195 |
|      | 3  | 417 | 65  | 7   | 81  |
|      | 4  | 118 | 125 | 97  | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.79    | 2399.33       | 410.3           | F       | 857                     | 1286                          |
| 2   | 1.12    | 251.90        | 42.9            | F       | 517                     | 775                           |
| 3   | 1.34    | 797.00        | 107.3           | F       | 523                     | 785                           |
| 4   | 0.94    | 89.19         | 8.7             | F       | 312                     | 468                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 703                   | 176                     | 216                       | 39.15                      | 603               | 1.167 | 583                 | 571                             | 0.0               | 30.0            | 106.653   | F                             |
| 2   | 424                   | 106                     | 546                       |                            | 586               | 0.724 | 414                 | 253                             | 0.0               | 2.4             | 20.007    | C                             |
| 3   | 429                   | 107                     | 441                       | 28.61                      | 508               | 0.845 | 412                 | 519                             | 0.0               | 4.3             | 33.315    | D                             |
| 4   | 256                   | 64                      | 536                       | 9.03                       | 470               | 0.545 | 251                 | 318                             | 0.0               | 1.2             | 16.169    | C                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 840                   | 210                     | 255                       | 46.75                      | 589               | 1.426 | 588                 | 661                             | 30.0              | 92.8            | 391.114   | F                             |
| 2   | 506                   | 127                     | 565                       |                            | 565               | 0.896 | 492                 | 278                             | 2.4               | 6.0             | 42.372    | E                             |
| 3   | 512                   | 128                     | 503                       | 34.16                      | 484               | 1.059 | 465                 | 554                             | 4.3               | 16.2            | 100.078   | F                             |
| 4   | 306                   | 76                      | 615                       | 10.79                      | 421               | 0.725 | 301                 | 353                             | 1.2               | 2.4             | 28.689    | D                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1028                  | 257                     | 292                       | 57.25                      | 576               | 1.786 | 576                 | 704                             | 92.8              | 206.0           | 944.945   | F                             |
| 2   | 620                   | 155                     | 571                       |                            | 554               | 1.119 | 543                 | 297                             | 6.0               | 25.3            | 122.719   | F                             |
| 3   | 628                   | 157                     | 540                       | 41.84                      | 470               | 1.336 | 468                 | 573                             | 16.2              | 56.1            | 295.575   | F                             |
| 4   | 374                   | 94                      | 640                       | 13.21                      | 401               | 0.934 | 357                 | 368                             | 2.4               | 6.8             | 63.936    | F                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1028                  | 257                     | 299                       | 57.25                      | 573               | 1.794 | 573                 | 711                             | 206.0             | 319.8           | 1658.821  | F                             |
| 2   | 620                   | 155                     | 572                       |                            | 552               | 1.122 | 550                 | 300                             | 25.3              | 42.9            | 238.136   | F                             |
| 3   | 628                   | 157                     | 545                       | 41.84                      | 468               | 1.342 | 467                 | 576                             | 56.1              | 96.2            | 598.911   | F                             |
| 4   | 374                   | 94                      | 642                       | 13.21                      | 398               | 0.940 | 367                 | 370                             | 6.8               | 8.7             | 89.188    | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 840                   | 210                     | 272                       | 46.75                      | 583               | 1.440 | 583                 | 695                             | 319.8             | 384.0           | 2148.841  | F                             |
| 2   | 506                   | 127                     | 568                       |                            | 558               | 0.906 | 546                 | 287                             | 42.9              | 33.0            | 251.901   | F                             |
| 3   | 512                   | 128                     | 544                       | 34.16                      | 468               | 1.094 | 468                 | 570                             | 96.2              | 107.3           | 793.003   | F                             |
| 4   | 306                   | 76                      | 641                       | 10.79                      | 405               | 0.755 | 326                 | 371                             | 8.7               | 3.6             | 52.386    | F                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 703                   | 176                     | 231                       | 39.15                      | 598               | 1.177 | 598                 | 668                             | 384.0             | 410.3           | 2399.332  | F                             |
| 2   | 424                   | 106                     | 562                       |                            | 566               | 0.749 | 539                 | 266                             | 33.0              | 4.1             | 125.933   | F                             |
| 3   | 429                   | 107                     | 542                       | 28.61                      | 469               | 0.915 | 465                 | 559                             | 107.3             | 98.4            | 797.005   | F                             |
| 4   | 256                   | 64                      | 636                       | 9.03                       | 414               | 0.618 | 263                 | 371                             | 3.6               | 1.7             | 24.872    | C                             |

# Clybaun Roundabout - 2043- Do Something, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 1037.18            | F            |

### 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 | 2043- Do Something | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 662                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 472                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 733                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 510                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 61.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 82.00                            |
| 4   | [ONEHOUR]    | 21.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 3   | 154 | 396 | 109 |
|      | 2  | 249 | 0   | 82  | 141 |
|      | 3  | 530 | 118 | 13  | 72  |
|      | 4  | 244 | 137 | 128 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.25    | 579.25        | 93.6            | F       | 607                     | 911                           |
| 2   | 0.92    | 61.70         | 8.3             | F       | 433                     | 650                           |
| 3   | 1.69    | 1772.05       | 261.0           | F       | 673                     | 1009                          |
| 4   | 1.58    | 1478.18       | 155.8           | F       | 468                     | 702                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 498                   | 125                     | 274                       | 45.92                      | 582               | 0.856 | 480                 | 717                             | 0.0               | 4.7             | 30.981    | D                             |
| 2   | 355                   | 89                      | 466                       |                            | 635               | 0.560 | 350                 | 287                             | 0.0               | 1.2             | 12.456    | B                             |
| 3   | 552                   | 138                     | 371                       | 61.73                      | 536               | 1.030 | 498                 | 445                             | 0.0               | 13.4            | 66.343    | F                             |
| 4   | 384                   | 96                      | 636                       | 15.81                      | 401               | 0.958 | 354                 | 233                             | 0.0               | 7.5             | 58.818    | F                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 595                   | 149                     | 283                       | 54.84                      | 579               | 1.028 | 553                 | 766                             | 4.7               | 15.1            | 81.895    | F                             |
| 2   | 424                   | 106                     | 527                       |                            | 587               | 0.723 | 420                 | 309                             | 1.2               | 2.4             | 20.952    | C                             |
| 3   | 659                   | 165                     | 441                       | 73.72                      | 509               | 1.294 | 507                 | 505                             | 13.4              | 51.4            | 250.185   | F                             |
| 4   | 458                   | 115                     | 681                       | 18.88                      | 373               | 1.231 | 368                 | 267                             | 7.5               | 30.2            | 208.927   | F                             |

### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 729                   | 182                     | 273                       | 67.16                      | 582               | 1.253 | 579                 | 787                             | 15.1              | 52.5            | 225.666   | F                             |
| 2   | 520                   | 130                     | 544                       |                            | 566               | 0.919 | 502                 | 308                             | 2.4               | 6.9             | 46.591    | E                             |
| 3   | 807                   | 202                     | 513                       | 90.28                      | 482               | 1.673 | 482                 | 532                             | 51.4              | 132.6           | 701.251   | F                             |
| 4   | 562                   | 140                     | 702                       | 23.12                      | 358               | 1.567 | 358                 | 293                             | 30.2              | 81.1            | 577.448   | F                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 729                   | 182                     | 271                       | 67.16                      | 582               | 1.252 | 582                 | 790                             | 52.5              | 89.3            | 451.055   | F                             |
| 2   | 520                   | 130                     | 545                       |                            | 564               | 0.922 | 514                 | 308                             | 6.9               | 8.3             | 61.699    | F                             |
| 3   | 807                   | 202                     | 524                       | 90.28                      | 478               | 1.687 | 478                 | 535                             | 132.6             | 214.8           | 1316.927  | F                             |
| 4   | 562                   | 140                     | 705                       | 23.12                      | 356               | 1.575 | 356                 | 297                             | 81.1              | 132.3           | 1069.234  | F                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 595                   | 149                     | 281                       | 54.84                      | 579               | 1.027 | 578                 | 775                             | 89.3              | 93.6            | 579.249   | F                             |
| 2   | 424                   | 106                     | 546                       |                            | 573               | 0.741 | 445                 | 314                             | 8.3               | 3.1             | 31.561    | D                             |
| 3   | 659                   | 165                     | 466                       | 73.72                      | 500               | 1.318 | 500                 | 524                             | 214.8             | 254.5           | 1658.616  | F                             |
| 4   | 458                   | 115                     | 688                       | 18.88                      | 368               | 1.245 | 368                 | 278                             | 132.3             | 154.9           | 1399.480  | F                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 498                   | 125                     | 292                       | 45.92                      | 576               | 0.865 | 570                 | 756                             | 93.6              | 75.7            | 535.893   | F                             |
| 2   | 355                   | 89                      | 543                       |                            | 583               | 0.610 | 361                 | 319                             | 3.1               | 1.6             | 16.691    | C                             |
| 3   | 552                   | 138                     | 396                       | 61.73                      | 526               | 1.049 | 526                 | 509                             | 254.5             | 261.0           | 1772.053  | F                             |
| 4   | 384                   | 96                      | 668                       | 15.81                      | 381               | 1.007 | 381                 | 254                             | 154.9             | 155.8           | 1478.183  | F                             |



# Clybaun Roundabout - 2043- Do Something, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 1698.95            | F            |

### 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 | 2043- Do Something | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 1026                    | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 618                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 625                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 375                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 61.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 45.00                            |
| 4   | [ONEHOUR]    | 14.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 3   | 200 | 620 | 203 |
|      | 2  | 269 | 0   | 134 | 215 |
|      | 3  | 457 | 71  | 8   | 89  |
|      | 4  | 130 | 138 | 107 | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.99    | 3215.98       | 546.8           | F       | 941                     | 1412                          |
| 2   | 1.24    | 523.50        | 79.9            | F       | 567                     | 851                           |
| 3   | 1.47    | 1287.76       | 166.0           | F       | 574                     | 860                           |
| 4   | 1.04    | 170.83        | 19.6            | F       | 344                     | 516                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 772                   | 193                     | 236                       | 45.92                      | 596               | 1.297 | 583                 | 615                             | 0.0               | 47.3            | 157.791   | F                             |
| 2   | 465                   | 116                     | 554                       |                            | 576               | 0.807 | 451                 | 265                             | 0.0               | 3.6             | 26.329    | D                             |
| 3   | 471                   | 118                     | 470                       | 33.88                      | 496               | 0.948 | 440                 | 535                             | 0.0               | 7.8             | 49.670    | E                             |
| 4   | 282                   | 71                      | 575                       | 10.54                      | 445               | 0.634 | 276                 | 335                             | 0.0               | 1.6             | 20.519    | C                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 922                   | 231                     | 274                       | 54.84                      | 582               | 1.585 | 582                 | 686                             | 47.3              | 132.4           | 571.525   | F                             |
| 2   | 556                   | 139                     | 568                       |                            | 558               | 0.995 | 524                 | 288                             | 3.6               | 11.6            | 69.264    | F                             |
| 3   | 562                   | 140                     | 527                       | 40.45                      | 475               | 1.184 | 468                 | 565                             | 7.8               | 31.1            | 169.760   | F                             |
| 4   | 337                   | 84                      | 631                       | 12.59                      | 409               | 0.825 | 329                 | 364                             | 1.6               | 3.8             | 41.051    | E                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1130                  | 282                     | 305                       | 67.16                      | 571               | 1.980 | 571                 | 712                             | 132.4             | 272.2           | 1287.524  | F                             |
| 2   | 680                   | 170                     | 573                       |                            | 550               | 1.237 | 546                 | 303                             | 11.6              | 45.1            | 203.923   | F                             |
| 3   | 688                   | 172                     | 542                       | 49.55                      | 468               | 1.469 | 468                 | 577                             | 31.1              | 86.2            | 465.446   | F                             |
| 4   | 413                   | 103                     | 641                       | 15.41                      | 397               | 1.041 | 376                 | 370                             | 3.8               | 12.9            | 102.044   | F                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1130                  | 282                     | 312                       | 67.16                      | 568               | 1.987 | 568                 | 716                             | 272.2             | 412.5           | 2176.010  | F                             |
| 2   | 680                   | 170                     | 574                       |                            | 549               | 1.240 | 548                 | 306                             | 45.1              | 78.2            | 416.900   | F                             |
| 3   | 688                   | 172                     | 543                       | 49.55                      | 468               | 1.470 | 468                 | 579                             | 86.2              | 141.2           | 885.835   | F                             |
| 4   | 413                   | 103                     | 642                       | 15.41                      | 395               | 1.045 | 386                 | 370                             | 12.9              | 19.6            | 170.829   | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 922                   | 231                     | 308                       | 54.84                      | 570               | 1.618 | 570                 | 715                             | 412.5             | 500.6           | 2831.145  | F                             |
| 2   | 556                   | 139                     | 574                       |                            | 552               | 1.007 | 549                 | 304                             | 78.2              | 79.9            | 523.502   | F                             |
| 3   | 562                   | 140                     | 544                       | 40.45                      | 468               | 1.200 | 468                 | 578                             | 141.2             | 164.7           | 1188.077  | F                             |
| 4   | 337                   | 84                      | 642                       | 12.59                      | 398               | 0.847 | 381                 | 370                             | 19.6              | 8.6             | 145.345   | F                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 772                   | 193                     | 259                       | 45.92                      | 587               | 1.315 | 587                 | 689                             | 500.6             | 546.8           | 3215.981  | F                             |
| 2   | 465                   | 116                     | 566                       |                            | 560               | 0.831 | 553                 | 280                             | 79.9              | 58.0            | 450.711   | F                             |
| 3   | 471                   | 118                     | 551                       | 33.88                      | 466               | 1.010 | 465                 | 568                             | 164.7             | 166.0           | 1287.759  | F                             |
| 4   | 282                   | 71                      | 641                       | 10.54                      | 406               | 0.695 | 307                 | 375                             | 8.6               | 2.5             | 42.274    | E                             |

# Clybaun Roundabout - 2043-Do Something+AT, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 916.79             | F            |

### 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 |
|-----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D15 | 2043-Do Something+AT | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 662                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 449                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 713                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 484                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 61.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 82.00                            |
| 4   | [ONEHOUR]    | 21.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 3   | 154 | 396 | 109 |
|      | 2  | 249 | 0   | 73  | 127 |
|      | 3  | 530 | 107 | 11  | 65  |
|      | 4  | 244 | 124 | 115 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.24    | 541.69        | 87.9            | F       | 607                     | 911                           |
| 2   | 0.87    | 43.32         | 5.6             | E       | 412                     | 618                           |
| 3   | 1.62    | 1553.28       | 228.5           | F       | 654                     | 981                           |
| 4   | 1.53    | 1302.49       | 135.4           | F       | 444                     | 666                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 498                   | 125                     | 251                       | 45.92                      | 590               | 0.844 | 481                 | 726                             | 0.0               | 4.4             | 29.369    | D                             |
| 2   | 338                   | 85                      | 458                       |                            | 643               | 0.525 | 334                 | 273                             | 0.0               | 1.1             | 11.471    | B                             |
| 3   | 537                   | 134                     | 362                       | 61.73                      | 540               | 0.994 | 494                 | 430                             | 0.0               | 10.7            | 57.064    | F                             |
| 4   | 364                   | 91                      | 636                       | 15.81                      | 398               | 0.914 | 341                 | 219                             | 0.0               | 5.9             | 50.718    | F                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 595                   | 149                     | 262                       | 54.84                      | 586               | 1.016 | 557                 | 785                             | 4.4               | 13.9            | 76.340    | F                             |
| 2   | 404                   | 101                     | 521                       |                            | 594               | 0.680 | 400                 | 298                             | 1.1               | 2.0             | 18.207    | C                             |
| 3   | 641                   | 160                     | 430                       | 73.72                      | 514               | 1.247 | 510                 | 491                             | 10.7              | 43.4            | 211.118   | F                             |
| 4   | 435                   | 109                     | 688                       | 18.88                      | 366               | 1.190 | 359                 | 252                             | 5.9               | 24.9            | 179.887   | F                             |

### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 729                   | 182                     | 254                       | 67.16                      | 588               | 1.239 | 585                 | 808                             | 13.9              | 49.8            | 211.741   | F                             |
| 2   | 494                   | 124                     | 540                       |                            | 572               | 0.864 | 483                 | 299                             | 2.0               | 5.0             | 36.166    | E                             |
| 3   | 785                   | 196                     | 504                       | 90.28                      | 486               | 1.614 | 486                 | 519                             | 43.4              | 118.1           | 611.610   | F                             |
| 4   | 533                   | 133                     | 712                       | 23.12                      | 350               | 1.524 | 349                 | 278                             | 24.9              | 70.9            | 512.564   | F                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 729                   | 182                     | 253                       | 67.16                      | 589               | 1.238 | 588                 | 810                             | 49.8              | 85.0            | 424.899   | F                             |
| 2   | 494                   | 124                     | 542                       |                            | 570               | 0.867 | 492                 | 299                             | 5.0               | 5.6             | 43.324    | E                             |
| 3   | 785                   | 196                     | 512                       | 90.28                      | 483               | 1.624 | 483                 | 522                             | 118.1             | 193.5           | 1132.513  | F                             |
| 4   | 533                   | 133                     | 715                       | 23.12                      | 348               | 1.530 | 348                 | 281                             | 70.9              | 117.0           | 964.908   | F                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 595                   | 149                     | 263                       | 54.84                      | 586               | 1.016 | 584                 | 793                             | 85.0              | 87.9            | 541.688   | F                             |
| 2   | 404                   | 101                     | 542                       |                            | 579               | 0.697 | 416                 | 305                             | 5.6               | 2.5             | 23.517    | C                             |
| 3   | 641                   | 160                     | 448                       | 73.72                      | 507               | 1.263 | 507                 | 511                             | 193.5             | 226.9           | 1474.091  | F                             |
| 4   | 435                   | 109                     | 694                       | 18.88                      | 362               | 1.203 | 362                 | 261                             | 117.0             | 135.4           | 1257.202  | F                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 498                   | 125                     | 272                       | 45.92                      | 583               | 0.855 | 576                 | 774                             | 87.9              | 68.3            | 489.022   | F                             |
| 2   | 338                   | 85                      | 540                       |                            | 588               | 0.575 | 342                 | 309                             | 2.5               | 1.4             | 14.895    | B                             |
| 3   | 537                   | 134                     | 385                       | 61.73                      | 531               | 1.012 | 530                 | 497                             | 226.9             | 228.5           | 1553.280  | F                             |
| 4   | 364                   | 91                      | 674                       | 15.81                      | 375               | 0.973 | 372                 | 241                             | 135.4             | 133.6           | 1302.495  | F                             |

# Clybaun Roundabout - 2043-Do Something+AT, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 1597.75            | F            |

### 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 |
|-----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D16 | 2043-Do Something+AT | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 1026                    | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 583                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 608                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 350                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 61.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 45.00                            |
| 4   | [ONEHOUR]    | 14.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 3   | 200 | 620 | 203 |
|      | 2  | 269 | 0   | 121 | 193 |
|      | 3  | 457 | 64  | 7   | 80  |
|      | 4  | 130 | 124 | 96  | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.96    | 3081.72       | 532.7           | F       | 941                     | 1412                          |
| 2   | 1.16    | 335.56        | 53.9            | F       | 535                     | 802                           |
| 3   | 1.44    | 1143.92       | 147.0           | F       | 558                     | 837                           |
| 4   | 1.01    | 138.40        | 14.4            | F       | 321                     | 482                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 772                   | 193                     | 213                       | 45.92                      | 604               | 1.280 | 591                 | 620                             | 0.0               | 45.5            | 150.442   | F                             |
| 2   | 439                   | 110                     | 551                       |                            | 582               | 0.754 | 428                 | 252                             | 0.0               | 2.8             | 22.025    | C                             |
| 3   | 458                   | 114                     | 458                       | 33.88                      | 502               | 0.912 | 433                 | 521                             | 0.0               | 6.2             | 42.802    | E                             |
| 4   | 263                   | 66                      | 575                       | 10.54                      | 444               | 0.593 | 258                 | 315                             | 0.0               | 1.4             | 18.822    | C                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 922                   | 231                     | 248                       | 54.84                      | 591               | 1.561 | 591                 | 702                             | 45.5              | 128.4           | 544.922   | F                             |
| 2   | 524                   | 131                     | 565                       |                            | 564               | 0.929 | 506                 | 274                             | 2.8               | 7.4             | 49.774    | E                             |
| 3   | 547                   | 137                     | 519                       | 40.45                      | 479               | 1.142 | 470                 | 552                             | 6.2               | 25.5            | 142.660   | F                             |
| 4   | 315                   | 79                      | 643                       | 12.59                      | 401               | 0.785 | 308                 | 346                             | 1.4               | 3.1             | 36.222    | E                             |



**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1130                  | 282                     | 279                       | 67.16                      | 580               | 1.949 | 580                 | 737                             | 128.4             | 265.9           | 1234.915  | F                             |
| 2   | 642                   | 160                     | 570                       |                            | 554               | 1.158 | 547                 | 289                             | 7.4               | 31.2            | 145.766   | F                             |
| 3   | 669                   | 167                     | 550                       | 49.55                      | 467               | 1.433 | 467                 | 567                             | 25.5              | 76.2            | 407.820   | F                             |
| 4   | 385                   | 96                      | 659                       | 15.41                      | 384               | 1.003 | 357                 | 357                             | 3.1               | 10.1            | 87.707    | F                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1130                  | 282                     | 286                       | 67.16                      | 577               | 1.957 | 577                 | 743                             | 265.9             | 404.0           | 2096.479  | F                             |
| 2   | 642                   | 160                     | 571                       |                            | 553               | 1.161 | 551                 | 292                             | 31.2              | 53.9            | 291.620   | F                             |
| 3   | 669                   | 167                     | 553                       | 49.55                      | 466               | 1.436 | 466                 | 570                             | 76.2              | 127.1           | 796.324   | F                             |
| 4   | 385                   | 96                      | 661                       | 15.41                      | 382               | 1.008 | 368                 | 358                             | 10.1              | 14.4            | 138.402   | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 922                   | 231                     | 274                       | 54.84                      | 582               | 1.585 | 582                 | 735                             | 404.0             | 489.2           | 2719.230  | F                             |
| 2   | 524                   | 131                     | 570                       |                            | 557               | 0.940 | 547                 | 287                             | 53.9              | 48.1            | 335.557   | F                             |
| 3   | 547                   | 137                     | 550                       | 40.45                      | 467               | 1.170 | 467                 | 566                             | 127.1             | 147.0           | 1067.775  | F                             |
| 4   | 315                   | 79                      | 660                       | 12.59                      | 387               | 0.813 | 350                 | 358                             | 14.4              | 5.6             | 100.714   | F                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 772                   | 193                     | 228                       | 45.92                      | 598               | 1.291 | 598                 | 707                             | 489.2             | 532.7           | 3081.716  | F                             |
| 2   | 439                   | 110                     | 563                       |                            | 565               | 0.777 | 553                 | 263                             | 48.1              | 19.5            | 225.582   | F                             |
| 3   | 458                   | 114                     | 558                       | 33.88                      | 464               | 0.986 | 461                 | 558                             | 147.0             | 146.1           | 1143.923  | F                             |
| 4   | 263                   | 66                      | 658                       | 10.54                      | 397               | 0.664 | 278                 | 362                             | 5.6               | 2.1             | 32.956    | D                             |

# Clybaun Roundabout - 2043-Do Something+Ring Road, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 745.85             | F            |

### 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 |
|-----|-----------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D17 | 2043-Do Something+Ring Road | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 662                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 416                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 683                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 444                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 61.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 82.00                            |
| 4   | [ONEHOUR]    | 21.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 3   | 154 | 396 | 109 |
|      | 2  | 249 | 0   | 61  | 106 |
|      | 3  | 530 | 89  | 10  | 54  |
|      | 4  | 244 | 103 | 96  | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.22    | 483.52        | 79.0            | F       | 607                     | 911                           |
| 2   | 0.79    | 29.29         | 3.5             | D       | 382                     | 573                           |
| 3   | 1.53    | 1241.71       | 186.7           | F       | 627                     | 940                           |
| 4   | 1.46    | 1045.60       | 107.0           | F       | 407                     | 611                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 498                   | 125                     | 213                       | 45.92                      | 603               | 0.826 | 482                 | 737                             | 0.0               | 4.0             | 27.022    | D                             |
| 2   | 313                   | 78                      | 447                       |                            | 655               | 0.478 | 310                 | 249                             | 0.0               | 0.9             | 10.309    | B                             |
| 3   | 514                   | 129                     | 347                       | 61.73                      | 546               | 0.942 | 483                 | 410                             | 0.0               | 7.7             | 45.533    | E                             |
| 4   | 334                   | 84                      | 633                       | 15.81                      | 397               | 0.843 | 318                 | 197                             | 0.0               | 4.1             | 40.153    | E                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 595                   | 149                     | 229                       | 54.84                      | 597               | 0.996 | 562                 | 813                             | 4.0               | 12.2            | 68.125    | F                             |
| 2   | 374                   | 93                      | 514                       |                            | 604               | 0.619 | 371                 | 278                             | 0.9               | 1.6             | 15.310    | C                             |
| 3   | 614                   | 154                     | 413                       | 73.72                      | 521               | 1.178 | 515                 | 473                             | 7.7               | 32.6            | 161.307   | F                             |
| 4   | 399                   | 100                     | 699                       | 18.88                      | 355               | 1.124 | 344                 | 229                             | 4.1               | 18.0            | 140.937   | F                             |

### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 729                   | 182                     | 223                       | 67.16                      | 599               | 1.217 | 595                 | 840                             | 12.2              | 45.6            | 191.053   | F                             |
| 2   | 458                   | 115                     | 537                       |                            | 580               | 0.790 | 451                 | 281                             | 1.6               | 3.3             | 26.577    | D                             |
| 3   | 752                   | 188                     | 486                       | 90.28                      | 494               | 1.522 | 494                 | 502                             | 32.6              | 97.2            | 487.284   | F                             |
| 4   | 489                   | 122                     | 727                       | 23.12                      | 337               | 1.452 | 336                 | 253                             | 18.0              | 56.2            | 418.372   | F                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 729                   | 182                     | 222                       | 67.16                      | 599               | 1.216 | 598                 | 842                             | 45.6              | 78.2            | 385.048   | F                             |
| 2   | 458                   | 115                     | 540                       |                            | 578               | 0.793 | 457                 | 281                             | 3.3               | 3.5             | 29.294    | D                             |
| 3   | 752                   | 188                     | 492                       | 90.28                      | 492               | 1.529 | 492                 | 505                             | 97.2              | 162.2           | 934.506   | F                             |
| 4   | 489                   | 122                     | 729                       | 23.12                      | 335               | 1.457 | 335                 | 255                             | 56.2              | 94.6            | 809.082   | F                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 595                   | 149                     | 232                       | 54.84                      | 596               | 0.998 | 592                 | 823                             | 78.2              | 79.0            | 483.516   | F                             |
| 2   | 374                   | 93                      | 538                       |                            | 587               | 0.637 | 381                 | 286                             | 3.5               | 1.8             | 18.004    | C                             |
| 3   | 614                   | 154                     | 426                       | 73.72                      | 516               | 1.189 | 516                 | 493                             | 162.2             | 186.7           | 1213.392  | F                             |
| 4   | 399                   | 100                     | 706                       | 18.88                      | 350               | 1.140 | 350                 | 236                             | 94.6              | 107.0           | 1045.596  | F                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 498                   | 125                     | 240                       | 45.92                      | 594               | 0.839 | 587                 | 804                             | 79.0              | 56.9            | 418.348   | F                             |
| 2   | 313                   | 78                      | 537                       |                            | 594               | 0.527 | 316                 | 290                             | 1.8               | 1.1             | 13.069    | B                             |
| 3   | 514                   | 129                     | 370                       | 61.73                      | 537               | 0.958 | 534                 | 483                             | 186.7             | 181.7           | 1241.708  | F                             |
| 4   | 334                   | 84                      | 684                       | 15.81                      | 364               | 0.919 | 360                 | 220                             | 107.0             | 100.5           | 1036.841  | F                             |

# Clybaun Roundabout - 2043-Do Something+Ring Road, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Last Run | Last Run    | Arm 4 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name                         | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | Clybaun/ Western Distributor | Standard Roundabout |                       | 1, 2, 3, 4 | 1467.36            | F            |

### 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 |
|-----|-----------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D18 | 2043-Do Something+Ring Road | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 1026                    | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 531                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 584                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 313                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 61.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 45.00                            |
| 4   | [ONEHOUR]    | 14.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 3   | 200 | 620 | 203 |
|      | 2  | 269 | 0   | 101 | 161 |
|      | 3  | 457 | 54  | 6   | 67  |
|      | 4  | 130 | 103 | 80  | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.91    | 2910.27       | 512.4           | F       | 941                     | 1412                          |
| 2   | 1.04    | 146.25        | 24.2            | F       | 487                     | 731                           |
| 3   | 1.39    | 866.21        | 122.1           | F       | 536                     | 804                           |
| 4   | 0.95    | 100.44        | 9.0             | F       | 287                     | 431                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 772                   | 193                     | 178                       | 45.92                      | 615               | 1.255 | 601                 | 626                             | 0.0               | 42.8            | 140.012   | F                             |
| 2   | 400                   | 100                     | 548                       |                            | 590               | 0.677 | 392                 | 232                             | 0.0               | 2.0             | 17.524    | C                             |
| 3   | 440                   | 110                     | 438                       | 33.88                      | 511               | 0.861 | 421                 | 501                             | 0.0               | 4.7             | 34.965    | D                             |
| 4   | 236                   | 59                      | 573                       | 10.54                      | 443               | 0.531 | 231                 | 286                             | 0.0               | 1.1             | 16.645    | C                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 922                   | 231                     | 210                       | 54.84                      | 604               | 1.527 | 604                 | 723                             | 42.8              | 122.4           | 506.728   | F                             |
| 2   | 477                   | 119                     | 562                       |                            | 573               | 0.832 | 469                 | 252                             | 2.0               | 4.1             | 31.877    | D                             |
| 3   | 525                   | 131                     | 501                       | 40.45                      | 487               | 1.077 | 471                 | 530                             | 4.7               | 18.2            | 108.111   | F                             |
| 4   | 281                   | 70                      | 656                       | 12.59                      | 391               | 0.719 | 277                 | 316                             | 1.1               | 2.3             | 30.105    | D                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1130                  | 282                     | 239                       | 67.16                      | 594               | 1.903 | 593                 | 775                             | 122.4             | 256.4           | 1158.009  | F                             |
| 2   | 585                   | 146                     | 566                       |                            | 562               | 1.040 | 538                 | 266                             | 4.1               | 15.7            | 84.764    | F                             |
| 3   | 643                   | 161                     | 555                       | 49.55                      | 467               | 1.376 | 466                 | 549                             | 18.2              | 62.4            | 328.183   | F                             |
| 4   | 345                   | 86                      | 687                       | 15.41                      | 366               | 0.942 | 326                 | 334                             | 2.3               | 6.9             | 69.664    | F                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 1130                  | 282                     | 244                       | 67.16                      | 592               | 1.909 | 592                 | 783                             | 256.4             | 390.9           | 1977.092  | F                             |
| 2   | 585                   | 146                     | 567                       |                            | 561               | 1.043 | 551                 | 269                             | 15.7              | 24.2            | 146.253   | F                             |
| 3   | 643                   | 161                     | 565                       | 49.55                      | 464               | 1.386 | 464                 | 553                             | 62.4              | 107.2           | 669.764   | F                             |
| 4   | 345                   | 86                      | 691                       | 15.41                      | 363               | 0.951 | 336                 | 337                             | 6.9               | 9.0             | 100.444   | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 922                   | 231                     | 225                       | 54.84                      | 599               | 1.540 | 599                 | 767                             | 390.9             | 471.8           | 2568.629  | F                             |
| 2   | 477                   | 119                     | 564                       |                            | 566               | 0.843 | 542                 | 259                             | 24.2              | 7.9             | 114.587   | F                             |
| 3   | 525                   | 131                     | 560                       | 40.45                      | 466               | 1.127 | 466                 | 547                             | 107.2             | 122.1           | 866.211   | F                             |
| 4   | 281                   | 70                      | 689                       | 12.59                      | 370               | 0.760 | 303                 | 336                             | 9.0               | 3.7             | 61.114    | F                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 772                   | 193                     | 194                       | 45.92                      | 610               | 1.266 | 610                 | 706                             | 471.8             | 512.4           | 2910.268  | F                             |
| 2   | 400                   | 100                     | 559                       |                            | 581               | 0.688 | 422                 | 245                             | 7.9               | 2.4             | 25.321    | D                             |
| 3   | 440                   | 110                     | 464                       | 33.88                      | 501               | 0.878 | 497                 | 517                             | 122.1             | 107.9           | 834.121   | F                             |
| 4   | 236                   | 59                      | 655                       | 10.54                      | 398               | 0.592 | 244                 | 306                             | 3.7               | 1.5             | 24.606    | C                             |

| <b>Junctions 9</b>                                                                                                                                                      |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>PICADY 9 - Priority Intersection Module</b>                                                                                                                          |  |
| Version: 9.5.0.6896<br>© Copyright TRL Limited, 2018                                                                                                                    |  |
| For sales and distribution information, program advice and maintenance, contact TRL:<br>+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk                     |  |
| <b>The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution</b> |  |

**Filename:** Junction 4- Ragoon-Gort na Bro Final.j9

**Path:** I:\DWGS\233\101-150\233114\3.0 Calculations\1. Civils\233114-PUNCH-XX-XX-CA-C-0002 Design Calculations\2.0 Traffic Calculations\Junction 4 - Ragoon Rd - Gort Na Bro T intersection

**Report generation date:** 18/09/2025 12:48:18

---

»DO Nothing 2023, AM  
 »DO Nothing 2023, PM  
 »DO Nothing 2028, AM  
 »DO Nothing 2028, PM  
 »DO Nothing 2033, AM  
 »DO Nothing 2033, PM  
 »DO Nothing 2043, AM  
 »DO Nothing 2043, PM  
 »DO Something 2028 , AM  
 »DO Something 2028, PM  
 »DO Something 2033, AM  
 »DO Something 2033, PM  
 »DO Something 2043, AM  
 »DO Something 2043, PM  
 »DO Something 2043+AT, AM  
 »DO Something 2043+AT, PM  
 »DO Something 2043+ Ring Road, AM  
 »DO Something 2043+ Ring Road, PM



## Summary of junction performance

|             | AM                           |           |      |     | PM          |           |      |     |
|-------------|------------------------------|-----------|------|-----|-------------|-----------|------|-----|
|             | Queue (PCU)                  | Delay (s) | RFC  | LOS | Queue (PCU) | Delay (s) | RFC  | LOS |
|             | DO Nothing 2023              |           |      |     |             |           |      |     |
| Stream B-AC | 0.4                          | 9.96      | 0.29 | A   | 0.7         | 11.95     | 0.41 | B   |
| Stream C-AB | 0.6                          | 6.95      | 0.30 | A   | 0.2         | 5.79      | 0.10 | A   |
|             | DO Nothing 2028              |           |      |     |             |           |      |     |
| Stream B-AC | 1.0                          | 15.79     | 0.50 | C   | 0.8         | 13.12     | 0.45 | B   |
| Stream C-AB | 2.3                          | 13.92     | 0.65 | B   | 0.2         | 5.82      | 0.11 | A   |
|             | DO Nothing 2033              |           |      |     |             |           |      |     |
| Stream B-AC | 1.2                          | 17.99     | 0.55 | C   | 0.9         | 14.24     | 0.48 | B   |
| Stream C-AB | 3.0                          | 16.58     | 0.71 | C   | 0.2         | 5.84      | 0.12 | A   |
|             | DO Nothing 2043              |           |      |     |             |           |      |     |
| Stream B-AC | 1.6                          | 22.90     | 0.63 | C   | 1.2         | 16.66     | 0.55 | C   |
| Stream C-AB | 5.1                          | 24.62     | 0.81 | C   | 0.2         | 5.88      | 0.13 | A   |
|             | DO Something 2028            |           |      |     |             |           |      |     |
| Stream B-AC | 1.1                          | 17.10     | 0.53 | C   | 1.3         | 17.10     | 0.57 | C   |
| Stream C-AB | 2.7                          | 15.44     | 0.68 | C   | 0.2         | 6.09      | 0.14 | A   |
|             | DO Something 2033            |           |      |     |             |           |      |     |
| Stream B-AC | 1.4                          | 19.70     | 0.58 | C   | 1.5         | 19.06     | 0.61 | C   |
| Stream C-AB | 3.5                          | 18.68     | 0.74 | C   | 0.3         | 6.11      | 0.15 | A   |
|             | DO Something 2043            |           |      |     |             |           |      |     |
| Stream B-AC | 1.9                          | 26.03     | 0.67 | D   | 2.0         | 23.59     | 0.68 | C   |
| Stream C-AB | 6.1                          | 29.55     | 0.84 | D   | 0.3         | 6.17      | 0.17 | A   |
|             | DO Something 2043+AT         |           |      |     |             |           |      |     |
| Stream B-AC | 1.8                          | 24.06     | 0.65 | C   | 1.9         | 22.07     | 0.66 | C   |
| Stream C-AB | 5.1                          | 26.04     | 0.81 | D   | 0.3         | 6.23      | 0.16 | A   |
|             | DO Something 2043+ Ring Road |           |      |     |             |           |      |     |
| Stream B-AC | 1.5                          | 20.62     | 0.61 | C   | 1.7         | 19.30     | 0.63 | C   |
| Stream C-AB | 3.6                          | 21.20     | 0.76 | C   | 0.2         | 6.38      | 0.15 | 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

|                    |                                                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Title</b>       | JCT 4 Rahoon Junction                                                                                        |
| <b>Location</b>    | Galway                                                                                                       |
| <b>Site number</b> | 233114                                                                                                       |
| <b>Date</b>        | 30/07/2025                                                                                                   |
| <b>Version</b>     |                                                                                                              |
| <b>Status</b>      | (new file)                                                                                                   |
| <b>Identifier</b>  |                                                                                                              |
| <b>Client</b>      |                                                                                                              |
| <b>Jobnumber</b>   |                                                                                                              |
| <b>Enumerator</b>  | MPPNET\EMcMillan                                                                                             |
| <b>Description</b> | done by EM - junction 4 -T intersection for Kingston and Miler Park Project, intersection northeast of Mille |

## Units

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

## Analysis Options

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

## Demand Set Summary

| ID  | Scenario name                | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1  | DO Nothing 2023              | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D2  | DO Nothing 2023              | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D3  | DO Nothing 2028              | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D4  | DO Nothing 2028              | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D5  | DO Nothing 2033              | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D6  | DO Nothing 2033              | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D7  | DO Nothing 2043              | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D8  | DO Nothing 2043              | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D9  | DO Something 2028            | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D10 | DO Something 2028            | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D11 | DO Something 2033            | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D12 | DO Something 2033            | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D13 | DO Something 2043            | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D14 | DO Something 2043            | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D15 | DO Something 2043+AT         | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D16 | DO Something 2043+AT         | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D17 | DO Something 2043+ Ring Road | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D18 | DO Something 2043+ Ring Road | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

## Analysis Set Details

| ID | Include in report | Network flow scaling factor (%) | Network capacity scaling factor (%) |
|----|-------------------|---------------------------------|-------------------------------------|
| AL | ✓                 | 100.000                         | 100.000                             |

# DO Nothing 2023, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 3.72               | A            |

### Junction Network Options

| Driving side | Lighting       |
|--------------|----------------|
| Left         | Normal/unknown |

## Arms

### Arms

| Arm | Name             | Description | Arm type |
|-----|------------------|-------------|----------|
| A   | Rahoon Road East |             | Major    |
| B   | Gort na Bro      |             | Minor    |
| C   | Rahoon Road West |             | 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   | 6.15                     |                            |                    | 101.0                         | ✓       | 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       | 4.22           | 39                     | 20                      |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 1-1      | B-A    | 561                | 0.102         | 0.257         | 0.162         | 0.367         |
| 1-1      | B-C    | 715                | 0.109         | 0.275         | -             | -             |
| 1-1      | C-B    | 632                | 0.243         | 0.243         | -             | -             |

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 | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | DO Nothing 2023 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 223                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 135                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 357                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 75  | 148 |
|  | B  | 68  | 0   | 67  |
|  | C  | 223 | 134 | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.29    | 9.96          | 0.4             | A       | 124                     | 186                           |
| C-AB   | 0.30    | 6.95          | 0.6             | A       | 174                     | 261                           |
| C-A    |         |               |                 |         | 154                     | 231                           |
| A-B    |         |               |                 |         | 69                      | 103                           |
| A-C    |         |               |                 |         | 136                     | 204                           |

## Main Results for each time segment

### 08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 102                   | 25                      | 549               | 0.185 | 101                 | 0.0               | 0.2             | 8.009     | A                             |
| C-AB   | 132                   | 33                      | 704               | 0.188 | 131                 | 0.0               | 0.3             | 6.275     | A                             |
| C-A    | 136                   | 34                      |                   |       | 136                 |                   |                 |           |                               |
| A-B    | 56                    | 14                      |                   |       | 56                  |                   |                 |           |                               |
| A-C    | 111                   | 28                      |                   |       | 111                 |                   |                 |           |                               |

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 121                   | 30                      | 533               | 0.228 | 121                 | 0.2               | 0.3             | 8.734     | A                             |
| C-AB   | 167                   | 42                      | 719               | 0.233 | 167                 | 0.3               | 0.4             | 6.521     | A                             |
| C-A    | 154                   | 38                      |                   |       | 154                 |                   |                 |           |                               |
| A-B    | 67                    | 17                      |                   |       | 67                  |                   |                 |           |                               |
| A-C    | 133                   | 33                      |                   |       | 133                 |                   |                 |           |                               |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 149                   | 37                      | 510               | 0.291 | 148                 | 0.3               | 0.4             | 9.927     | A                             |
| C-AB   | 221                   | 55                      | 740               | 0.299 | 221                 | 0.4               | 0.6             | 6.932     | A                             |
| C-A    | 172                   | 43                      |                   |       | 172                 |                   |                 |           |                               |
| A-B    | 83                    | 21                      |                   |       | 83                  |                   |                 |           |                               |
| A-C    | 163                   | 41                      |                   |       | 163                 |                   |                 |           |                               |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 149                   | 37                      | 510               | 0.291 | 149                 | 0.4               | 0.4             | 9.956     | A                             |
| C-AB   | 222                   | 55                      | 741               | 0.299 | 222                 | 0.6               | 0.6             | 6.952     | A                             |
| C-A    | 171                   | 43                      |                   |       | 171                 |                   |                 |           |                               |
| A-B    | 83                    | 21                      |                   |       | 83                  |                   |                 |           |                               |
| A-C    | 163                   | 41                      |                   |       | 163                 |                   |                 |           |                               |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 121                   | 30                      | 533               | 0.228 | 122                 | 0.4               | 0.3             | 8.768     | A                             |
| C-AB   | 168                   | 42                      | 720               | 0.233 | 168                 | 0.6               | 0.4             | 6.546     | A                             |
| C-A    | 153                   | 38                      |                   |       | 153                 |                   |                 |           |                               |
| A-B    | 67                    | 17                      |                   |       | 67                  |                   |                 |           |                               |
| A-C    | 133                   | 33                      |                   |       | 133                 |                   |                 |           |                               |

### 09:15 - 09:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 102                   | 25                      | 549               | 0.185 | 102                 | 0.3               | 0.2             | 8.057     | A                             |
| C-AB   | 133                   | 33                      | 705               | 0.189 | 133                 | 0.4               | 0.3             | 6.310     | A                             |
| C-A    | 136                   | 34                      |                   |       | 136                 |                   |                 |           |                               |
| A-B    | 56                    | 14                      |                   |       | 56                  |                   |                 |           |                               |
| A-C    | 111                   | 28                      |                   |       | 111                 |                   |                 |           |                               |

# DO Nothing 2023, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 3.84               | 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 |
|----|-----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | DO Nothing 2023 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 269                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 187                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 216                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |
|------|----|-----|----|-----|
|      | A  | B   | C  |     |
| From | A  | 0   | 73 | 196 |
|      | B  | 117 | 0  | 70  |
|      | C  | 171 | 45 | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.41    | 11.95         | 0.7             | B       | 172                     | 257                           |
| C-AB   | 0.10    | 5.79          | 0.2             | A       | 54                      | 81                            |
| C-A    |         |               |                 |         | 144                     | 216                           |
| A-B    |         |               |                 |         | 67                      | 100                           |
| A-C    |         |               |                 |         | 180                     | 270                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 141                   | 35                      | 540               | 0.261 | 139                 | 0.0               | 0.3             | 8.954     | A                             |
| C-AB   | 42                    | 10                      | 670               | 0.063 | 42                  | 0.0               | 0.1             | 5.725     | A                             |
| C-A    | 121                   | 30                      |                   |       | 121                 |                   |                 |           |                               |
| A-B    | 55                    | 14                      |                   |       | 55                  |                   |                 |           |                               |
| A-C    | 148                   | 37                      |                   |       | 148                 |                   |                 |           |                               |

#### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 168                   | 42                      | 526               | 0.319 | 168                 | 0.3               | 0.5             | 10.026    | B                             |
| C-AB   | 52                    | 13                      | 678               | 0.077 | 52                  | 0.1               | 0.1             | 5.753     | A                             |
| C-A    | 142                   | 35                      |                   |       | 142                 |                   |                 |           |                               |
| A-B    | 66                    | 16                      |                   |       | 66                  |                   |                 |           |                               |
| A-C    | 176                   | 44                      |                   |       | 176                 |                   |                 |           |                               |

#### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 206                   | 51                      | 507               | 0.406 | 205                 | 0.5               | 0.7             | 11.890    | B                             |
| C-AB   | 68                    | 17                      | 690               | 0.099 | 68                  | 0.1               | 0.2             | 5.791     | A                             |
| C-A    | 170                   | 42                      |                   |       | 170                 |                   |                 |           |                               |
| A-B    | 80                    | 20                      |                   |       | 80                  |                   |                 |           |                               |
| A-C    | 216                   | 54                      |                   |       | 216                 |                   |                 |           |                               |

#### 17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 206                   | 51                      | 507               | 0.406 | 206                 | 0.7               | 0.7             | 11.955    | B                             |
| C-AB   | 68                    | 17                      | 690               | 0.099 | 68                  | 0.2               | 0.2             | 5.794     | A                             |
| C-A    | 170                   | 42                      |                   |       | 170                 |                   |                 |           |                               |
| A-B    | 80                    | 20                      |                   |       | 80                  |                   |                 |           |                               |
| A-C    | 216                   | 54                      |                   |       | 216                 |                   |                 |           |                               |

**18:00 - 18:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 168                   | 42                      | 526               | 0.320 | 169                 | 0.7               | 0.5             | 10.101    | B                             |
| C-AB   | 52                    | 13                      | 678               | 0.077 | 53                  | 0.2               | 0.1             | 5.757     | A                             |
| C-A    | 142                   | 35                      |                   |       | 142                 |                   |                 |           |                               |
| A-B    | 66                    | 16                      |                   |       | 66                  |                   |                 |           |                               |
| A-C    | 176                   | 44                      |                   |       | 176                 |                   |                 |           |                               |

**18:15 - 18:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 141                   | 35                      | 540               | 0.261 | 141                 | 0.5               | 0.4             | 9.038     | A                             |
| C-AB   | 42                    | 11                      | 670               | 0.063 | 42                  | 0.1               | 0.1             | 5.733     | A                             |
| C-A    | 121                   | 30                      |                   |       | 121                 |                   |                 |           |                               |
| A-B    | 55                    | 14                      |                   |       | 55                  |                   |                 |           |                               |
| A-C    | 148                   | 37                      |                   |       | 148                 |                   |                 |           |                               |



# DO Nothing 2028, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 8.63               | 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 | DO Nothing 2028 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 307                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 208                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 524                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 143 | 164 |
|  | B  | 97  | 0   | 111 |
|  | C  | 251 | 273 | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.50    | 15.79         | 1.0             | C       | 191                     | 286                           |
| C-AB   | 0.65    | 13.92         | 2.3             | B       | 374                     | 561                           |
| C-A    |         |               |                 |         | 107                     | 160                           |
| A-B    |         |               |                 |         | 131                     | 197                           |
| A-C    |         |               |                 |         | 150                     | 226                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 157                   | 39                      | 519               | 0.302 | 155                 | 0.0               | 0.4             | 9.849     | A                             |
| C-AB   | 281                   | 70                      | 705               | 0.399 | 278                 | 0.0               | 0.8             | 8.392     | A                             |
| C-A    | 114                   | 28                      |                   |       | 114                 |                   |                 |           |                               |
| A-B    | 108                   | 27                      |                   |       | 108                 |                   |                 |           |                               |
| A-C    | 123                   | 31                      |                   |       | 123                 |                   |                 |           |                               |

#### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 187                   | 47                      | 494               | 0.379 | 186                 | 0.4               | 0.6             | 11.691    | B                             |
| C-AB   | 359                   | 90                      | 721               | 0.498 | 357                 | 0.8               | 1.2             | 9.903     | A                             |
| C-A    | 112                   | 28                      |                   |       | 112                 |                   |                 |           |                               |
| A-B    | 129                   | 32                      |                   |       | 129                 |                   |                 |           |                               |
| A-C    | 147                   | 37                      |                   |       | 147                 |                   |                 |           |                               |

#### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 229                   | 57                      | 458               | 0.500 | 228                 | 0.6               | 1.0             | 15.539    | C                             |
| C-AB   | 481                   | 120                     | 743               | 0.647 | 477                 | 1.2               | 2.3             | 13.506    | B                             |
| C-A    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| A-B    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
| A-C    | 181                   | 45                      |                   |       | 181                 |                   |                 |           |                               |

#### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 229                   | 57                      | 457               | 0.501 | 229                 | 1.0               | 1.0             | 15.792    | C                             |
| C-AB   | 483                   | 121                     | 744               | 0.648 | 482                 | 2.3               | 2.3             | 13.921    | B                             |
| C-A    | 94                    | 24                      |                   |       | 94                  |                   |                 |           |                               |
| A-B    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
| A-C    | 181                   | 45                      |                   |       | 181                 |                   |                 |           |                               |

**09:00 - 09:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 187                   | 47                      | 492               | 0.380 | 188                 | 1.0               | 0.6             | 11.909    | B                             |
| C-AB   | 360                   | 90                      | 722               | 0.499 | 364                 | 2.3               | 1.3             | 10.232    | B                             |
| C-A    | 111                   | 28                      |                   |       | 111                 |                   |                 |           |                               |
| A-B    | 129                   | 32                      |                   |       | 129                 |                   |                 |           |                               |
| A-C    | 147                   | 37                      |                   |       | 147                 |                   |                 |           |                               |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 157                   | 39                      | 518               | 0.303 | 157                 | 0.6               | 0.4             | 10.011    | B                             |
| C-AB   | 282                   | 71                      | 706               | 0.400 | 284                 | 1.3               | 0.8             | 8.597     | A                             |
| C-A    | 112                   | 28                      |                   |       | 112                 |                   |                 |           |                               |
| A-B    | 108                   | 27                      |                   |       | 108                 |                   |                 |           |                               |
| A-C    | 123                   | 31                      |                   |       | 123                 |                   |                 |           |                               |

# DO Nothing 2028, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 4.17               | 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 | DO Nothing 2028 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 292                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 203                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 235                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |
|------|----|-----|----|-----|
|      | A  | B   | C  |     |
| From | A  | 0   | 79 | 213 |
|      | B  | 127 | 0  | 76  |
|      | C  | 186 | 49 | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.45    | 13.12         | 0.8             | B       | 186                     | 279                           |
| C-AB   | 0.11    | 5.82          | 0.2             | A       | 61                      | 91                            |
| C-A    |         |               |                 |         | 155                     | 233                           |
| A-B    |         |               |                 |         | 72                      | 109                           |
| A-C    |         |               |                 |         | 195                     | 293                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 153                   | 38                      | 534               | 0.286 | 151                 | 0.0               | 0.4             | 9.369     | A                             |
| C-AB   | 47                    | 12                      | 674               | 0.069 | 46                  | 0.0               | 0.1             | 5.733     | A                             |
| C-A    | 130                   | 33                      |                   |       | 130                 |                   |                 |           |                               |
| A-B    | 59                    | 15                      |                   |       | 59                  |                   |                 |           |                               |
| A-C    | 160                   | 40                      |                   |       | 160                 |                   |                 |           |                               |

#### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 182                   | 46                      | 519               | 0.352 | 182                 | 0.4               | 0.5             | 10.668    | B                             |
| C-AB   | 58                    | 15                      | 683               | 0.086 | 58                  | 0.1               | 0.1             | 5.763     | A                             |
| C-A    | 153                   | 38                      |                   |       | 153                 |                   |                 |           |                               |
| A-B    | 71                    | 18                      |                   |       | 71                  |                   |                 |           |                               |
| A-C    | 191                   | 48                      |                   |       | 191                 |                   |                 |           |                               |

#### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 224                   | 56                      | 498               | 0.449 | 222                 | 0.5               | 0.8             | 13.023    | B                             |
| C-AB   | 77                    | 19                      | 696               | 0.110 | 76                  | 0.1               | 0.2             | 5.814     | A                             |
| C-A    | 182                   | 46                      |                   |       | 182                 |                   |                 |           |                               |
| A-B    | 87                    | 22                      |                   |       | 87                  |                   |                 |           |                               |
| A-C    | 235                   | 59                      |                   |       | 235                 |                   |                 |           |                               |

#### 17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 224                   | 56                      | 498               | 0.449 | 223                 | 0.8               | 0.8             | 13.120    | B                             |
| C-AB   | 77                    | 19                      | 696               | 0.110 | 77                  | 0.2               | 0.2             | 5.817     | A                             |
| C-A    | 182                   | 46                      |                   |       | 182                 |                   |                 |           |                               |
| A-B    | 87                    | 22                      |                   |       | 87                  |                   |                 |           |                               |
| A-C    | 235                   | 59                      |                   |       | 235                 |                   |                 |           |                               |

**18:00 - 18:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 182                   | 46                      | 519               | 0.352 | 184                 | 0.8               | 0.6             | 10.772    | B                             |
| C-AB   | 58                    | 15                      | 683               | 0.086 | 59                  | 0.2               | 0.1             | 5.771     | A                             |
| C-A    | 153                   | 38                      |                   |       | 153                 |                   |                 |           |                               |
| A-B    | 71                    | 18                      |                   |       | 71                  |                   |                 |           |                               |
| A-C    | 191                   | 48                      |                   |       | 191                 |                   |                 |           |                               |

**18:15 - 18:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 153                   | 38                      | 534               | 0.286 | 153                 | 0.6               | 0.4             | 9.477     | A                             |
| C-AB   | 47                    | 12                      | 674               | 0.069 | 47                  | 0.1               | 0.1             | 5.742     | A                             |
| C-A    | 130                   | 33                      |                   |       | 130                 |                   |                 |           |                               |
| A-B    | 59                    | 15                      |                   |       | 59                  |                   |                 |           |                               |
| A-C    | 160                   | 40                      |                   |       | 160                 |                   |                 |           |                               |

# DO Nothing 2033, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 10.30              | 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 | DO Nothing 2033 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 327                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 221                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 558                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 152 | 175 |
|  | B  | 103 | 0   | 118 |
|  | C  | 267 | 291 | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.55    | 17.99         | 1.2             | C       | 203                     | 304                           |
| C-AB   | 0.71    | 16.58         | 3.0             | C       | 410                     | 616                           |
| C-A    |         |               |                 |         | 102                     | 153                           |
| A-B    |         |               |                 |         | 139                     | 209                           |
| A-C    |         |               |                 |         | 161                     | 241                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 166                   | 42                      | 511               | 0.326 | 164                 | 0.0               | 0.5             | 10.345    | B                             |
| C-AB   | 306                   | 76                      | 710               | 0.431 | 302                 | 0.0               | 0.9             | 8.785     | A                             |
| C-A    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| A-B    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| A-C    | 132                   | 33                      |                   |       | 132                 |                   |                 |           |                               |

#### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 199                   | 50                      | 483               | 0.411 | 198                 | 0.5               | 0.7             | 12.572    | B                             |
| C-AB   | 392                   | 98                      | 727               | 0.540 | 390                 | 0.9               | 1.4             | 10.697    | B                             |
| C-A    | 109                   | 27                      |                   |       | 109                 |                   |                 |           |                               |
| A-B    | 137                   | 34                      |                   |       | 137                 |                   |                 |           |                               |
| A-C    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |

#### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 243                   | 61                      | 444               | 0.548 | 241                 | 0.7               | 1.2             | 17.566    | C                             |
| C-AB   | 530                   | 132                     | 751               | 0.705 | 524                 | 1.4               | 2.9             | 15.769    | C                             |
| C-A    | 85                    | 21                      |                   |       | 85                  |                   |                 |           |                               |
| A-B    | 167                   | 42                      |                   |       | 167                 |                   |                 |           |                               |
| A-C    | 193                   | 48                      |                   |       | 193                 |                   |                 |           |                               |

#### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 243                   | 61                      | 443               | 0.549 | 243                 | 1.2               | 1.2             | 17.992    | C                             |
| C-AB   | 532                   | 133                     | 753               | 0.707 | 532                 | 2.9               | 3.0             | 16.579    | C                             |
| C-A    | 82                    | 21                      |                   |       | 82                  |                   |                 |           |                               |
| A-B    | 167                   | 42                      |                   |       | 167                 |                   |                 |           |                               |
| A-C    | 193                   | 48                      |                   |       | 193                 |                   |                 |           |                               |



**09:00 - 09:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 199                   | 50                      | 481               | 0.413 | 201                 | 1.2               | 0.7             | 12.901    | B                             |
| C-AB   | 395                   | 99                      | 729               | 0.541 | 401                 | 3.0               | 1.6             | 11.233    | B                             |
| C-A    | 107                   | 27                      |                   |       | 107                 |                   |                 |           |                               |
| A-B    | 137                   | 34                      |                   |       | 137                 |                   |                 |           |                               |
| A-C    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 166                   | 42                      | 509               | 0.327 | 167                 | 0.7               | 0.5             | 10.553    | B                             |
| C-AB   | 307                   | 77                      | 711               | 0.432 | 310                 | 1.6               | 1.0             | 9.056     | A                             |
| C-A    | 113                   | 28                      |                   |       | 113                 |                   |                 |           |                               |
| A-B    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| A-C    | 132                   | 33                      |                   |       | 132                 |                   |                 |           |                               |

# DO Nothing 2033, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 4.50               | 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 | DO Nothing 2033 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 311                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 216                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 250                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |
|------|----|-----|----|-----|
|      | A  | B   | C  |     |
| From | A  | 0   | 84 | 227 |
|      | B  | 135 | 0  | 81  |
|      | C  | 198 | 52 | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.48    | 14.24         | 0.9             | B       | 198                     | 297                           |
| C-AB   | 0.12    | 5.84          | 0.2             | A       | 66                      | 98                            |
| C-A    |         |               |                 |         | 164                     | 246                           |
| A-B    |         |               |                 |         | 77                      | 116                           |
| A-C    |         |               |                 |         | 208                     | 312                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 163                   | 41                      | 529               | 0.307 | 161                 | 0.0               | 0.4             | 9.733     | A                             |
| C-AB   | 50                    | 13                      | 677               | 0.074 | 50                  | 0.0               | 0.1             | 5.739     | A                             |
| C-A    | 138                   | 35                      |                   |       | 138                 |                   |                 |           |                               |
| A-B    | 63                    | 16                      |                   |       | 63                  |                   |                 |           |                               |
| A-C    | 171                   | 43                      |                   |       | 171                 |                   |                 |           |                               |

#### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 194                   | 49                      | 513               | 0.379 | 194                 | 0.4               | 0.6             | 11.248    | B                             |
| C-AB   | 63                    | 16                      | 687               | 0.092 | 63                  | 0.1               | 0.1             | 5.774     | A                             |
| C-A    | 162                   | 40                      |                   |       | 162                 |                   |                 |           |                               |
| A-B    | 76                    | 19                      |                   |       | 76                  |                   |                 |           |                               |
| A-C    | 204                   | 51                      |                   |       | 204                 |                   |                 |           |                               |

#### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 238                   | 59                      | 490               | 0.485 | 237                 | 0.6               | 0.9             | 14.109    | B                             |
| C-AB   | 83                    | 21                      | 701               | 0.119 | 83                  | 0.1               | 0.2             | 5.833     | A                             |
| C-A    | 192                   | 48                      |                   |       | 192                 |                   |                 |           |                               |
| A-B    | 92                    | 23                      |                   |       | 92                  |                   |                 |           |                               |
| A-C    | 250                   | 62                      |                   |       | 250                 |                   |                 |           |                               |

#### 17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 238                   | 59                      | 490               | 0.485 | 238                 | 0.9               | 0.9             | 14.238    | B                             |
| C-AB   | 83                    | 21                      | 701               | 0.119 | 83                  | 0.2               | 0.2             | 5.837     | A                             |
| C-A    | 192                   | 48                      |                   |       | 192                 |                   |                 |           |                               |
| A-B    | 92                    | 23                      |                   |       | 92                  |                   |                 |           |                               |
| A-C    | 250                   | 62                      |                   |       | 250                 |                   |                 |           |                               |

**18:00 - 18:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 194                   | 49                      | 513               | 0.379 | 195                 | 0.9               | 0.6             | 11.387    | B                             |
| C-AB   | 63                    | 16                      | 687               | 0.092 | 64                  | 0.2               | 0.1             | 5.783     | A                             |
| C-A    | 161                   | 40                      |                   |       | 161                 |                   |                 |           |                               |
| A-B    | 76                    | 19                      |                   |       | 76                  |                   |                 |           |                               |
| A-C    | 204                   | 51                      |                   |       | 204                 |                   |                 |           |                               |

**18:15 - 18:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 163                   | 41                      | 529               | 0.307 | 163                 | 0.6               | 0.5             | 9.864     | A                             |
| C-AB   | 50                    | 13                      | 677               | 0.074 | 50                  | 0.1               | 0.1             | 5.749     | A                             |
| C-A    | 138                   | 34                      |                   |       | 138                 |                   |                 |           |                               |
| A-B    | 63                    | 16                      |                   |       | 63                  |                   |                 |           |                               |
| A-C    | 171                   | 43                      |                   |       | 171                 |                   |                 |           |                               |

# DO Nothing 2043, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 14.98              | 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 | DO Nothing 2043 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 360                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 240                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 613                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 167 | 193 |
|  | B  | 111 | 0   | 129 |
|  | C  | 294 | 319 | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.63    | 22.90         | 1.6             | C       | 220                     | 330                           |
| C-AB   | 0.81    | 24.62         | 5.1             | C       | 472                     | 708                           |
| C-A    |         |               |                 |         | 90                      | 135                           |
| A-B    |         |               |                 |         | 153                     | 230                           |
| A-C    |         |               |                 |         | 177                     | 266                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 181                   | 45                      | 498               | 0.363 | 178                 | 0.0               | 0.6             | 11.183    | B                             |
| C-AB   | 347                   | 87                      | 718               | 0.483 | 343                 | 0.0               | 1.1             | 9.519     | A                             |
| C-A    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| A-B    | 126                   | 31                      |                   |       | 126                 |                   |                 |           |                               |
| A-C    | 145                   | 36                      |                   |       | 145                 |                   |                 |           |                               |

#### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 216                   | 54                      | 467               | 0.462 | 215                 | 0.6               | 0.8             | 14.176    | B                             |
| C-AB   | 449                   | 112                     | 738               | 0.609 | 446                 | 1.1               | 1.9             | 12.349    | B                             |
| C-A    | 102                   | 25                      |                   |       | 102                 |                   |                 |           |                               |
| A-B    | 150                   | 38                      |                   |       | 150                 |                   |                 |           |                               |
| A-C    | 174                   | 43                      |                   |       | 174                 |                   |                 |           |                               |

#### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 264                   | 66                      | 423               | 0.624 | 261                 | 0.8               | 1.6             | 21.839    | C                             |
| C-AB   | 614                   | 153                     | 765               | 0.802 | 603                 | 1.9               | 4.7             | 21.828    | C                             |
| C-A    | 61                    | 15                      |                   |       | 61                  |                   |                 |           |                               |
| A-B    | 184                   | 46                      |                   |       | 184                 |                   |                 |           |                               |
| A-C    | 212                   | 53                      |                   |       | 212                 |                   |                 |           |                               |

#### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 264                   | 66                      | 421               | 0.628 | 264                 | 1.6               | 1.6             | 22.902    | C                             |
| C-AB   | 619                   | 155                     | 769               | 0.805 | 618                 | 4.7               | 5.1             | 24.621    | C                             |
| C-A    | 56                    | 14                      |                   |       | 56                  |                   |                 |           |                               |
| A-B    | 184                   | 46                      |                   |       | 184                 |                   |                 |           |                               |
| A-C    | 212                   | 53                      |                   |       | 212                 |                   |                 |           |                               |

**09:00 - 09:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 216                   | 54                      | 464               | 0.465 | 219                 | 1.6               | 0.9             | 14.844    | B                             |
| C-AB   | 455                   | 114                     | 743               | 0.612 | 466                 | 5.1               | 2.1             | 13.728    | B                             |
| C-A    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| A-B    | 150                   | 38                      |                   |       | 150                 |                   |                 |           |                               |
| A-C    | 174                   | 43                      |                   |       | 174                 |                   |                 |           |                               |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 181                   | 45                      | 496               | 0.364 | 182                 | 0.9               | 0.6             | 11.494    | B                             |
| C-AB   | 350                   | 87                      | 720               | 0.486 | 353                 | 2.1               | 1.2             | 9.963     | A                             |
| C-A    | 112                   | 28                      |                   |       | 112                 |                   |                 |           |                               |
| A-B    | 126                   | 31                      |                   |       | 126                 |                   |                 |           |                               |
| A-C    | 145                   | 36                      |                   |       | 145                 |                   |                 |           |                               |

# DO Nothing 2043, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 5.19               | 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 | DO Nothing 2043 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 343                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 238                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 275                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |
|------|----|-----|----|-----|
|      | A  | B   | C  |     |
| From | A  | 0   | 93 | 250 |
|      | B  | 149 | 0  | 89  |
|      | C  | 218 | 57 | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.55    | 16.66         | 1.2             | C       | 218                     | 328                           |
| C-AB   | 0.13    | 5.88          | 0.2             | A       | 74                      | 112                           |
| C-A    |         |               |                 |         | 178                     | 267                           |
| A-B    |         |               |                 |         | 85                      | 128                           |
| A-C    |         |               |                 |         | 229                     | 344                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 179                   | 45                      | 521               | 0.344 | 177                 | 0.0               | 0.5             | 10.422    | B                             |
| C-AB   | 57                    | 14                      | 682               | 0.083 | 56                  | 0.0               | 0.1             | 5.752     | A                             |
| C-A    | 151                   | 38                      |                   |       | 151                 |                   |                 |           |                               |
| A-B    | 70                    | 18                      |                   |       | 70                  |                   |                 |           |                               |
| A-C    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |

#### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 214                   | 53                      | 503               | 0.426 | 213                 | 0.5               | 0.7             | 12.395    | B                             |
| C-AB   | 72                    | 18                      | 693               | 0.103 | 71                  | 0.1               | 0.2             | 5.798     | A                             |
| C-A    | 176                   | 44                      |                   |       | 176                 |                   |                 |           |                               |
| A-B    | 84                    | 21                      |                   |       | 84                  |                   |                 |           |                               |
| A-C    | 225                   | 56                      |                   |       | 225                 |                   |                 |           |                               |

#### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 262                   | 66                      | 478               | 0.548 | 260                 | 0.7               | 1.2             | 16.404    | C                             |
| C-AB   | 95                    | 24                      | 709               | 0.134 | 95                  | 0.2               | 0.2             | 5.868     | A                             |
| C-A    | 208                   | 52                      |                   |       | 208                 |                   |                 |           |                               |
| A-B    | 102                   | 26                      |                   |       | 102                 |                   |                 |           |                               |
| A-C    | 275                   | 69                      |                   |       | 275                 |                   |                 |           |                               |

#### 17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 262                   | 66                      | 478               | 0.548 | 262                 | 1.2               | 1.2             | 16.659    | C                             |
| C-AB   | 95                    | 24                      | 709               | 0.134 | 95                  | 0.2               | 0.2             | 5.875     | A                             |
| C-A    | 208                   | 52                      |                   |       | 208                 |                   |                 |           |                               |
| A-B    | 102                   | 26                      |                   |       | 102                 |                   |                 |           |                               |
| A-C    | 275                   | 69                      |                   |       | 275                 |                   |                 |           |                               |

**18:00 - 18:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 214                   | 53                      | 503               | 0.426 | 216                 | 1.2               | 0.8             | 12.625    | B                             |
| C-AB   | 72                    | 18                      | 693               | 0.103 | 72                  | 0.2               | 0.2             | 5.805     | A                             |
| C-A    | 176                   | 44                      |                   |       | 176                 |                   |                 |           |                               |
| A-B    | 84                    | 21                      |                   |       | 84                  |                   |                 |           |                               |
| A-C    | 225                   | 56                      |                   |       | 225                 |                   |                 |           |                               |

**18:15 - 18:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 179                   | 45                      | 520               | 0.344 | 180                 | 0.8               | 0.5             | 10.606    | B                             |
| C-AB   | 57                    | 14                      | 682               | 0.083 | 57                  | 0.2               | 0.1             | 5.765     | A                             |
| C-A    | 150                   | 38                      |                   |       | 150                 |                   |                 |           |                               |
| A-B    | 70                    | 18                      |                   |       | 70                  |                   |                 |           |                               |
| A-C    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |

# DO Something 2028 , 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 9.68               | 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 |
|----|-------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D9 | DO Something 2028 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 314                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 219                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 537                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 150 | 164 |
|  | B  | 102 | 0   | 117 |
|  | C  | 251 | 286 | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.53    | 17.10         | 1.1             | C       | 201                     | 301                           |
| C-AB   | 0.68    | 15.44         | 2.7             | C       | 393                     | 589                           |
| C-A    |         |               |                 |         | 100                     | 150                           |
| A-B    |         |               |                 |         | 138                     | 206                           |
| A-C    |         |               |                 |         | 150                     | 226                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 165                   | 41                      | 516               | 0.320 | 163                 | 0.0               | 0.5             | 10.156    | B                             |
| C-AB   | 294                   | 74                      | 704               | 0.418 | 291                 | 0.0               | 0.9             | 8.682     | A                             |
| C-A    | 110                   | 27                      |                   |       | 110                 |                   |                 |           |                               |
| A-B    | 113                   | 28                      |                   |       | 113                 |                   |                 |           |                               |
| A-C    | 123                   | 31                      |                   |       | 123                 |                   |                 |           |                               |

#### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 197                   | 49                      | 490               | 0.402 | 196                 | 0.5               | 0.7             | 12.228    | B                             |
| C-AB   | 376                   | 94                      | 719               | 0.523 | 374                 | 0.9               | 1.3             | 10.433    | B                             |
| C-A    | 107                   | 27                      |                   |       | 107                 |                   |                 |           |                               |
| A-B    | 135                   | 34                      |                   |       | 135                 |                   |                 |           |                               |
| A-C    | 147                   | 37                      |                   |       | 147                 |                   |                 |           |                               |

#### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 241                   | 60                      | 452               | 0.533 | 239                 | 0.7               | 1.1             | 16.752    | C                             |
| C-AB   | 505                   | 126                     | 742               | 0.681 | 500                 | 1.3               | 2.6             | 14.839    | B                             |
| C-A    | 86                    | 22                      |                   |       | 86                  |                   |                 |           |                               |
| A-B    | 165                   | 41                      |                   |       | 165                 |                   |                 |           |                               |
| A-C    | 181                   | 45                      |                   |       | 181                 |                   |                 |           |                               |

#### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 241                   | 60                      | 451               | 0.534 | 241                 | 1.1               | 1.1             | 17.102    | C                             |
| C-AB   | 507                   | 127                     | 743               | 0.682 | 506                 | 2.6               | 2.7             | 15.440    | C                             |
| C-A    | 85                    | 21                      |                   |       | 85                  |                   |                 |           |                               |
| A-B    | 165                   | 41                      |                   |       | 165                 |                   |                 |           |                               |
| A-C    | 181                   | 45                      |                   |       | 181                 |                   |                 |           |                               |

**09:00 - 09:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 197                   | 49                      | 488               | 0.403 | 199                 | 1.1               | 0.7             | 12.515    | B                             |
| C-AB   | 378                   | 95                      | 721               | 0.524 | 383                 | 2.7               | 1.4             | 10.867    | B                             |
| C-A    | 105                   | 26                      |                   |       | 105                 |                   |                 |           |                               |
| A-B    | 135                   | 34                      |                   |       | 135                 |                   |                 |           |                               |
| A-C    | 147                   | 37                      |                   |       | 147                 |                   |                 |           |                               |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 165                   | 41                      | 514               | 0.321 | 166                 | 0.7               | 0.5             | 10.348    | B                             |
| C-AB   | 296                   | 74                      | 705               | 0.420 | 298                 | 1.4               | 0.9             | 8.926     | A                             |
| C-A    | 108                   | 27                      |                   |       | 108                 |                   |                 |           |                               |
| A-B    | 113                   | 28                      |                   |       | 113                 |                   |                 |           |                               |
| A-C    | 123                   | 31                      |                   |       | 123                 |                   |                 |           |                               |

# DO Something 2028, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 5.96               | 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 | DO Something 2028 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 315                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 255                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 249                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 102 | 213 |
|  | B  | 159 | 0   | 96  |
|  | C  | 186 | 63  | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.57    | 17.10         | 1.3             | C       | 234                     | 351                           |
| C-AB   | 0.14    | 6.09          | 0.2             | A       | 78                      | 117                           |
| C-A    |         |               |                 |         | 150                     | 226                           |
| A-B    |         |               |                 |         | 94                      | 140                           |
| A-C    |         |               |                 |         | 195                     | 293                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 192                   | 48                      | 529               | 0.363 | 190                 | 0.0               | 0.6             | 10.531    | B                             |
| C-AB   | 60                    | 15                      | 670               | 0.089 | 59                  | 0.0               | 0.1             | 5.893     | A                             |
| C-A    | 127                   | 32                      |                   |       | 127                 |                   |                 |           |                               |
| A-B    | 77                    | 19                      |                   |       | 77                  |                   |                 |           |                               |
| A-C    | 160                   | 40                      |                   |       | 160                 |                   |                 |           |                               |

#### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 229                   | 57                      | 513               | 0.447 | 228                 | 0.6               | 0.8             | 12.591    | B                             |
| C-AB   | 75                    | 19                      | 678               | 0.111 | 75                  | 0.1               | 0.2             | 5.970     | A                             |
| C-A    | 149                   | 37                      |                   |       | 149                 |                   |                 |           |                               |
| A-B    | 92                    | 23                      |                   |       | 92                  |                   |                 |           |                               |
| A-C    | 191                   | 48                      |                   |       | 191                 |                   |                 |           |                               |

#### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 281                   | 70                      | 491               | 0.572 | 279                 | 0.8               | 1.3             | 16.810    | C                             |
| C-AB   | 99                    | 25                      | 691               | 0.143 | 99                  | 0.2               | 0.2             | 6.083     | A                             |
| C-A    | 175                   | 44                      |                   |       | 175                 |                   |                 |           |                               |
| A-B    | 112                   | 28                      |                   |       | 112                 |                   |                 |           |                               |
| A-C    | 235                   | 59                      |                   |       | 235                 |                   |                 |           |                               |

#### 17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 281                   | 70                      | 491               | 0.572 | 281                 | 1.3               | 1.3             | 17.104    | C                             |
| C-AB   | 99                    | 25                      | 691               | 0.143 | 99                  | 0.2               | 0.2             | 6.088     | A                             |
| C-A    | 175                   | 44                      |                   |       | 175                 |                   |                 |           |                               |
| A-B    | 112                   | 28                      |                   |       | 112                 |                   |                 |           |                               |
| A-C    | 235                   | 59                      |                   |       | 235                 |                   |                 |           |                               |

**18:00 - 18:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 229                   | 57                      | 513               | 0.447 | 231                 | 1.3               | 0.8             | 12.852    | B                             |
| C-AB   | 75                    | 19                      | 679               | 0.111 | 76                  | 0.2               | 0.2             | 5.976     | A                             |
| C-A    | 148                   | 37                      |                   |       | 148                 |                   |                 |           |                               |
| A-B    | 92                    | 23                      |                   |       | 92                  |                   |                 |           |                               |
| A-C    | 191                   | 48                      |                   |       | 191                 |                   |                 |           |                               |

**18:15 - 18:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 192                   | 48                      | 529               | 0.363 | 193                 | 0.8               | 0.6             | 10.737    | B                             |
| C-AB   | 60                    | 15                      | 670               | 0.090 | 60                  | 0.2               | 0.1             | 5.908     | A                             |
| C-A    | 127                   | 32                      |                   |       | 127                 |                   |                 |           |                               |
| A-B    | 77                    | 19                      |                   |       | 77                  |                   |                 |           |                               |
| A-C    | 160                   | 40                      |                   |       | 160                 |                   |                 |           |                               |



# DO Something 2033, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 11.69              | 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 | DO Something 2033 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 334                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 232                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 570                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 159 | 175 |
|  | B  | 108 | 0   | 124 |
|  | C  | 267 | 303 | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.58    | 19.70         | 1.4             | C       | 213                     | 319                           |
| C-AB   | 0.74    | 18.68         | 3.5             | C       | 428                     | 642                           |
| C-A    |         |               |                 |         | 95                      | 143                           |
| A-B    |         |               |                 |         | 146                     | 219                           |
| A-C    |         |               |                 |         | 161                     | 241                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 175                   | 44                      | 508               | 0.344 | 173                 | 0.0               | 0.5             | 10.678    | B                             |
| C-AB   | 318                   | 80                      | 708               | 0.450 | 315                 | 0.0               | 1.0             | 9.084     | A                             |
| C-A    | 111                   | 28                      |                   |       | 111                 |                   |                 |           |                               |
| A-B    | 120                   | 30                      |                   |       | 120                 |                   |                 |           |                               |
| A-C    | 132                   | 33                      |                   |       | 132                 |                   |                 |           |                               |

#### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 209                   | 52                      | 480               | 0.435 | 208                 | 0.5               | 0.8             | 13.189    | B                             |
| C-AB   | 409                   | 102                     | 726               | 0.563 | 406                 | 1.0               | 1.6             | 11.283    | B                             |
| C-A    | 104                   | 26                      |                   |       | 104                 |                   |                 |           |                               |
| A-B    | 143                   | 36                      |                   |       | 143                 |                   |                 |           |                               |
| A-C    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |

#### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 255                   | 64                      | 439               | 0.581 | 253                 | 0.8               | 1.3             | 19.094    | C                             |
| C-AB   | 553                   | 138                     | 750               | 0.737 | 545                 | 1.6               | 3.4             | 17.505    | C                             |
| C-A    | 75                    | 19                      |                   |       | 75                  |                   |                 |           |                               |
| A-B    | 175                   | 44                      |                   |       | 175                 |                   |                 |           |                               |
| A-C    | 193                   | 48                      |                   |       | 193                 |                   |                 |           |                               |

#### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 255                   | 64                      | 438               | 0.584 | 255                 | 1.3               | 1.4             | 19.695    | C                             |
| C-AB   | 556                   | 139                     | 752               | 0.739 | 555                 | 3.4               | 3.5             | 18.676    | C                             |
| C-A    | 72                    | 18                      |                   |       | 72                  |                   |                 |           |                               |
| A-B    | 175                   | 44                      |                   |       | 175                 |                   |                 |           |                               |
| A-C    | 193                   | 48                      |                   |       | 193                 |                   |                 |           |                               |

**09:00 - 09:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 209                   | 52                      | 477               | 0.437 | 211                 | 1.4               | 0.8             | 13.622    | B                             |
| C-AB   | 412                   | 103                     | 729               | 0.565 | 419                 | 3.5               | 1.7             | 12.000    | B                             |
| C-A    | 100                   | 25                      |                   |       | 100                 |                   |                 |           |                               |
| A-B    | 143                   | 36                      |                   |       | 143                 |                   |                 |           |                               |
| A-C    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 175                   | 44                      | 506               | 0.345 | 176                 | 0.8               | 0.5             | 10.926    | B                             |
| C-AB   | 320                   | 80                      | 710               | 0.451 | 323                 | 1.7               | 1.0             | 9.407     | A                             |
| C-A    | 109                   | 27                      |                   |       | 109                 |                   |                 |           |                               |
| A-B    | 120                   | 30                      |                   |       | 120                 |                   |                 |           |                               |
| A-C    | 132                   | 33                      |                   |       | 132                 |                   |                 |           |                               |

# DO Something 2033, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 6.54               | 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 | DO Something 2033 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 334                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 268                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 264                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 107 | 227 |
|  | B  | 167 | 0   | 101 |
|  | C  | 198 | 66  | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.61    | 19.06         | 1.5             | C       | 246                     | 369                           |
| C-AB   | 0.15    | 6.11          | 0.3             | A       | 84                      | 125                           |
| C-A    |         |               |                 |         | 159                     | 238                           |
| A-B    |         |               |                 |         | 98                      | 147                           |
| A-C    |         |               |                 |         | 208                     | 312                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 202                   | 50                      | 525               | 0.385 | 199                 | 0.0               | 0.6             | 10.990    | B                             |
| C-AB   | 64                    | 16                      | 673               | 0.095 | 63                  | 0.0               | 0.1             | 5.902     | A                             |
| C-A    | 135                   | 34                      |                   |       | 135                 |                   |                 |           |                               |
| A-B    | 81                    | 20                      |                   |       | 81                  |                   |                 |           |                               |
| A-C    | 171                   | 43                      |                   |       | 171                 |                   |                 |           |                               |

#### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 241                   | 60                      | 507               | 0.475 | 240                 | 0.6               | 0.9             | 13.402    | B                             |
| C-AB   | 80                    | 20                      | 682               | 0.118 | 80                  | 0.1               | 0.2             | 5.982     | A                             |
| C-A    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
| A-B    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| A-C    | 204                   | 51                      |                   |       | 204                 |                   |                 |           |                               |

#### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 295                   | 74                      | 484               | 0.610 | 293                 | 0.9               | 1.5             | 18.615    | C                             |
| C-AB   | 106                   | 27                      | 695               | 0.153 | 106                 | 0.2               | 0.3             | 6.112     | A                             |
| C-A    | 185                   | 46                      |                   |       | 185                 |                   |                 |           |                               |
| A-B    | 118                   | 29                      |                   |       | 118                 |                   |                 |           |                               |
| A-C    | 250                   | 62                      |                   |       | 250                 |                   |                 |           |                               |

#### 17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 295                   | 74                      | 483               | 0.610 | 295                 | 1.5               | 1.5             | 19.057    | C                             |
| C-AB   | 106                   | 27                      | 695               | 0.153 | 106                 | 0.3               | 0.3             | 6.115     | A                             |
| C-A    | 184                   | 46                      |                   |       | 184                 |                   |                 |           |                               |
| A-B    | 118                   | 29                      |                   |       | 118                 |                   |                 |           |                               |
| A-C    | 250                   | 62                      |                   |       | 250                 |                   |                 |           |                               |

**18:00 - 18:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 241                   | 60                      | 507               | 0.475 | 243                 | 1.5               | 0.9             | 13.763    | B                             |
| C-AB   | 81                    | 20                      | 682               | 0.118 | 81                  | 0.3               | 0.2             | 5.991     | A                             |
| C-A    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
| A-B    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| A-C    | 204                   | 51                      |                   |       | 204                 |                   |                 |           |                               |

**18:15 - 18:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 202                   | 50                      | 524               | 0.385 | 203                 | 0.9               | 0.6             | 11.243    | B                             |
| C-AB   | 64                    | 16                      | 673               | 0.095 | 64                  | 0.2               | 0.1             | 5.915     | A                             |
| C-A    | 135                   | 34                      |                   |       | 135                 |                   |                 |           |                               |
| A-B    | 81                    | 20                      |                   |       | 81                  |                   |                 |           |                               |
| A-C    | 171                   | 43                      |                   |       | 171                 |                   |                 |           |                               |

# DO Something 2043, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 17.99              | 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 | DO Something 2043 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 366                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 251                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 625                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 173 | 193 |
|  | B  | 117 | 0   | 134 |
|  | C  | 294 | 331 | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.67    | 26.03         | 1.9             | D       | 230                     | 345                           |
| C-AB   | 0.84    | 29.55         | 6.1             | D       | 491                     | 737                           |
| C-A    |         |               |                 |         | 82                      | 124                           |
| A-B    |         |               |                 |         | 159                     | 238                           |
| A-C    |         |               |                 |         | 177                     | 266                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 189                   | 47                      | 494               | 0.382 | 187                 | 0.0               | 0.6             | 11.613    | B                             |
| C-AB   | 360                   | 90                      | 717               | 0.503 | 355                 | 0.0               | 1.2             | 9.877     | A                             |
| C-A    | 110                   | 28                      |                   |       | 110                 |                   |                 |           |                               |
| A-B    | 130                   | 33                      |                   |       | 130                 |                   |                 |           |                               |
| A-C    | 145                   | 36                      |                   |       | 145                 |                   |                 |           |                               |

#### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 226                   | 56                      | 462               | 0.488 | 224                 | 0.6               | 0.9             | 15.036    | C                             |
| C-AB   | 467                   | 117                     | 737               | 0.633 | 463                 | 1.2               | 2.1             | 13.152    | B                             |
| C-A    | 95                    | 24                      |                   |       | 95                  |                   |                 |           |                               |
| A-B    | 156                   | 39                      |                   |       | 156                 |                   |                 |           |                               |
| A-C    | 174                   | 43                      |                   |       | 174                 |                   |                 |           |                               |

#### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 276                   | 69                      | 417               | 0.663 | 273                 | 0.9               | 1.8             | 24.388    | C                             |
| C-AB   | 638                   | 160                     | 764               | 0.835 | 624                 | 2.1               | 5.6             | 25.079    | D                             |
| C-A    | 50                    | 12                      |                   |       | 50                  |                   |                 |           |                               |
| A-B    | 190                   | 48                      |                   |       | 190                 |                   |                 |           |                               |
| A-C    | 212                   | 53                      |                   |       | 212                 |                   |                 |           |                               |

#### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 276                   | 69                      | 413               | 0.669 | 276                 | 1.8               | 1.9             | 26.026    | D                             |
| C-AB   | 645                   | 161                     | 769               | 0.839 | 642                 | 5.6               | 6.1             | 29.547    | D                             |
| C-A    | 43                    | 11                      |                   |       | 43                  |                   |                 |           |                               |
| A-B    | 190                   | 48                      |                   |       | 190                 |                   |                 |           |                               |
| A-C    | 212                   | 53                      |                   |       | 212                 |                   |                 |           |                               |



**09:00 - 09:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 226                   | 56                      | 458               | 0.493 | 229                 | 1.9               | 1.0             | 15.979    | C                             |
| C-AB   | 473                   | 118                     | 743               | 0.637 | 488                 | 6.1               | 2.4             | 15.166    | C                             |
| C-A    | 88                    | 22                      |                   |       | 88                  |                   |                 |           |                               |
| A-B    | 156                   | 39                      |                   |       | 156                 |                   |                 |           |                               |
| A-C    | 174                   | 43                      |                   |       | 174                 |                   |                 |           |                               |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 189                   | 47                      | 492               | 0.384 | 190                 | 1.0               | 0.6             | 11.991    | B                             |
| C-AB   | 363                   | 91                      | 720               | 0.505 | 368                 | 2.4               | 1.3             | 10.411    | B                             |
| C-A    | 107                   | 27                      |                   |       | 107                 |                   |                 |           |                               |
| A-B    | 130                   | 33                      |                   |       | 130                 |                   |                 |           |                               |
| A-C    | 145                   | 36                      |                   |       | 145                 |                   |                 |           |                               |

# DO Something 2043, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 7.91               | 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 | DO Something 2043 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 365                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 290                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 289                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |
|------|----|-----|-----|-----|
|      | A  | B   | C   |     |
| From | A  | 0   | 115 | 250 |
|      | B  | 181 | 0   | 109 |
|      | C  | 218 | 71  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.68    | 23.59         | 2.0             | C       | 266                     | 399                           |
| C-AB   | 0.17    | 6.17          | 0.3             | A       | 93                      | 140                           |
| C-A    |         |               |                 |         | 172                     | 258                           |
| A-B    |         |               |                 |         | 106                     | 158                           |
| A-C    |         |               |                 |         | 229                     | 344                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 218                   | 55                      | 516               | 0.423 | 215                 | 0.0               | 0.7             | 11.868    | B                             |
| C-AB   | 71                    | 18                      | 678               | 0.104 | 70                  | 0.0               | 0.2             | 5.917     | A                             |
| C-A    | 147                   | 37                      |                   |       | 147                 |                   |                 |           |                               |
| A-B    | 87                    | 22                      |                   |       | 87                  |                   |                 |           |                               |
| A-C    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |

#### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 261                   | 65                      | 497               | 0.524 | 259                 | 0.7               | 1.1             | 15.042    | C                             |
| C-AB   | 89                    | 22                      | 688               | 0.130 | 89                  | 0.2               | 0.2             | 6.011     | A                             |
| C-A    | 170                   | 43                      |                   |       | 170                 |                   |                 |           |                               |
| A-B    | 103                   | 26                      |                   |       | 103                 |                   |                 |           |                               |
| A-C    | 225                   | 56                      |                   |       | 225                 |                   |                 |           |                               |

#### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 319                   | 80                      | 471               | 0.678 | 316                 | 1.1               | 2.0             | 22.664    | C                             |
| C-AB   | 119                   | 30                      | 704               | 0.169 | 119                 | 0.2               | 0.3             | 6.158     | A                             |
| C-A    | 199                   | 50                      |                   |       | 199                 |                   |                 |           |                               |
| A-B    | 127                   | 32                      |                   |       | 127                 |                   |                 |           |                               |
| A-C    | 275                   | 69                      |                   |       | 275                 |                   |                 |           |                               |

#### 17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 319                   | 80                      | 471               | 0.678 | 319                 | 2.0               | 2.0             | 23.592    | C                             |
| C-AB   | 119                   | 30                      | 704               | 0.169 | 119                 | 0.3               | 0.3             | 6.165     | A                             |
| C-A    | 199                   | 50                      |                   |       | 199                 |                   |                 |           |                               |
| A-B    | 127                   | 32                      |                   |       | 127                 |                   |                 |           |                               |
| A-C    | 275                   | 69                      |                   |       | 275                 |                   |                 |           |                               |

**18:00 - 18:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 261                   | 65                      | 497               | 0.525 | 264                 | 2.0               | 1.1             | 15.689    | C                             |
| C-AB   | 90                    | 22                      | 689               | 0.130 | 90                  | 0.3               | 0.2             | 6.019     | A                             |
| C-A    | 170                   | 43                      |                   |       | 170                 |                   |                 |           |                               |
| A-B    | 103                   | 26                      |                   |       | 103                 |                   |                 |           |                               |
| A-C    | 225                   | 56                      |                   |       | 225                 |                   |                 |           |                               |

**18:15 - 18:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 218                   | 55                      | 516               | 0.423 | 220                 | 1.1               | 0.8             | 12.226    | B                             |
| C-AB   | 71                    | 18                      | 678               | 0.104 | 71                  | 0.2               | 0.2             | 5.934     | A                             |
| C-A    | 147                   | 37                      |                   |       | 147                 |                   |                 |           |                               |
| A-B    | 87                    | 22                      |                   |       | 87                  |                   |                 |           |                               |
| A-C    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |

# DO Something 2043+AT, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 16.17              | 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 |
|-----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D15 | DO Something 2043+AT | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 347                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 251                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 596                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 173 | 174 |
|  | B  | 117 | 0   | 134 |
|  | C  | 265 | 331 | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.65    | 24.06         | 1.8             | C       | 230                     | 345                           |
| C-AB   | 0.81    | 26.04         | 5.1             | D       | 468                     | 702                           |
| C-A    |         |               |                 |         | 79                      | 119                           |
| A-B    |         |               |                 |         | 159                     | 238                           |
| A-C    |         |               |                 |         | 160                     | 239                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 189                   | 47                      | 501               | 0.377 | 187                 | 0.0               | 0.6             | 11.369    | B                             |
| C-AB   | 347                   | 87                      | 705               | 0.493 | 343                 | 0.0               | 1.2             | 9.856     | A                             |
| C-A    | 101                   | 25                      |                   |       | 101                 |                   |                 |           |                               |
| A-B    | 130                   | 33                      |                   |       | 130                 |                   |                 |           |                               |
| A-C    | 131                   | 33                      |                   |       | 131                 |                   |                 |           |                               |

#### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 226                   | 56                      | 471               | 0.479 | 224                 | 0.6               | 0.9             | 14.537    | B                             |
| C-AB   | 446                   | 112                     | 722               | 0.618 | 443                 | 1.2               | 1.9             | 12.894    | B                             |
| C-A    | 90                    | 22                      |                   |       | 90                  |                   |                 |           |                               |
| A-B    | 156                   | 39                      |                   |       | 156                 |                   |                 |           |                               |
| A-C    | 156                   | 39                      |                   |       | 156                 |                   |                 |           |                               |

#### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 276                   | 69                      | 428               | 0.646 | 273                 | 0.9               | 1.7             | 22.802    | C                             |
| C-AB   | 603                   | 151                     | 746               | 0.809 | 592                 | 1.9               | 4.7             | 22.984    | C                             |
| C-A    | 53                    | 13                      |                   |       | 53                  |                   |                 |           |                               |
| A-B    | 190                   | 48                      |                   |       | 190                 |                   |                 |           |                               |
| A-C    | 192                   | 48                      |                   |       | 192                 |                   |                 |           |                               |

#### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 276                   | 69                      | 425               | 0.650 | 276                 | 1.7               | 1.8             | 24.055    | C                             |
| C-AB   | 608                   | 152                     | 749               | 0.812 | 607                 | 4.7               | 5.1             | 26.035    | D                             |
| C-A    | 48                    | 12                      |                   |       | 48                  |                   |                 |           |                               |
| A-B    | 190                   | 48                      |                   |       | 190                 |                   |                 |           |                               |
| A-C    | 192                   | 48                      |                   |       | 192                 |                   |                 |           |                               |

**09:00 - 09:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 226                   | 56                      | 467               | 0.483 | 229                 | 1.8               | 1.0             | 15.306    | C                             |
| C-AB   | 451                   | 113                     | 727               | 0.621 | 463                 | 5.1               | 2.2             | 14.409    | B                             |
| C-A    | 85                    | 21                      |                   |       | 85                  |                   |                 |           |                               |
| A-B    | 156                   | 39                      |                   |       | 156                 |                   |                 |           |                               |
| A-C    | 156                   | 39                      |                   |       | 156                 |                   |                 |           |                               |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 189                   | 47                      | 499               | 0.379 | 190                 | 1.0               | 0.6             | 11.714    | B                             |
| C-AB   | 350                   | 87                      | 707               | 0.495 | 354                 | 2.2               | 1.2             | 10.336    | B                             |
| C-A    | 99                    | 25                      |                   |       | 99                  |                   |                 |           |                               |
| A-B    | 130                   | 33                      |                   |       | 130                 |                   |                 |           |                               |
| A-C    | 131                   | 33                      |                   |       | 131                 |                   |                 |           |                               |

# DO Something 2043+AT, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 7.81               | 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 |
|-----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D16 | DO Something 2043+AT | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 340                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 290                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 267                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 115 | 225 |
|  | B  | 181 | 0   | 109 |
|  | C  | 196 | 71  | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.66    | 22.07         | 1.9             | C       | 266                     | 399                           |
| C-AB   | 0.16    | 6.23          | 0.3             | A       | 90                      | 134                           |
| C-A    |         |               |                 |         | 155                     | 233                           |
| A-B    |         |               |                 |         | 106                     | 158                           |
| A-C    |         |               |                 |         | 206                     | 310                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 218                   | 55                      | 523               | 0.417 | 216                 | 0.0               | 0.7             | 11.599    | B                             |
| C-AB   | 69                    | 17                      | 671               | 0.102 | 68                  | 0.0               | 0.1             | 5.968     | A                             |
| C-A    | 132                   | 33                      |                   |       | 132                 |                   |                 |           |                               |
| A-B    | 87                    | 22                      |                   |       | 87                  |                   |                 |           |                               |
| A-C    | 169                   | 42                      |                   |       | 169                 |                   |                 |           |                               |

#### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 261                   | 65                      | 506               | 0.515 | 259                 | 0.7               | 1.0             | 14.528    | B                             |
| C-AB   | 86                    | 22                      | 680               | 0.127 | 86                  | 0.1               | 0.2             | 6.066     | A                             |
| C-A    | 154                   | 38                      |                   |       | 154                 |                   |                 |           |                               |
| A-B    | 103                   | 26                      |                   |       | 103                 |                   |                 |           |                               |
| A-C    | 202                   | 51                      |                   |       | 202                 |                   |                 |           |                               |

#### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 319                   | 80                      | 482               | 0.663 | 316                 | 1.0               | 1.8             | 21.316    | C                             |
| C-AB   | 114                   | 28                      | 692               | 0.164 | 114                 | 0.2               | 0.3             | 6.222     | A                             |
| C-A    | 180                   | 45                      |                   |       | 180                 |                   |                 |           |                               |
| A-B    | 127                   | 32                      |                   |       | 127                 |                   |                 |           |                               |
| A-C    | 248                   | 62                      |                   |       | 248                 |                   |                 |           |                               |

#### 17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 319                   | 80                      | 482               | 0.663 | 319                 | 1.8               | 1.9             | 22.072    | C                             |
| C-AB   | 114                   | 28                      | 692               | 0.165 | 114                 | 0.3               | 0.3             | 6.228     | A                             |
| C-A    | 180                   | 45                      |                   |       | 180                 |                   |                 |           |                               |
| A-B    | 127                   | 32                      |                   |       | 127                 |                   |                 |           |                               |
| A-C    | 248                   | 62                      |                   |       | 248                 |                   |                 |           |                               |

**18:00 - 18:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 261                   | 65                      | 506               | 0.516 | 264                 | 1.9               | 1.1             | 15.081    | C                             |
| C-AB   | 86                    | 22                      | 680               | 0.127 | 87                  | 0.3               | 0.2             | 6.076     | A                             |
| C-A    | 154                   | 38                      |                   |       | 154                 |                   |                 |           |                               |
| A-B    | 103                   | 26                      |                   |       | 103                 |                   |                 |           |                               |
| A-C    | 202                   | 51                      |                   |       | 202                 |                   |                 |           |                               |

**18:15 - 18:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 218                   | 55                      | 523               | 0.417 | 220                 | 1.1               | 0.7             | 11.929    | B                             |
| C-AB   | 69                    | 17                      | 671               | 0.102 | 69                  | 0.2               | 0.2             | 5.982     | A                             |
| C-A    | 132                   | 33                      |                   |       | 132                 |                   |                 |           |                               |
| A-B    | 87                    | 22                      |                   |       | 87                  |                   |                 |           |                               |
| A-C    | 169                   | 42                      |                   |       | 169                 |                   |                 |           |                               |

# DO Something 2043+ Ring Road, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 13.70              | 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 |
|-----|------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D17 | DO Something 2043+ Ring Road | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 304                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 251                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 530                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 173 | 131 |
|  | B  | 117 | 0   | 134 |
|  | C  | 199 | 331 | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.61    | 20.62         | 1.5             | C       | 230                     | 345                           |
| C-AB   | 0.76    | 21.20         | 3.6             | C       | 419                     | 629                           |
| C-A    |         |               |                 |         | 67                      | 101                           |
| A-B    |         |               |                 |         | 159                     | 238                           |
| A-C    |         |               |                 |         | 120                     | 180                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 189                   | 47                      | 516               | 0.366 | 187                 | 0.0               | 0.6             | 10.859    | B                             |
| C-AB   | 320                   | 80                      | 679               | 0.471 | 316                 | 0.0               | 1.0             | 9.848     | A                             |
| C-A    | 79                    | 20                      |                   |       | 79                  |                   |                 |           |                               |
| A-B    | 130                   | 33                      |                   |       | 130                 |                   |                 |           |                               |
| A-C    | 99                    | 25                      |                   |       | 99                  |                   |                 |           |                               |

#### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 226                   | 56                      | 490               | 0.461 | 225                 | 0.6               | 0.8             | 13.529    | B                             |
| C-AB   | 403                   | 101                     | 689               | 0.585 | 401                 | 1.0               | 1.6             | 12.465    | B                             |
| C-A    | 73                    | 18                      |                   |       | 73                  |                   |                 |           |                               |
| A-B    | 156                   | 39                      |                   |       | 156                 |                   |                 |           |                               |
| A-C    | 118                   | 29                      |                   |       | 118                 |                   |                 |           |                               |

#### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 276                   | 69                      | 452               | 0.611 | 274                 | 0.8               | 1.5             | 19.892    | C                             |
| C-AB   | 532                   | 133                     | 704               | 0.755 | 525                 | 1.6               | 3.4             | 19.745    | C                             |
| C-A    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
| A-B    | 190                   | 48                      |                   |       | 190                 |                   |                 |           |                               |
| A-C    | 144                   | 36                      |                   |       | 144                 |                   |                 |           |                               |

#### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 276                   | 69                      | 450               | 0.614 | 276                 | 1.5               | 1.5             | 20.625    | C                             |
| C-AB   | 534                   | 134                     | 706               | 0.757 | 533                 | 3.4               | 3.6             | 21.200    | C                             |
| C-A    | 49                    | 12                      |                   |       | 49                  |                   |                 |           |                               |
| A-B    | 190                   | 48                      |                   |       | 190                 |                   |                 |           |                               |
| A-C    | 144                   | 36                      |                   |       | 144                 |                   |                 |           |                               |

**09:00 - 09:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 226                   | 56                      | 487               | 0.463 | 228                 | 1.5               | 0.9             | 14.040    | B                             |
| C-AB   | 406                   | 101                     | 692               | 0.587 | 413                 | 3.6               | 1.8             | 13.346    | B                             |
| C-A    | 71                    | 18                      |                   |       | 71                  |                   |                 |           |                               |
| A-B    | 156                   | 39                      |                   |       | 156                 |                   |                 |           |                               |
| A-C    | 118                   | 29                      |                   |       | 118                 |                   |                 |           |                               |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 189                   | 47                      | 514               | 0.367 | 190                 | 0.9               | 0.6             | 11.143    | B                             |
| C-AB   | 321                   | 80                      | 680               | 0.473 | 324                 | 1.8               | 1.1             | 10.231    | B                             |
| C-A    | 78                    | 19                      |                   |       | 78                  |                   |                 |           |                               |
| A-B    | 130                   | 33                      |                   |       | 130                 |                   |                 |           |                               |
| A-C    | 99                    | 25                      |                   |       | 99                  |                   |                 |           |                               |

# DO Something 2043+ Ring Road, 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 |
|----------|---------------------|---------------|----------------------|-----------------------|--------------------|--------------|
| 1-1      | 233114 - JUNCTION 4 | T-Junction    | Two-way              |                       | 7.79               | 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 |
|-----|------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D18 | DO Something 2043+ Ring Road | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| A   |            | ONE HOUR     | ✓            | 284                     | 100.000            |
| B   |            | ONE HOUR     | ✓            | 290                     | 100.000            |
| C   |            | ONE HOUR     | ✓            | 218                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|  | To |     |     |     |
|--|----|-----|-----|-----|
|  |    | A   | B   | C   |
|  | A  | 0   | 115 | 169 |
|  | B  | 181 | 0   | 109 |
|  | C  | 147 | 71  | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |
|--|----|---|---|---|
|  |    | A | B | C |
|  | 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 (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-AC   | 0.63    | 19.30         | 1.7             | C       | 266                     | 399                           |
| C-AB   | 0.15    | 6.38          | 0.2             | A       | 83                      | 124                           |
| C-A    |         |               |                 |         | 117                     | 176                           |
| A-B    |         |               |                 |         | 106                     | 158                           |
| A-C    |         |               |                 |         | 155                     | 233                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 218                   | 55                      | 539               | 0.405 | 216                 | 0.0               | 0.7             | 11.040    | B                             |
| C-AB   | 64                    | 16                      | 655               | 0.098 | 64                  | 0.0               | 0.1             | 6.082     | A                             |
| C-A    | 100                   | 25                      |                   |       | 100                 |                   |                 |           |                               |
| A-B    | 87                    | 22                      |                   |       | 87                  |                   |                 |           |                               |
| A-C    | 127                   | 32                      |                   |       | 127                 |                   |                 |           |                               |

#### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 261                   | 65                      | 525               | 0.497 | 260                 | 0.7               | 1.0             | 13.501    | B                             |
| C-AB   | 80                    | 20                      | 661               | 0.121 | 80                  | 0.1               | 0.2             | 6.198     | A                             |
| C-A    | 116                   | 29                      |                   |       | 116                 |                   |                 |           |                               |
| A-B    | 103                   | 26                      |                   |       | 103                 |                   |                 |           |                               |
| A-C    | 152                   | 38                      |                   |       | 152                 |                   |                 |           |                               |

#### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 319                   | 80                      | 505               | 0.632 | 317                 | 1.0               | 1.6             | 18.807    | C                             |
| C-AB   | 103                   | 26                      | 668               | 0.155 | 103                 | 0.2               | 0.2             | 6.372     | A                             |
| C-A    | 137                   | 34                      |                   |       | 137                 |                   |                 |           |                               |
| A-B    | 127                   | 32                      |                   |       | 127                 |                   |                 |           |                               |
| A-C    | 186                   | 47                      |                   |       | 186                 |                   |                 |           |                               |

#### 17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 319                   | 80                      | 505               | 0.632 | 319                 | 1.6               | 1.7             | 19.299    | C                             |
| C-AB   | 103                   | 26                      | 668               | 0.155 | 103                 | 0.2               | 0.2             | 6.376     | A                             |
| C-A    | 137                   | 34                      |                   |       | 137                 |                   |                 |           |                               |
| A-B    | 127                   | 32                      |                   |       | 127                 |                   |                 |           |                               |
| A-C    | 186                   | 47                      |                   |       | 186                 |                   |                 |           |                               |

**18:00 - 18:15**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 261                   | 65                      | 525               | 0.497 | 263                 | 1.7               | 1.0             | 13.900    | B                             |
| C-AB   | 80                    | 20                      | 661               | 0.121 | 80                  | 0.2               | 0.2             | 6.206     | A                             |
| C-A    | 116                   | 29                      |                   |       | 116                 |                   |                 |           |                               |
| A-B    | 103                   | 26                      |                   |       | 103                 |                   |                 |           |                               |
| A-C    | 152                   | 38                      |                   |       | 152                 |                   |                 |           |                               |

**18:15 - 18:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| B-AC   | 218                   | 55                      | 539               | 0.405 | 220                 | 1.0               | 0.7             | 11.317    | B                             |
| C-AB   | 64                    | 16                      | 655               | 0.098 | 65                  | 0.2               | 0.1             | 6.098     | A                             |
| C-A    | 100                   | 25                      |                   |       | 100                 |                   |                 |           |                               |
| A-B    | 87                    | 22                      |                   |       | 87                  |                   |                 |           |                               |
| A-C    | 127                   | 32                      |                   |       | 127                 |                   |                 |           |                               |



| <b>Junctions 9</b>                                                                                                                                               |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>ARCADY 9 - Roundabout Module</b>                                                                                                                              |  |
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| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |

**Filename:** Junct 2- Atlan-Western distribtor-peak count +GFA Final.j9

**Path:** I:\DWGS\233\101-150\233114\3.0 Calculations\1. Civils\233114-PUNCH-XX-XX-CA-C-0002 Design Calculations\2.0 Traffic Calculations\Junction 2-Atlan Roundabout-Western distributor + Bothar Stiofan Rd

**Report generation date:** 17/09/2025 16:53:19

- 
- »Existing, 2023, AM
  - »Existing, 2023, PM
  - »Do Nothing, 2028, AM
  - »Do Nothing, 2028, PM
  - »Do Nothing, 2033, AM
  - »Do Nothing, 2033, PM
  - »Do Nothing, 2043, AM
  - »Do Nothing, 2043, PM
  - »Do Something, 2028, AM
  - »Do Something, 2028, PM
  - »Do Something, 2033, AM
  - »Do Something, 2033, PM
  - »Do Something, 2043, AM
  - »Do Something, 2043, PM
  - »Do Something, 2043 +AT, AM
  - »Do Something, 2043 +AT, PM
  - »Do Something, 2043+ Ring Road, AM
  - »Do Something, 2043+ Ring Road, PM

## Summary of junction performance

|       | AM                            |           |      |     | PM          |           |      |     |
|-------|-------------------------------|-----------|------|-----|-------------|-----------|------|-----|
|       | Queue (PCU)                   | Delay (s) | RFC  | LOS | Queue (PCU) | Delay (s) | RFC  | LOS |
|       | Existing, 2023                |           |      |     |             |           |      |     |
| Arm 1 | 0.9                           | 10.45     | 0.47 | B   | 5.6         | 39.02     | 0.87 | E   |
| Arm 2 | 0.6                           | 10.27     | 0.37 | B   | 0.3         | 12.45     | 0.22 | B   |
| Arm 3 | 100.0                         | 507.55    | 1.24 | F   | 12.2        | 67.74     | 0.96 | F   |
| Arm 4 | 2.6                           | 24.88     | 0.74 | C   | 2.6         | 22.49     | 0.74 | C   |
|       | Do Nothing, 2028              |           |      |     |             |           |      |     |
| Arm 1 | 1.3                           | 13.43     | 0.57 | B   | 54.1        | 285.75    | 1.16 | F   |
| Arm 2 | 1.0                           | 14.54     | 0.51 | B   | 1.0         | 23.79     | 0.50 | C   |
| Arm 3 | 189.5                         | 931.32    | 1.40 | F   | 62.2        | 298.06    | 1.15 | F   |
| Arm 4 | 7.0                           | 55.97     | 0.90 | F   | 9.1         | 65.13     | 0.93 | F   |
|       | Do Nothing, 2033              |           |      |     |             |           |      |     |
| Arm 1 | 1.6                           | 15.33     | 0.62 | C   | 82.3        | 490.73    | 1.25 | F   |
| Arm 2 | 1.3                           | 17.09     | 0.57 | C   | 1.2         | 26.81     | 0.55 | D   |
| Arm 3 | 390.9                         | 1941.95   | 1.68 | F   | 86.8        | 444.01    | 1.21 | F   |
| Arm 4 | 13.1                          | 96.06     | 0.98 | F   | 16.3        | 105.02    | 1.00 | F   |
|       | Do Nothing, 2043              |           |      |     |             |           |      |     |
| Arm 1 | 2.1                           | 18.88     | 0.69 | C   | 151.7       | 897.57    | 1.38 | F   |
| Arm 2 | 1.9                           | 23.18     | 0.66 | C   | 1.6         | 32.70     | 0.62 | D   |
| Arm 3 | 542.2                         | 2682.08   | 1.87 | F   | 168.3       | 825.14    | 1.36 | F   |
| Arm 4 | 27.2                          | 172.21    | 1.06 | F   | 42.2        | 238.19    | 1.11 | F   |
|       | Do Something, 2028            |           |      |     |             |           |      |     |
| Arm 1 | 1.4                           | 13.96     | 0.58 | B   | 65.2        | 365.92    | 1.19 | F   |
| Arm 2 | 1.1                           | 15.47     | 0.54 | C   | 1.4         | 28.69     | 0.60 | D   |
| Arm 3 | 200.9                         | 997.13    | 1.42 | F   | 71.2        | 353.48    | 1.18 | F   |
| Arm 4 | 7.7                           | 61.44     | 0.91 | F   | 10.8        | 76.03     | 0.95 | F   |
|       | Do Something, 2033            |           |      |     |             |           |      |     |
| Arm 1 | 1.7                           | 15.96     | 0.63 | C   | 98.3        | 578.46    | 1.28 | F   |
| Arm 2 | 1.4                           | 18.08     | 0.59 | C   | 1.7         | 33.46     | 0.65 | D   |
| Arm 3 | 405.3                         | 2015.64   | 1.70 | F   | 104.4       | 536.94    | 1.25 | F   |
| Arm 4 | 14.8                          | 106.45    | 0.99 | F   | 19.1        | 119.71    | 1.01 | F   |
|       | Do Something, 2043            |           |      |     |             |           |      |     |
| Arm 1 | 2.2                           | 19.71     | 0.70 | C   | 169.0       | 1031.52   | 1.41 | F   |
| Arm 2 | 2.1                           | 25.17     | 0.69 | D   | 2.3         | 41.87     | 0.72 | E   |
| Arm 3 | 557.0                         | 2761.40   | 1.90 | F   | 183.8       | 914.65    | 1.39 | F   |
| Arm 4 | 29.8                          | 186.07    | 1.07 | F   | 48.0        | 282.36    | 1.14 | F   |
|       | Do Something, 2043 +AT        |           |      |     |             |           |      |     |
| Arm 1 | 1.8                           | 16.53     | 0.64 | C   | 101.9       | 597.66    | 1.29 | F   |
| Arm 2 | 1.8                           | 21.13     | 0.65 | C   | 2.1         | 37.87     | 0.69 | E   |
| Arm 3 | 415.4                         | 2077.96   | 1.72 | F   | 105.3       | 542.36    | 1.25 | F   |
| Arm 4 | 13.5                          | 99.59     | 0.98 | F   | 21.8        | 133.61    | 1.03 | F   |
|       | Do Something, 2043+ Ring Road |           |      |     |             |           |      |     |
| Arm 1 | 1.2                           | 12.94     | 0.55 | B   | 30.6        | 163.30    | 1.07 | F   |
| Arm 2 | 1.4                           | 16.08     | 0.58 | C   | 1.6         | 27.98     | 0.62 | D   |
| Arm 3 | 219.5                         | 1103.92   | 1.46 | F   | 31.8        | 149.33    | 1.06 | F   |
| Arm 4 | 4.7                           | 41.14     | 0.84 | E   | 5.6         | 44.03     | 0.87 | E   |

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

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

## File summary

### File Description

|             |               |
|-------------|---------------|
| Title       |               |
| Location    |               |
| Site number |               |
| Date        | 29/07/2025    |
| Version     |               |
| Status      | (new file)    |
| Identifier  |               |
| Client      |               |
| Jobnumber   |               |
| Enumerator  | MPPNET\WNCube |
| Description |               |

## Units

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

## Analysis Options

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

## Demand Set Summary

| ID  | Scenario name                 | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|-------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1  | Existing, 2023                | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D2  | Existing, 2023                | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D3  | Do Nothing, 2028              | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D4  | Do Nothing, 2028              | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D5  | Do Nothing, 2033              | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D6  | Do Nothing, 2033              | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D7  | Do Nothing, 2043              | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D8  | Do Nothing, 2043              | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D9  | Do Something, 2028            | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D10 | Do Something, 2028            | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D11 | Do Something, 2033            | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D12 | Do Something, 2033            | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D13 | Do Something, 2043            | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D14 | Do Something, 2043            | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D15 | Do Something, 2043 +AT        | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D16 | Do Something, 2043 +AT        | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D17 | Do Something, 2043+ Ring Road | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D18 | Do Something, 2043+ Ring Road | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

## Analysis Set Details

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

# Existing, 2023, 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       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 257.89             | F            |

### Junction Network Options

| Driving side | Lighting       |
|--------------|----------------|
| Left         | Normal/unknown |

## Arms

### Arms

| Arm | Name     | Description |
|-----|----------|-------------|
| 1   | untitled |             |
| 2   | untitled |             |
| 3   | untitled |             |
| 4   | untitled |             |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit only |
|-----|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|-----------|
| 1   | 3.00                             | 4.92                | 2.0                             | 3.0                  | 46.8                              | 22.0                               |           |
| 2   | 3.00                             | 4.92                | 2.0                             | 3.0                  | 46.8                              | 18.0                               |           |
| 3   | 3.00                             | 4.92                | 2.0                             | 3.0                  | 46.8                              | 18.0                               |           |
| 4   | 3.00                             | 4.92                | 2.0                             | 3.0                  | 46.8                              | 39.0                               |           |

### Zebra Crossings

| Arm | Space between crossing and junction entry (Zebra) (PCU) | Vehicles queueing on exit (Zebra) (PCU) | Central Refuge | Crossing data type | Crossing length (entry side) (m) | Crossing time (entry side) (s) | Crossing length (exit side) (m) | Crossing time (exit side) (s) |
|-----|---------------------------------------------------------|-----------------------------------------|----------------|--------------------|----------------------------------|--------------------------------|---------------------------------|-------------------------------|
| 1   | 1.00                                                    | 1.00                                    | ✓              | Distance           | 3.00                             | 2.14                           | 3.02                            | 2.15                          |
| 3   | 1.00                                                    | 1.00                                    | ✓              | Distance           | 3.36                             | 2.40                           | 4.10                            | 2.93                          |
| 4   | 1.00                                                    | 1.00                                    | ✓              | Distance           | 3.50                             | 2.50                           | 4.84                            | 3.46                          |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Final slope | Final intercept (PCU/hr) |
|-----|-------------|--------------------------|
| 1   | 0.373       | 791                      |
| 2   | 0.379       | 804                      |
| 3   | 0.379       | 804                      |
| 4   | 0.343       | 728                      |

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 | Existing, 2023 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 275                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 184                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 792                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 361                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 20.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 38.00                            |
| 4   | [ONEHOUR]    | 25.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      |    | 1   | 2  | 3   | 4   |
| From | 1  | 0   | 51 | 201 | 23  |
|      | 2  | 70  | 0  | 59  | 55  |
|      | 3  | 383 | 71 | 4   | 334 |
|      | 4  | 71  | 39 | 249 | 2   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
| From | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.47    | 10.45         | 0.9             | B       | 252                     | 379                           |
| 2   | 0.37    | 10.27         | 0.6             | B       | 169                     | 253                           |
| 3   | 1.24    | 507.55        | 100.0           | F       | 727                     | 1090                          |
| 4   | 0.74    | 24.88         | 2.6             | C       | 331                     | 497                           |

## Main Results for each time segment

### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 207                   | 52                      | 271                       | 15.06                      | 690               | 0.300 | 205                 | 386                             | 0.0               | 0.4             | 7.405     | A                             |
| 2   | 139                   | 35                      | 357                       |                            | 644               | 0.215 | 137                 | 119                             | 0.0               | 0.3             | 7.087     | A                             |
| 3   | 596                   | 149                     | 112                       | 28.61                      | 735               | 0.812 | 581                 | 382                             | 0.0               | 3.8             | 21.712    | C                             |
| 4   | 272                   | 68                      | 388                       | 18.82                      | 582               | 0.467 | 268                 | 305                             | 0.0               | 0.9             | 11.362    | B                             |

### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 247                   | 62                      | 323                       | 17.98                      | 670               | 0.369 | 247                 | 453                             | 0.4               | 0.6             | 8.483     | A                             |
| 2   | 165                   | 41                      | 429                       |                            | 607               | 0.273 | 165                 | 141                             | 0.3               | 0.4             | 8.143     | A                             |
| 3   | 712                   | 178                     | 135                       | 34.16                      | 717               | 0.993 | 676                 | 459                             | 3.8               | 12.9            | 59.108    | F                             |
| 4   | 325                   | 81                      | 454                       | 22.47                      | 554               | 0.586 | 323                 | 357                             | 0.9               | 1.4             | 15.398    | C                             |

### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 303                   | 76                      | 382                       | 22.02                      | 648               | 0.467 | 302                 | 491                             | 0.6               | 0.9             | 10.346    | B                             |
| 2   | 203                   | 51                      | 522                       |                            | 555               | 0.365 | 202                 | 161                             | 0.4               | 0.6             | 10.171    | B                             |
| 3   | 872                   | 218                     | 165                       | 41.84                      | 701               | 1.244 | 698                 | 560                             | 12.9              | 56.4            | 192.935   | F                             |
| 4   | 397                   | 99                      | 480                       | 27.53                      | 541               | 0.734 | 393                 | 382                             | 1.4               | 2.5             | 23.497    | C                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 303                   | 76                      | 385                       | 22.02                      | 647               | 0.468 | 303                 | 494                             | 0.9               | 0.9             | 10.449    | B                             |
| 2   | 203                   | 51                      | 526                       |                            | 553               | 0.366 | 203                 | 162                             | 0.6               | 0.6             | 10.274    | B                             |
| 3   | 872                   | 218                     | 165                       | 41.84                      | 701               | 1.245 | 700                 | 564                             | 56.4              | 99.4            | 408.582   | F                             |
| 4   | 397                   | 99                      | 482                       | 27.53                      | 541               | 0.735 | 397                 | 383                             | 2.5               | 2.6             | 24.878    | C                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 247                   | 62                      | 332                       | 17.98                      | 667               | 0.371 | 248                 | 471                             | 0.9               | 0.6             | 8.618     | A                             |
| 2   | 165                   | 41                      | 435                       |                            | 603               | 0.274 | 166                 | 145                             | 0.6               | 0.4             | 8.246     | A                             |
| 3   | 712                   | 178                     | 135                       | 34.16                      | 714               | 0.997 | 710                 | 465                             | 99.4              | 100.0           | 507.552   | F                             |
| 4   | 325                   | 81                      | 474                       | 22.47                      | 546               | 0.595 | 329                 | 372                             | 2.6               | 1.5             | 16.935    | C                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 207                   | 52                      | 288                       | 15.06                      | 683               | 0.303 | 208                 | 453                             | 0.6               | 0.4             | 7.578     | A                             |
| 2   | 139                   | 35                      | 363                       |                            | 641               | 0.216 | 139                 | 132                             | 0.4               | 0.3             | 7.173     | A                             |
| 3   | 596                   | 149                     | 113                       | 28.61                      | 724               | 0.824 | 717                 | 389                             | 100.0             | 69.8            | 427.802   | F                             |
| 4   | 272                   | 68                      | 467                       | 18.82                      | 550               | 0.494 | 274                 | 363                             | 1.5               | 1.0             | 13.151    | B                             |

# Existing, 2023, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 4 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 44.90              | E            |

### 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 | Existing, 2023 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 498                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 72                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 622                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 399                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 36.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 35.00                            |
| 4   | [ONEHOUR]    | 27.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      | 1  | 2   | 3  | 4   |     |
| From | 1  | 0   | 35 | 414 | 49  |
|      | 2  | 27  | 0  | 32  | 13  |
|      | 3  | 265 | 25 | 1   | 331 |
|      | 4  | 42  | 14 | 342 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |   |
|------|----|---|---|---|---|
|      | 1  | 2 | 3 | 4 |   |
|      | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.87    | 39.02         | 5.6             | E       | 457                     | 685                           |
| 2   | 0.22    | 12.45         | 0.3             | B       | 66                      | 99                            |
| 3   | 0.96    | 67.74         | 12.2            | F       | 571                     | 856                           |
| 4   | 0.74    | 22.49         | 2.6             | C       | 366                     | 549                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 375                   | 94                      | 285                       | 27.10                      | 684               | 0.548 | 370                 | 248                             | 0.0               | 1.2             | 11.298    | B                             |
| 2   | 54                    | 14                      | 600                       |                            | 524               | 0.103 | 54                  | 55                              | 0.0               | 0.1             | 7.647     | A                             |
| 3   | 468                   | 117                     | 67                        | 26.35                      | 753               | 0.622 | 462                 | 587                             | 0.0               | 1.6             | 12.120    | B                             |
| 4   | 300                   | 75                      | 236                       | 20.33                      | 642               | 0.468 | 297                 | 293                             | 0.0               | 0.9             | 10.342    | B                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 448                   | 112                     | 342                       | 32.36                      | 663               | 0.675 | 444                 | 298                             | 1.2               | 2.0             | 16.237    | C                             |
| 2   | 65                    | 16                      | 721                       |                            | 459               | 0.141 | 65                  | 66                              | 0.1               | 0.2             | 9.127     | A                             |
| 3   | 559                   | 140                     | 80                        | 31.46                      | 738               | 0.758 | 554                 | 705                             | 1.6               | 2.9             | 19.045    | C                             |
| 4   | 359                   | 90                      | 283                       | 24.27                      | 623               | 0.576 | 357                 | 351                             | 0.9               | 1.3             | 13.430    | B                             |

#### 17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 548                   | 137                     | 416                       | 39.64                      | 635               | 0.863 | 536                 | 356                             | 2.0               | 5.0             | 32.850    | D                             |
| 2   | 79                    | 20                      | 873                       |                            | 375               | 0.211 | 79                  | 79                              | 0.2               | 0.3             | 12.131    | B                             |
| 3   | 685                   | 171                     | 98                        | 38.54                      | 717               | 0.955 | 658                 | 854                             | 2.9               | 9.6             | 47.132    | E                             |
| 4   | 439                   | 110                     | 338                       | 29.73                      | 601               | 0.731 | 435                 | 418                             | 1.3               | 2.5             | 21.043    | C                             |



**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 548                   | 137                     | 421                       | 39.64                      | 634               | 0.865 | 546                 | 363                             | 5.0               | 5.6             | 39.016    | E                             |
| 2   | 79                    | 20                      | 886                       |                            | 368               | 0.215 | 79                  | 81                              | 0.3               | 0.3             | 12.450    | B                             |
| 3   | 685                   | 171                     | 99                        | 38.54                      | 715               | 0.958 | 674                 | 866                             | 9.6               | 12.2            | 67.741    | F                             |
| 4   | 439                   | 110                     | 345                       | 29.73                      | 598               | 0.735 | 439                 | 428                             | 2.5               | 2.6             | 22.486    | C                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 448                   | 112                     | 350                       | 32.36                      | 660               | 0.678 | 461                 | 316                             | 5.6               | 2.2             | 19.151    | C                             |
| 2   | 65                    | 16                      | 742                       |                            | 448               | 0.145 | 65                  | 69                              | 0.3               | 0.2             | 9.425     | A                             |
| 3   | 559                   | 140                     | 82                        | 31.46                      | 733               | 0.763 | 594                 | 725                             | 12.2              | 3.5             | 30.613    | D                             |
| 4   | 359                   | 90                      | 302                       | 24.27                      | 616               | 0.583 | 363                 | 374                             | 2.6               | 1.4             | 14.535    | B                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 375                   | 94                      | 291                       | 27.10                      | 682               | 0.549 | 379                 | 255                             | 2.2               | 1.3             | 12.009    | B                             |
| 2   | 54                    | 14                      | 613                       |                            | 517               | 0.105 | 54                  | 56                              | 0.2               | 0.1             | 7.781     | A                             |
| 3   | 468                   | 117                     | 68                        | 26.35                      | 751               | 0.623 | 476                 | 599                             | 3.5               | 1.7             | 13.388    | B                             |
| 4   | 300                   | 75                      | 243                       | 20.33                      | 639               | 0.470 | 303                 | 301                             | 1.4               | 0.9             | 10.762    | B                             |

# Do Nothing, 2028, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 452.68             | F            |

### 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 | Do Nothing, 2028 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 323                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 232                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 871                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 437                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 23.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 42.00                            |
| 4   | [ONEHOUR]    | 30.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      | 1  | 2   | 3  | 4   |     |
| From | 1  | 0   | 68 | 230 | 25  |
|      | 2  | 91  | 0  | 73  | 68  |
|      | 3  | 416 | 77 | 4   | 374 |
|      | 4  | 84  | 53 | 298 | 2   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |   |
|------|----|---|---|---|---|
|      | 1  | 2 | 3 | 4 |   |
|      | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.57    | 13.43         | 1.3             | B       | 296                     | 445                           |
| 2   | 0.51    | 14.54         | 1.0             | B       | 213                     | 319                           |
| 3   | 1.40    | 931.32        | 189.5           | F       | 799                     | 1199                          |
| 4   | 0.90    | 55.97         | 7.0             | F       | 401                     | 601                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 243                   | 61                      | 320                       | 17.32                      | 672               | 0.362 | 241                 | 430                             | 0.0               | 0.6             | 8.318     | A                             |
| 2   | 175                   | 44                      | 415                       |                            | 613               | 0.285 | 173                 | 145                             | 0.0               | 0.4             | 8.150     | A                             |
| 3   | 656                   | 164                     | 139                       | 31.62                      | 719               | 0.913 | 628                 | 450                             | 0.0               | 6.9             | 33.317    | D                             |
| 4   | 329                   | 82                      | 426                       | 22.59                      | 565               | 0.582 | 324                 | 341                             | 0.0               | 1.3             | 14.588    | B                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 290                   | 73                      | 378                       | 20.68                      | 650               | 0.447 | 289                 | 485                             | 0.6               | 0.8             | 9.961     | A                             |
| 2   | 209                   | 52                      | 498                       |                            | 567               | 0.368 | 208                 | 169                             | 0.4               | 0.6             | 9.990     | A                             |
| 3   | 783                   | 196                     | 167                       | 37.76                      | 701               | 1.118 | 689                 | 540                             | 6.9               | 30.4            | 114.318   | F                             |
| 4   | 393                   | 98                      | 475                       | 26.97                      | 544               | 0.722 | 389                 | 381                             | 1.3               | 2.4             | 22.566    | C                             |

#### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 356                   | 89                      | 441                       | 25.32                      | 627               | 0.568 | 354                 | 515                             | 0.8               | 1.3             | 13.102    | B                             |
| 2   | 255                   | 64                      | 603                       |                            | 508               | 0.503 | 254                 | 191                             | 0.6               | 1.0             | 14.093    | B                             |
| 3   | 959                   | 240                     | 203                       | 46.24                      | 684               | 1.403 | 683                 | 653                             | 30.4              | 99.4            | 353.522   | F                             |
| 4   | 481                   | 120                     | 489                       | 33.03                      | 536               | 0.898 | 467                 | 397                             | 2.4               | 6.0             | 44.754    | E                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 356                   | 89                      | 449                       | 25.32                      | 623               | 0.571 | 356                 | 518                             | 1.3               | 1.3             | 13.427    | B                             |
| 2   | 255                   | 64                      | 612                       |                            | 503               | 0.508 | 255                 | 193                             | 1.0               | 1.0             | 14.542    | B                             |
| 3   | 959                   | 240                     | 205                       | 46.24                      | 683               | 1.404 | 683                 | 662                             | 99.4              | 168.4           | 707.211   | F                             |
| 4   | 481                   | 120                     | 490                       | 33.03                      | 535               | 0.899 | 477                 | 398                             | 6.0               | 7.0             | 55.966    | F                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 290                   | 73                      | 395                       | 20.68                      | 643               | 0.451 | 292                 | 495                             | 1.3               | 0.8             | 10.306    | B                             |
| 2   | 209                   | 52                      | 515                       |                            | 559               | 0.373 | 210                 | 173                             | 1.0               | 0.6             | 10.381    | B                             |
| 3   | 783                   | 196                     | 169                       | 37.76                      | 699               | 1.120 | 699                 | 556                             | 168.4             | 189.5           | 921.012   | F                             |
| 4   | 393                   | 98                      | 481                       | 26.97                      | 541               | 0.727 | 409                 | 386                             | 7.0               | 2.9             | 29.949    | D                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 243                   | 61                      | 336                       | 17.32                      | 666               | 0.365 | 244                 | 471                             | 0.8               | 0.6             | 8.565     | A                             |
| 2   | 175                   | 44                      | 426                       |                            | 608               | 0.287 | 175                 | 155                             | 0.6               | 0.4             | 8.345     | A                             |
| 3   | 656                   | 164                     | 141                       | 31.62                      | 711               | 0.922 | 708                 | 460                             | 189.5             | 176.5           | 931.319   | F                             |
| 4   | 329                   | 82                      | 473                       | 22.59                      | 546               | 0.602 | 334                 | 376                             | 2.9               | 1.6             | 17.391    | C                             |

# Do Nothing, 2028, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 217.67             | F            |

### 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 | Do Nothing, 2028 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 626                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 139                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 731                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 488                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 44.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 41.00                            |
| 4   | [ONEHOUR]    | 33.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      | 1  | 2   | 3  | 4   |     |
| From | 1  | 0   | 66 | 504 | 56  |
|      | 2  | 51  | 0  | 67  | 21  |
|      | 3  | 315 | 40 | 1   | 375 |
|      | 4  | 46  | 27 | 414 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |   |
|------|----|---|---|---|---|
|      | 1  | 2 | 3 | 4 |   |
|      | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.16    | 285.75        | 54.1            | F       | 574                     | 862                           |
| 2   | 0.50    | 23.79         | 1.0             | C       | 128                     | 191                           |
| 3   | 1.15    | 298.06        | 62.2            | F       | 671                     | 1006                          |
| 4   | 0.93    | 65.13         | 9.1             | F       | 448                     | 672                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 471                   | 118                     | 358                       | 33.13                      | 657               | 0.717 | 462                 | 304                             | 0.0               | 2.4             | 17.673    | C                             |
| 2   | 105                   | 26                      | 721                       |                            | 453               | 0.231 | 103                 | 98                              | 0.0               | 0.3             | 10.256    | B                             |
| 3   | 550                   | 138                     | 96                        | 30.87                      | 735               | 0.749 | 539                 | 729                             | 0.0               | 2.8             | 17.519    | C                             |
| 4   | 367                   | 92                      | 301                       | 24.84                      | 617               | 0.596 | 362                 | 334                             | 0.0               | 1.4             | 13.826    | B                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 563                   | 141                     | 429                       | 39.56                      | 631               | 0.892 | 548                 | 362                             | 2.4               | 6.0             | 38.135    | E                             |
| 2   | 125                   | 31                      | 860                       |                            | 375               | 0.333 | 124                 | 117                             | 0.3               | 0.5             | 14.291    | B                             |
| 3   | 657                   | 164                     | 114                       | 36.86                      | 716               | 0.918 | 639                 | 870                             | 2.8               | 7.3             | 39.344    | E                             |
| 4   | 439                   | 110                     | 357                       | 29.67                      | 594               | 0.739 | 434                 | 396                             | 1.4               | 2.6             | 21.859    | C                             |

#### 17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 689                   | 172                     | 508                       | 48.44                      | 601               | 1.147 | 591                 | 403                             | 6.0               | 30.5            | 128.955   | F                             |
| 2   | 153                   | 38                      | 970                       |                            | 311               | 0.492 | 151                 | 129                             | 0.5               | 0.9             | 22.248    | C                             |
| 3   | 805                   | 201                     | 132                       | 45.14                      | 701               | 1.148 | 692                 | 989                             | 7.3               | 35.5            | 127.413   | F                             |
| 4   | 537                   | 134                     | 393                       | 36.33                      | 578               | 0.929 | 518                 | 432                             | 2.6               | 7.5             | 48.404    | E                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 689                   | 172                     | 520                       | 48.44                      | 597               | 1.155 | 595                 | 407                             | 30.5              | 54.1            | 267.864   | F                             |
| 2   | 153                   | 38                      | 984                       |                            | 304               | 0.504 | 153                 | 130                             | 0.9               | 1.0             | 23.794    | C                             |
| 3   | 805                   | 201                     | 133                       | 45.14                      | 700               | 1.150 | 698                 | 1004                            | 35.5              | 62.2            | 263.377   | F                             |
| 4   | 537                   | 134                     | 396                       | 36.33                      | 577               | 0.932 | 531                 | 436                             | 7.5               | 9.1             | 65.134    | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 563                   | 141                     | 457                       | 39.56                      | 620               | 0.907 | 609                 | 389                             | 54.1              | 42.6            | 285.750   | F                             |
| 2   | 125                   | 31                      | 938                       |                            | 334               | 0.374 | 126                 | 128                             | 1.0               | 0.6             | 17.465    | C                             |
| 3   | 657                   | 164                     | 121                       | 36.86                      | 706               | 0.930 | 695                 | 944                             | 62.2              | 52.7            | 298.064   | F                             |
| 4   | 439                   | 110                     | 385                       | 29.67                      | 582               | 0.753 | 461                 | 431                             | 9.1               | 3.4             | 33.761    | D                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 471                   | 118                     | 378                       | 33.13                      | 650               | 0.725 | 627                 | 374                             | 42.6              | 3.7             | 136.203   | F                             |
| 2   | 105                   | 26                      | 880                       |                            | 370               | 0.283 | 105                 | 125                             | 0.6               | 0.4             | 13.670    | B                             |
| 3   | 550                   | 138                     | 111                       | 30.87                      | 710               | 0.775 | 697                 | 874                             | 52.7              | 16.0            | 183.111   | F                             |
| 4   | 367                   | 92                      | 378                       | 24.84                      | 586               | 0.627 | 374                 | 430                             | 3.4               | 1.8             | 17.465    | C                             |

# Do Nothing, 2033, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 987.57             | F            |

### 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 | Do Nothing, 2033 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 345                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 248                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 1038                    | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 465                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 23.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 42.00                            |
| 4   | [ONEHOUR]    | 30.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      | 1  | 2   | 3   | 4   |     |
| From | 1  | 0   | 73  | 245 | 27  |
|      | 2  | 97  | 0   | 78  | 73  |
|      | 3  | 513 | 104 | 5   | 416 |
|      | 4  | 90  | 56  | 317 | 2   |



## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |
|------|----|---|---|---|
|      | 1  | 2 | 3 | 4 |
|      | 1  | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.62    | 15.33         | 1.6             | C       | 317                     | 475                           |
| 2   | 0.57    | 17.09         | 1.3             | C       | 228                     | 341                           |
| 3   | 1.68    | 1941.95       | 390.9           | F       | 952                     | 1429                          |
| 4   | 0.98    | 96.06         | 13.1            | F       | 427                     | 640                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 260                   | 65                      | 349                       | 17.32                      | 661               | 0.393 | 257                 | 477                             | 0.0               | 0.6             | 8.865     | A                             |
| 2   | 187                   | 47                      | 441                       |                            | 599               | 0.312 | 185                 | 164                             | 0.0               | 0.4             | 8.656     | A                             |
| 3   | 781                   | 195                     | 148                       | 31.62                      | 713               | 1.096 | 685                 | 478                             | 0.0               | 24.1            | 77.547    | F                             |
| 4   | 350                   | 88                      | 483                       | 22.59                      | 542               | 0.646 | 343                 | 351                             | 0.0               | 1.7             | 17.545    | C                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 310                   | 78                      | 405                       | 20.68                      | 640               | 0.485 | 309                 | 511                             | 0.6               | 0.9             | 10.851    | B                             |
| 2   | 223                   | 56                      | 530                       |                            | 550               | 0.405 | 222                 | 185                             | 0.4               | 0.7             | 10.943    | B                             |
| 3   | 933                   | 233                     | 178                       | 37.76                      | 698               | 1.336 | 697                 | 573                             | 24.1              | 83.1            | 290.818   | F                             |
| 4   | 418                   | 105                     | 505                       | 26.97                      | 531               | 0.787 | 412                 | 371                             | 1.7               | 3.2             | 28.743    | D                             |

#### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 380                   | 95                      | 463                       | 25.32                      | 618               | 0.615 | 377                 | 537                             | 0.9               | 1.5             | 14.801    | B                             |
| 2   | 273                   | 68                      | 634                       |                            | 489               | 0.558 | 271                 | 207                             | 0.7               | 1.2             | 16.304    | C                             |
| 3   | 1143                  | 286                     | 217                       | 46.24                      | 681               | 1.678 | 681                 | 687                             | 83.1              | 198.5           | 752.711   | F                             |
| 4   | 512                   | 128                     | 514                       | 33.03                      | 525               | 0.975 | 485                 | 384                             | 3.2               | 9.9             | 65.297    | F                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 380                   | 95                      | 474                       | 25.32                      | 614               | 0.619 | 380                 | 540                             | 1.5               | 1.6             | 15.331    | C                             |
| 2   | 273                   | 68                      | 645                       |                            | 483               | 0.565 | 273                 | 209                             | 1.2               | 1.3             | 17.087    | C                             |
| 3   | 1143                  | 286                     | 219                       | 46.24                      | 681               | 1.679 | 680                 | 699                             | 198.5             | 314.1           | 1363.008  | F                             |
| 4   | 512                   | 128                     | 514                       | 33.03                      | 524               | 0.976 | 499                 | 385                             | 9.9               | 13.1            | 96.055    | F                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 310                   | 78                      | 438                       | 20.68                      | 627               | 0.494 | 312                 | 520                             | 1.6               | 1.0             | 11.517    | B                             |
| 2   | 223                   | 56                      | 560                       |                            | 533               | 0.418 | 225                 | 190                             | 1.3               | 0.7             | 11.762    | B                             |
| 3   | 933                   | 233                     | 181                       | 37.76                      | 697               | 1.338 | 697                 | 605                             | 314.1             | 373.1           | 1764.239  | F                             |
| 4   | 418                   | 105                     | 506                       | 26.97                      | 530               | 0.789 | 453                 | 372                             | 13.1              | 4.4             | 55.644    | F                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 260                   | 65                      | 365                       | 17.32                      | 655               | 0.397 | 261                 | 494                             | 1.0               | 0.7             | 9.172     | A                             |
| 2   | 187                   | 47                      | 456                       |                            | 591               | 0.316 | 188                 | 170                             | 0.7               | 0.5             | 8.945     | A                             |
| 3   | 781                   | 195                     | 151                       | 31.62                      | 710               | 1.100 | 710                 | 493                             | 373.1             | 390.9           | 1941.955  | F                             |
| 4   | 350                   | 88                      | 499                       | 22.59                      | 535               | 0.654 | 360                 | 362                             | 4.4               | 2.0             | 21.510    | C                             |

# Do Nothing, 2033, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 345.98             | F            |

### 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 | Do Nothing, 2033 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 666                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 147                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 771                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 519                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 44.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 41.00                            |
| 4   | [ONEHOUR]    | 33.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      | 1  | 2   | 3  | 4   |     |
| From | 1  | 0   | 71 | 536 | 59  |
|      | 2  | 54  | 0  | 71  | 22  |
|      | 3  | 335 | 44 | 1   | 391 |
|      | 4  | 49  | 28 | 441 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |   |
|------|----|---|---|---|---|
|      | 1  | 2 | 3 | 4 |   |
|      | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.25    | 490.73        | 82.3            | F       | 611                     | 917                           |
| 2   | 0.55    | 26.81         | 1.2             | D       | 135                     | 202                           |
| 3   | 1.21    | 444.01        | 86.8            | F       | 707                     | 1061                          |
| 4   | 1.00    | 105.02        | 16.3            | F       | 476                     | 714                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 501                   | 125                     | 381                       | 33.13                      | 649               | 0.773 | 489                 | 323                             | 0.0               | 3.1             | 21.199    | C                             |
| 2   | 111                   | 28                      | 765                       |                            | 429               | 0.258 | 109                 | 105                             | 0.0               | 0.3             | 11.206    | B                             |
| 3   | 580                   | 145                     | 101                       | 30.87                      | 731               | 0.794 | 567                 | 773                             | 0.0               | 3.4             | 20.479    | C                             |
| 4   | 391                   | 98                      | 319                       | 24.84                      | 609               | 0.641 | 384                 | 348                             | 0.0               | 1.7             | 15.542    | C                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 599                   | 150                     | 455                       | 39.56                      | 621               | 0.964 | 572                 | 380                             | 3.1               | 9.7             | 54.953    | F                             |
| 2   | 132                   | 33                      | 903                       |                            | 351               | 0.376 | 131                 | 124                             | 0.3               | 0.6             | 16.284    | C                             |
| 3   | 693                   | 173                     | 119                       | 36.86                      | 712               | 0.974 | 663                 | 915                             | 3.4               | 11.0            | 53.287    | F                             |
| 4   | 467                   | 117                     | 375                       | 29.67                      | 586               | 0.796 | 460                 | 407                             | 1.7               | 3.4             | 26.990    | D                             |

#### 17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 733                   | 183                     | 528                       | 48.44                      | 594               | 1.235 | 589                 | 412                             | 9.7               | 45.7            | 186.054   | F                             |
| 2   | 162                   | 40                      | 986                       |                            | 302               | 0.537 | 160                 | 132                             | 0.6               | 1.1             | 25.030    | D                             |
| 3   | 849                   | 212                     | 136                       | 45.14                      | 700               | 1.212 | 696                 | 1010                            | 11.0              | 49.3            | 170.887   | F                             |
| 4   | 571                   | 143                     | 402                       | 36.33                      | 574               | 0.995 | 538                 | 430                             | 3.4               | 11.7            | 67.293    | F                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 733                   | 183                     | 542                       | 48.44                      | 589               | 1.246 | 588                 | 415                             | 45.7              | 82.1            | 400.491   | F                             |
| 2   | 162                   | 40                      | 997                       |                            | 295               | 0.548 | 162                 | 132                             | 1.1               | 1.2             | 26.811    | D                             |
| 3   | 849                   | 212                     | 137                       | 45.14                      | 700               | 1.213 | 699                 | 1022                            | 49.3              | 86.8            | 360.207   | F                             |
| 4   | 571                   | 143                     | 404                       | 36.33                      | 573               | 0.997 | 553                 | 432                             | 11.7              | 16.3            | 105.024   | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 599                   | 150                     | 504                       | 39.56                      | 603               | 0.993 | 598                 | 402                             | 82.1              | 82.3            | 490.728   | F                             |
| 2   | 132                   | 33                      | 970                       |                            | 315               | 0.419 | 134                 | 131                             | 1.2               | 0.7             | 20.029    | C                             |
| 3   | 693                   | 173                     | 123                       | 36.86                      | 706               | 0.982 | 700                 | 981                             | 86.8              | 85.1            | 444.007   | F                             |
| 4   | 467                   | 117                     | 394                       | 29.67                      | 578               | 0.807 | 511                 | 429                             | 16.3              | 5.0             | 64.300    | F                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 501                   | 125                     | 405                       | 33.13                      | 640               | 0.784 | 632                 | 384                             | 82.3              | 49.7            | 378.546   | F                             |
| 2   | 111                   | 28                      | 908                       |                            | 354               | 0.313 | 112                 | 129                             | 0.7               | 0.5             | 14.958    | B                             |
| 3   | 580                   | 145                     | 115                       | 30.87                      | 710               | 0.818 | 701                 | 905                             | 85.1              | 54.9            | 361.156   | F                             |
| 4   | 391                   | 98                      | 387                       | 24.84                      | 582               | 0.671 | 402                 | 429                             | 5.0               | 2.2             | 21.116    | C                             |

# Do Nothing, 2043, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 4 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 1376.53            | F            |

### 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 | Do Nothing, 2043 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 379                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 272                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 1141                    | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 504                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 27.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 56.00                            |
| 4   | [ONEHOUR]    | 35.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      | 1  | 2   | 3   | 4   |     |
| From | 1  | 0   | 80  | 270 | 29  |
|      | 2  | 107 | 0   | 85  | 80  |
|      | 3  | 564 | 114 | 5   | 458 |
|      | 4  | 90  | 62  | 349 | 3   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
|      | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.69    | 18.88         | 2.1             | C       | 348                     | 522                           |
| 2   | 0.66    | 23.18         | 1.9             | C       | 250                     | 374                           |
| 3   | 1.87    | 2682.08       | 542.2           | F       | 1047                    | 1571                          |
| 4   | 1.06    | 172.21        | 27.2            | F       | 462                     | 694                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 285                   | 71                      | 376                       | 20.33                      | 650               | 0.439 | 282                 | 487                             | 0.0               | 0.8             | 9.699     | A                             |
| 2   | 205                   | 51                      | 485                       |                            | 575               | 0.356 | 203                 | 174                             | 0.0               | 0.5             | 9.615     | A                             |
| 3   | 859                   | 215                     | 163                       | 42.16                      | 706               | 1.217 | 689                 | 524                             | 0.0               | 42.4            | 122.164   | F                             |
| 4   | 379                   | 95                      | 492                       | 26.35                      | 538               | 0.705 | 371                 | 360                             | 0.0               | 2.2             | 20.572    | C                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 341                   | 85                      | 436                       | 24.27                      | 628               | 0.542 | 339                 | 516                             | 0.8               | 1.2             | 12.387    | B                             |
| 2   | 245                   | 61                      | 580                       |                            | 520               | 0.470 | 243                 | 195                             | 0.5               | 0.9             | 12.931    | B                             |
| 3   | 1026                  | 256                     | 196                       | 50.34                      | 690               | 1.486 | 690                 | 628                             | 42.4              | 126.3           | 454.795   | F                             |
| 4   | 453                   | 113                     | 509                       | 31.46                      | 529               | 0.856 | 443                 | 377                             | 2.2               | 4.7             | 37.920    | E                             |

#### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 417                   | 104                     | 484                       | 29.73                      | 610               | 0.684 | 414                 | 538                             | 1.2               | 2.0             | 17.992    | C                             |
| 2   | 299                   | 75                      | 681                       |                            | 460               | 0.652 | 296                 | 216                             | 0.9               | 1.8             | 21.542    | C                             |
| 3   | 1256                  | 314                     | 238                       | 61.66                      | 672               | 1.871 | 672                 | 739                             | 126.3             | 272.5           | 1075.068  | F                             |
| 4   | 555                   | 139                     | 518                       | 38.54                      | 523               | 1.061 | 504                 | 391                             | 4.7               | 17.4            | 98.107    | F                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 417                   | 104                     | 493                       | 29.73                      | 607               | 0.688 | 417                 | 541                             | 2.0               | 2.1             | 18.882    | C                             |
| 2   | 299                   | 75                      | 692                       |                            | 453               | 0.660 | 299                 | 218                             | 1.8               | 1.9             | 23.184    | C                             |
| 3   | 1256                  | 314                     | 241                       | 61.66                      | 671               | 1.874 | 671                 | 750                             | 272.5             | 419.0           | 1862.849  | F                             |
| 4   | 555                   | 139                     | 519                       | 38.54                      | 523               | 1.062 | 515                 | 392                             | 17.4              | 27.2            | 172.213   | F                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 341                   | 85                      | 490                       | 24.27                      | 608               | 0.560 | 344                 | 529                             | 2.1               | 1.3             | 13.787    | B                             |
| 2   | 245                   | 61                      | 630                       |                            | 493               | 0.496 | 248                 | 204                             | 1.9               | 1.0             | 14.906    | B                             |
| 3   | 1026                  | 256                     | 200                       | 50.34                      | 689               | 1.490 | 689                 | 678                             | 419.0             | 503.3           | 2385.445  | F                             |
| 4   | 453                   | 113                     | 510                       | 31.46                      | 527               | 0.859 | 509                 | 379                             | 27.2              | 13.4            | 149.899   | F                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 285                   | 71                      | 420                       | 20.33                      | 634               | 0.450 | 287                 | 504                             | 1.3               | 0.8             | 10.431    | B                             |
| 2   | 205                   | 51                      | 524                       |                            | 553               | 0.370 | 206                 | 183                             | 1.0               | 0.6             | 10.427    | B                             |
| 3   | 859                   | 215                     | 166                       | 42.16                      | 703               | 1.222 | 703                 | 564                             | 503.3             | 542.2           | 2682.082  | F                             |
| 4   | 379                   | 95                      | 502                       | 26.35                      | 533               | 0.712 | 422                 | 367                             | 13.4              | 2.7             | 41.221    | E                             |



# Do Nothing, 2043, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 647.27             | F            |

### 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 | Do Nothing, 2043 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 735                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 162                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 857                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 579                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 52.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 52.00                            |
| 4   | [ONEHOUR]    | 37.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      | 1  | 2   | 3  | 4   |     |
| From | 1  | 0   | 78 | 591 | 66  |
|      | 2  | 59  | 0  | 79  | 24  |
|      | 3  | 369 | 47 | 1   | 440 |
|      | 4  | 62  | 31 | 485 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |
|------|----|---|---|---|
|      | 1  | 2 | 3 | 4 |
|      | 1  | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.38    | 897.57        | 151.7           | F       | 674                     | 1012                          |
| 2   | 0.62    | 32.70         | 1.6             | D       | 149                     | 223                           |
| 3   | 1.36    | 825.14        | 168.3           | F       | 786                     | 1180                          |
| 4   | 1.11    | 238.19        | 42.2            | F       | 531                     | 797                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 553                   | 138                     | 415                       | 39.15                      | 636               | 0.870 | 533                 | 356                             | 0.0               | 5.2             | 30.599    | D                             |
| 2   | 122                   | 30                      | 834                       |                            | 389               | 0.313 | 120                 | 113                             | 0.0               | 0.4             | 13.298    | B                             |
| 3   | 645                   | 161                     | 110                       | 39.15                      | 720               | 0.896 | 620                 | 844                             | 0.0               | 6.2             | 30.953    | D                             |
| 4   | 436                   | 109                     | 346                       | 27.86                      | 598               | 0.729 | 426                 | 385                             | 0.0               | 2.5             | 19.930    | C                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 661                   | 165                     | 490                       | 46.75                      | 608               | 1.087 | 592                 | 403                             | 5.2               | 22.5            | 102.355   | F                             |
| 2   | 146                   | 36                      | 954                       |                            | 320               | 0.455 | 144                 | 128                             | 0.4               | 0.8             | 20.274    | C                             |
| 3   | 770                   | 193                     | 128                       | 46.75                      | 704               | 1.095 | 689                 | 971                             | 6.2               | 26.6            | 102.320   | F                             |
| 4   | 521                   | 130                     | 388                       | 33.26                      | 580               | 0.898 | 506                 | 429                             | 2.5               | 6.1             | 42.005    | E                             |

#### 17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 809                   | 202                     | 540                       | 57.25                      | 589               | 1.374 | 588                 | 423                             | 22.5              | 77.8            | 320.581   | F                             |
| 2   | 178                   | 45                      | 997                       |                            | 291               | 0.614 | 176                 | 131                             | 0.8               | 1.5             | 30.637    | D                             |
| 3   | 944                   | 236                     | 144                       | 57.25                      | 695               | 1.357 | 694                 | 1029                            | 26.6              | 88.8            | 310.874   | F                             |
| 4   | 637                   | 159                     | 402                       | 40.74                      | 573               | 1.112 | 561                 | 436                             | 6.1               | 25.2            | 118.961   | F                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 809                   | 202                     | 547                       | 57.25                      | 586               | 1.380 | 586                 | 425                             | 77.8              | 133.5           | 657.867   | F                             |
| 2   | 178                   | 45                      | 1003                      |                            | 287               | 0.621 | 178                 | 131                             | 1.5               | 1.6             | 32.699    | D                             |
| 3   | 944                   | 236                     | 145                       | 57.25                      | 695               | 1.358 | 695                 | 1036                            | 88.8              | 151.0           | 627.685   | F                             |
| 4   | 637                   | 159                     | 403                       | 40.74                      | 573               | 1.113 | 569                 | 437                             | 25.2              | 42.2            | 227.930   | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 661                   | 165                     | 542                       | 46.75                      | 588               | 1.123 | 588                 | 416                             | 133.5             | 151.7           | 877.459   | F                             |
| 2   | 146                   | 36                      | 999                       |                            | 296               | 0.493 | 148                 | 131                             | 1.6               | 1.0             | 24.690    | C                             |
| 3   | 770                   | 193                     | 130                       | 46.75                      | 702               | 1.098 | 701                 | 1017                            | 151.0             | 168.3           | 824.041   | F                             |
| 4   | 521                   | 130                     | 395                       | 33.26                      | 576               | 0.903 | 563                 | 436                             | 42.2              | 31.6            | 238.187   | F                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 553                   | 138                     | 527                       | 39.15                      | 594               | 0.932 | 590                 | 406                             | 151.7             | 142.5           | 897.571   | F                             |
| 2   | 122                   | 30                      | 987                       |                            | 307               | 0.397 | 123                 | 130                             | 1.0               | 0.7             | 19.741    | C                             |
| 3   | 645                   | 161                     | 117                       | 39.15                      | 707               | 0.912 | 703                 | 993                             | 168.3             | 153.8           | 825.143   | F                             |
| 4   | 436                   | 109                     | 387                       | 27.86                      | 580               | 0.751 | 547                 | 433                             | 31.6              | 4.0             | 114.873   | F                             |

# Do Something, 2028, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 481.28             | F            |

### 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 | Do Something, 2028 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 329                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 245                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 879                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 442                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 24.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 42.00                            |
| 4   | [ONEHOUR]    | 30.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      | 1  | 2   | 3  | 4   |     |
| From | 1  | 0   | 74 | 230 | 25  |
|      | 2  | 96  | 0  | 77  | 72  |
|      | 3  | 416 | 85 | 4   | 374 |
|      | 4  | 84  | 58 | 298 | 2   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |   |
|------|----|---|---|---|---|
|      | 1  | 2 | 3 | 4 |   |
|      | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.58    | 13.96         | 1.4             | B       | 302                     | 453                           |
| 2   | 0.54    | 15.47         | 1.1             | C       | 225                     | 337                           |
| 3   | 1.42    | 997.13        | 200.9           | F       | 807                     | 1210                          |
| 4   | 0.91    | 61.44         | 7.7             | F       | 406                     | 608                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 248                   | 62                      | 329                       | 18.07                      | 668               | 0.371 | 245                 | 433                             | 0.0               | 0.6             | 8.470     | A                             |
| 2   | 184                   | 46                      | 415                       |                            | 613               | 0.301 | 183                 | 159                             | 0.0               | 0.4             | 8.341     | A                             |
| 3   | 662                   | 165                     | 145                       | 31.62                      | 716               | 0.925 | 632                 | 452                             | 0.0               | 7.5             | 35.254    | E                             |
| 4   | 333                   | 83                      | 435                       | 22.59                      | 562               | 0.592 | 327                 | 343                             | 0.0               | 1.4             | 14.977    | B                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 296                   | 74                      | 388                       | 21.58                      | 646               | 0.458 | 295                 | 486                             | 0.6               | 0.8             | 10.215    | B                             |
| 2   | 220                   | 55                      | 498                       |                            | 567               | 0.389 | 219                 | 184                             | 0.4               | 0.6             | 10.337    | B                             |
| 3   | 790                   | 198                     | 175                       | 37.76                      | 698               | 1.133 | 688                 | 543                             | 7.5               | 33.1            | 122.975   | F                             |
| 4   | 397                   | 99                      | 481                       | 26.97                      | 542               | 0.734 | 393                 | 381                             | 1.4               | 2.5             | 23.474    | C                             |

#### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 362                   | 91                      | 450                       | 26.42                      | 623               | 0.581 | 360                 | 516                             | 0.8               | 1.3             | 13.587    | B                             |
| 2   | 270                   | 67                      | 602                       |                            | 507               | 0.532 | 268                 | 208                             | 0.6               | 1.1             | 14.917    | B                             |
| 3   | 968                   | 242                     | 213                       | 46.24                      | 680               | 1.423 | 680                 | 656                             | 33.1              | 105.2           | 377.299   | F                             |
| 4   | 487                   | 122                     | 495                       | 33.03                      | 533               | 0.912 | 471                 | 397                             | 2.5               | 6.5             | 47.832    | E                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 362                   | 91                      | 459                       | 26.42                      | 620               | 0.585 | 362                 | 519                             | 1.3               | 1.4             | 13.965    | B                             |
| 2   | 270                   | 67                      | 611                       |                            | 502               | 0.537 | 270                 | 210                             | 1.1               | 1.1             | 15.469    | C                             |
| 3   | 968                   | 242                     | 215                       | 46.24                      | 680               | 1.424 | 679                 | 666                             | 105.2             | 177.3           | 748.256   | F                             |
| 4   | 487                   | 122                     | 496                       | 33.03                      | 533               | 0.913 | 482                 | 398                             | 6.5               | 7.7             | 61.436    | F                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 296                   | 74                      | 407                       | 21.58                      | 639               | 0.463 | 298                 | 495                             | 1.4               | 0.9             | 10.614    | B                             |
| 2   | 220                   | 55                      | 516                       |                            | 557               | 0.395 | 222                 | 189                             | 1.1               | 0.7             | 10.805    | B                             |
| 3   | 790                   | 198                     | 177                       | 37.76                      | 696               | 1.135 | 696                 | 562                             | 177.3             | 200.9           | 983.751   | F                             |
| 4   | 397                   | 99                      | 487                       | 26.97                      | 539               | 0.738 | 416                 | 386                             | 7.7               | 3.1             | 32.553    | D                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 248                   | 62                      | 346                       | 18.07                      | 662               | 0.374 | 249                 | 471                             | 0.9               | 0.6             | 8.738     | A                             |
| 2   | 184                   | 46                      | 426                       |                            | 607               | 0.304 | 185                 | 169                             | 0.7               | 0.4             | 8.554     | A                             |
| 3   | 662                   | 165                     | 148                       | 31.62                      | 709               | 0.933 | 706                 | 464                             | 200.9             | 189.9           | 997.131   | F                             |
| 4   | 333                   | 83                      | 478                       | 22.59                      | 544               | 0.611 | 339                 | 375                             | 3.1               | 1.6             | 17.950    | C                             |

# Do Something, 2028, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 263.68             | F            |

### 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 | Do Something, 2028 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 641                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 168                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 742                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 494                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 44.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 41.00                            |
| 4   | [ONEHOUR]    | 34.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      | 1  | 2   | 3  | 4   |     |
| From | 1  | 0   | 81 | 504 | 56  |
|      | 2  | 62  | 0  | 80  | 26  |
|      | 3  | 315 | 51 | 1   | 375 |
|      | 4  | 46  | 33 | 414 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
|      | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.19    | 365.92        | 65.2            | F       | 588                     | 882                           |
| 2   | 0.60    | 28.69         | 1.4             | D       | 154                     | 231                           |
| 3   | 1.18    | 353.48        | 71.2            | F       | 681                     | 1021                          |
| 4   | 0.95    | 76.03         | 10.8            | F       | 453                     | 680                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 483                   | 121                     | 370                       | 33.13                      | 653               | 0.739 | 472                 | 312                             | 0.0               | 2.6             | 18.992    | C                             |
| 2   | 126                   | 32                      | 721                       |                            | 452               | 0.280 | 125                 | 122                             | 0.0               | 0.4             | 10.975    | B                             |
| 3   | 559                   | 140                     | 107                       | 30.87                      | 730               | 0.765 | 547                 | 738                             | 0.0               | 3.0             | 18.574    | C                             |
| 4   | 372                   | 93                      | 317                       | 25.60                      | 611               | 0.609 | 366                 | 338                             | 0.0               | 1.5             | 14.368    | B                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 576                   | 144                     | 443                       | 39.56                      | 625               | 0.921 | 558                 | 370                             | 2.6               | 7.2             | 44.156    | E                             |
| 2   | 151                   | 38                      | 857                       |                            | 374               | 0.404 | 150                 | 144                             | 0.4               | 0.7             | 15.966    | C                             |
| 3   | 667                   | 167                     | 128                       | 36.86                      | 711               | 0.939 | 645                 | 879                             | 3.0               | 8.5             | 44.187    | E                             |
| 4   | 444                   | 111                     | 374                       | 30.57                      | 587               | 0.756 | 439                 | 399                             | 1.5               | 2.8             | 23.405    | C                             |

#### 17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 706                   | 176                     | 521                       | 48.44                      | 596               | 1.184 | 589                 | 408                             | 7.2               | 36.4            | 150.638   | F                             |
| 2   | 185                   | 46                      | 953                       |                            | 316               | 0.585 | 182                 | 157                             | 0.7               | 1.3             | 26.349    | D                             |
| 3   | 817                   | 204                     | 148                       | 45.14                      | 696               | 1.173 | 689                 | 988                             | 8.5               | 40.4            | 143.438   | F                             |
| 4   | 544                   | 136                     | 408                       | 37.43                      | 573               | 0.950 | 521                 | 429                             | 2.8               | 8.6             | 53.956    | F                             |



**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 706                   | 176                     | 534                       | 48.44                      | 592               | 1.193 | 590                 | 412                             | 36.4              | 65.2            | 320.000   | F                             |
| 2   | 185                   | 46                      | 966                       |                            | 309               | 0.598 | 185                 | 158                             | 1.3               | 1.4             | 28.690    | D                             |
| 3   | 817                   | 204                     | 149                       | 45.14                      | 695               | 1.175 | 694                 | 1001                            | 40.4              | 71.2            | 300.371   | F                             |
| 4   | 544                   | 136                     | 411                       | 37.43                      | 571               | 0.952 | 535                 | 432                             | 8.6               | 10.8            | 76.026    | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 576                   | 144                     | 477                       | 39.56                      | 613               | 0.940 | 604                 | 395                             | 65.2              | 58.4            | 365.922   | F                             |
| 2   | 151                   | 38                      | 925                       |                            | 338               | 0.447 | 153                 | 155                             | 1.4               | 0.8             | 19.782    | C                             |
| 3   | 667                   | 167                     | 134                       | 36.86                      | 702               | 0.950 | 693                 | 944                             | 71.2              | 64.8            | 353.482   | F                             |
| 4   | 444                   | 111                     | 399                       | 30.57                      | 577               | 0.770 | 472                 | 427                             | 10.8              | 3.8             | 40.099    | E                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 483                   | 121                     | 393                       | 33.13                      | 644               | 0.749 | 633                 | 378                             | 58.4              | 20.7            | 230.023   | F                             |
| 2   | 126                   | 32                      | 873                       |                            | 371               | 0.341 | 128                 | 153                             | 0.8               | 0.5             | 14.887    | B                             |
| 3   | 559                   | 140                     | 123                       | 30.87                      | 707               | 0.790 | 696                 | 878                             | 64.8              | 30.4            | 249.918   | F                             |
| 4   | 372                   | 93                      | 391                       | 25.60                      | 581               | 0.640 | 380                 | 428                             | 3.8               | 1.9             | 18.469    | C                             |

# Do Something, 2033, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 3 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 1020.07            | F            |

### 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 | Do Something, 2033 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 351                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 259                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 1046                    | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 470                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 24.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 42.00                            |
| 4   | [ONEHOUR]    | 30.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      | 1  | 2   | 3   | 4   |     |
| From | 1  | 0   | 79  | 245 | 27  |
|      | 2  | 102 | 0   | 81  | 76  |
|      | 3  | 513 | 112 | 5   | 416 |
|      | 4  | 90  | 61  | 317 | 2   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |
|------|----|---|---|---|
|      | 1  | 2 | 3 | 4 |
|      | 1  | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.63    | 15.96         | 1.7             | C       | 322                     | 483                           |
| 2   | 0.59    | 18.08         | 1.4             | C       | 238                     | 356                           |
| 3   | 1.70    | 2015.64       | 405.3           | F       | 960                     | 1440                          |
| 4   | 0.99    | 106.45        | 14.8            | F       | 431                     | 647                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 264                   | 66                      | 357                       | 18.07                      | 658               | 0.402 | 262                 | 478                             | 0.0               | 0.7             | 9.030     | A                             |
| 2   | 195                   | 49                      | 441                       |                            | 599               | 0.326 | 193                 | 177                             | 0.0               | 0.5             | 8.833     | A                             |
| 3   | 787                   | 197                     | 154                       | 31.62                      | 711               | 1.107 | 685                 | 480                             | 0.0               | 25.7            | 81.537    | F                             |
| 4   | 354                   | 88                      | 488                       | 22.59                      | 540               | 0.655 | 347                 | 351                             | 0.0               | 1.8             | 18.005    | C                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 316                   | 79                      | 414                       | 21.58                      | 636               | 0.496 | 314                 | 512                             | 0.7               | 1.0             | 11.133    | B                             |
| 2   | 233                   | 58                      | 529                       |                            | 550               | 0.424 | 232                 | 199                             | 0.5               | 0.7             | 11.289    | B                             |
| 3   | 940                   | 235                     | 185                       | 37.76                      | 696               | 1.351 | 695                 | 576                             | 25.7              | 87.1            | 306.230   | F                             |
| 4   | 423                   | 106                     | 510                       | 26.97                      | 529               | 0.798 | 416                 | 370                             | 1.8               | 3.4             | 30.044    | D                             |

#### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 386                   | 97                      | 470                       | 26.42                      | 615               | 0.628 | 384                 | 537                             | 1.0               | 1.6             | 15.366    | C                             |
| 2   | 285                   | 71                      | 632                       |                            | 490               | 0.582 | 283                 | 222                             | 0.7               | 1.3             | 17.169    | C                             |
| 3   | 1152                  | 288                     | 226                       | 46.24                      | 678               | 1.698 | 678                 | 689                             | 87.1              | 205.5           | 784.909   | F                             |
| 4   | 517                   | 129                     | 520                       | 33.03                      | 523               | 0.990 | 488                 | 384                             | 3.4               | 10.8            | 70.045    | F                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 386                   | 97                      | 481                       | 26.42                      | 611               | 0.632 | 386                 | 540                             | 1.6               | 1.7             | 15.960    | C                             |
| 2   | 285                   | 71                      | 643                       |                            | 483               | 0.590 | 285                 | 225                             | 1.3               | 1.4             | 18.083    | C                             |
| 3   | 1152                  | 288                     | 228                       | 46.24                      | 677               | 1.700 | 677                 | 700                             | 205.5             | 324.0           | 1414.055  | F                             |
| 4   | 517                   | 129                     | 520                       | 33.03                      | 522               | 0.991 | 502                 | 385                             | 10.8              | 14.8            | 106.450   | F                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 316                   | 79                      | 452                       | 21.58                      | 622               | 0.507 | 318                 | 522                             | 1.7               | 1.1             | 11.920    | B                             |
| 2   | 233                   | 58                      | 564                       |                            | 531               | 0.439 | 235                 | 206                             | 1.4               | 0.8             | 12.273    | B                             |
| 3   | 940                   | 235                     | 188                       | 37.76                      | 695               | 1.354 | 695                 | 611                             | 324.0             | 385.5           | 1826.685  | F                             |
| 4   | 423                   | 106                     | 511                       | 26.97                      | 528               | 0.801 | 462                 | 372                             | 14.8              | 4.8             | 65.175    | F                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 264                   | 66                      | 374                       | 18.07                      | 651               | 0.406 | 266                 | 494                             | 1.1               | 0.7             | 9.370     | A                             |
| 2   | 195                   | 49                      | 457                       |                            | 590               | 0.330 | 196                 | 183                             | 0.8               | 0.5             | 9.159     | A                             |
| 3   | 787                   | 197                     | 157                       | 31.62                      | 708               | 1.112 | 708                 | 496                             | 385.5             | 405.3           | 2015.636  | F                             |
| 4   | 354                   | 88                      | 504                       | 22.59                      | 533               | 0.663 | 365                 | 361                             | 4.8               | 2.1             | 22.557    | C                             |

# Do Something, 2033, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 408.02             | F            |

### 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 | Do Something, 2033 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 681                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 177                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 788                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 525                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 44.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 41.00                            |
| 4   | [ONEHOUR]    | 34.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      | 1  | 2   | 3  | 4   |     |
| From | 1  | 0   | 86 | 536 | 59  |
|      | 2  | 65  | 0  | 84  | 28  |
|      | 3  | 335 | 53 | 1   | 399 |
|      | 4  | 49  | 34 | 441 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |
|------|----|---|---|---|
|      | 1  | 2 | 3 | 4 |
|      | 1  | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.28    | 578.46        | 98.3            | F       | 625                     | 937                           |
| 2   | 0.65    | 33.46         | 1.7             | D       | 162                     | 244                           |
| 3   | 1.25    | 536.94        | 104.4           | F       | 723                     | 1085                          |
| 4   | 1.01    | 119.71        | 19.1            | F       | 482                     | 723                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 513                   | 128                     | 391                       | 33.13                      | 645               | 0.795 | 499                 | 330                             | 0.0               | 3.4             | 22.950    | C                             |
| 2   | 133                   | 33                      | 763                       |                            | 428               | 0.312 | 131                 | 127                             | 0.0               | 0.4             | 12.086    | B                             |
| 3   | 593                   | 148                     | 113                       | 30.87                      | 725               | 0.819 | 578                 | 782                             | 0.0               | 3.9             | 22.538    | C                             |
| 4   | 395                   | 99                      | 333                       | 25.60                      | 604               | 0.654 | 388                 | 357                             | 0.0               | 1.8             | 16.175    | C                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 612                   | 153                     | 467                       | 39.56                      | 617               | 0.993 | 578                 | 385                             | 3.4               | 11.9            | 63.976    | F                             |
| 2   | 159                   | 40                      | 897                       |                            | 352               | 0.452 | 158                 | 148                             | 0.4               | 0.8             | 18.423    | C                             |
| 3   | 708                   | 177                     | 134                       | 36.86                      | 705               | 1.004 | 668                 | 921                             | 3.9               | 13.9            | 63.434    | F                             |
| 4   | 472                   | 118                     | 388                       | 30.57                      | 582               | 0.812 | 464                 | 414                             | 1.8               | 3.7             | 28.899    | D                             |

#### 17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 750                   | 187                     | 537                       | 48.44                      | 590               | 1.270 | 587                 | 415                             | 11.9              | 52.6            | 213.760   | F                             |
| 2   | 195                   | 49                      | 969                       |                            | 307               | 0.635 | 192                 | 156                             | 0.8               | 1.6             | 30.458    | D                             |
| 3   | 868                   | 217                     | 153                       | 45.14                      | 694               | 1.250 | 691                 | 1008                            | 13.9              | 58.1            | 201.718   | F                             |
| 4   | 578                   | 145                     | 411                       | 37.43                      | 571               | 1.013 | 540                 | 432                             | 3.7               | 13.2            | 73.806    | F                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 750                   | 187                     | 550                       | 48.44                      | 585               | 1.281 | 585                 | 418                             | 52.6              | 93.8            | 459.264   | F                             |
| 2   | 195                   | 49                      | 979                       |                            | 301               | 0.648 | 194                 | 156                             | 1.6               | 1.7             | 33.456    | D                             |
| 3   | 868                   | 217                     | 154                       | 45.14                      | 693               | 1.251 | 693                 | 1019                            | 58.1              | 101.8           | 424.221   | F                             |
| 4   | 578                   | 145                     | 413                       | 37.43                      | 570               | 1.014 | 555                 | 433                             | 13.2              | 19.1            | 119.713   | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 612                   | 153                     | 524                       | 39.56                      | 595               | 1.028 | 594                 | 405                             | 93.8              | 98.3            | 578.455   | F                             |
| 2   | 159                   | 40                      | 962                       |                            | 316               | 0.503 | 162                 | 156                             | 1.7               | 1.1             | 23.698    | C                             |
| 3   | 708                   | 177                     | 137                       | 36.86                      | 700               | 1.012 | 698                 | 986                             | 101.8             | 104.4           | 536.938   | F                             |
| 4   | 472                   | 118                     | 404                       | 30.57                      | 574               | 0.822 | 525                 | 432                             | 19.1              | 5.8             | 80.578    | F                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 513                   | 128                     | 419                       | 33.13                      | 634               | 0.808 | 628                 | 385                             | 98.3              | 69.5            | 482.690   | F                             |
| 2   | 133                   | 33                      | 894                       |                            | 358               | 0.372 | 135                 | 153                             | 1.1               | 0.6             | 16.269    | C                             |
| 3   | 593                   | 148                     | 126                       | 30.87                      | 705               | 0.841 | 698                 | 903                             | 104.4             | 78.1            | 471.456   | F                             |
| 4   | 395                   | 99                      | 394                       | 25.60                      | 580               | 0.682 | 409                 | 430                             | 5.8               | 2.3             | 22.667    | C                             |

# Do Something, 2043, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 4 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 1411.05            | F            |

### 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 | Do Something, 2043 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 385                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 284                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 1149                    | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 508                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 28.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 57.00                            |
| 4   | [ONEHOUR]    | 36.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      | 1  | 2   | 3   | 4   |     |
| From | 1  | 0   | 86  | 270 | 29  |
|      | 2  | 112 | 0   | 89  | 83  |
|      | 3  | 564 | 122 | 5   | 458 |
|      | 4  | 90  | 66  | 349 | 3   |



## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |   |
|------|----|---|---|---|---|
|      |    | 1 | 2 | 3 | 4 |
|      | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.70    | 19.71         | 2.2             | C       | 353                     | 530                           |
| 2   | 0.69    | 25.17         | 2.1             | D       | 261                     | 391                           |
| 3   | 1.90    | 2761.40       | 557.0           | F       | 1054                    | 1582                          |
| 4   | 1.07    | 186.07        | 29.8            | F       | 466                     | 699                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 290                   | 72                      | 383                       | 21.08                      | 648               | 0.447 | 287                 | 487                             | 0.0               | 0.8             | 9.883     | A                             |
| 2   | 214                   | 53                      | 484                       |                            | 574               | 0.372 | 211                 | 186                             | 0.0               | 0.6             | 9.857     | A                             |
| 3   | 865                   | 216                     | 169                       | 42.91                      | 704               | 1.229 | 688                 | 527                             | 0.0               | 44.2            | 127.090   | F                             |
| 4   | 382                   | 96                      | 497                       | 27.10                      | 536               | 0.713 | 373                 | 360                             | 0.0               | 2.3             | 21.072    | C                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 346                   | 87                      | 443                       | 25.17                      | 626               | 0.553 | 344                 | 517                             | 0.8               | 1.2             | 12.729    | B                             |
| 2   | 255                   | 64                      | 580                       |                            | 520               | 0.491 | 254                 | 208                             | 0.6               | 0.9             | 13.465    | B                             |
| 3   | 1033                  | 258                     | 203                       | 51.24                      | 688               | 1.502 | 687                 | 631                             | 44.2              | 130.6           | 472.877   | F                             |
| 4   | 457                   | 114                     | 514                       | 32.36                      | 527               | 0.866 | 446                 | 377                             | 2.3               | 4.9             | 39.617    | E                             |

#### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 424                   | 106                     | 489                       | 30.83                      | 608               | 0.697 | 420                 | 539                             | 1.2               | 2.2             | 18.726    | C                             |
| 2   | 313                   | 78                      | 679                       |                            | 460               | 0.680 | 309                 | 230                             | 0.9               | 2.0             | 23.167    | C                             |
| 3   | 1265                  | 316                     | 246                       | 62.76                      | 668               | 1.892 | 668                 | 741                             | 130.6             | 279.8           | 1110.838  | F                             |
| 4   | 559                   | 140                     | 524                       | 39.64                      | 521               | 1.073 | 504                 | 391                             | 4.9               | 18.7            | 103.922   | F                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 424                   | 106                     | 497                       | 30.83                      | 605               | 0.700 | 424                 | 542                             | 2.2               | 2.2             | 19.708    | C                             |
| 2   | 313                   | 78                      | 688                       |                            | 454               | 0.689 | 312                 | 232                             | 2.0               | 2.1             | 25.170    | D                             |
| 3   | 1265                  | 316                     | 249                       | 62.76                      | 667               | 1.896 | 667                 | 751                             | 279.8             | 429.2           | 1919.169  | F                             |
| 4   | 559                   | 140                     | 524                       | 39.64                      | 521               | 1.074 | 515                 | 392                             | 18.7              | 29.8            | 186.069   | F                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 346                   | 87                      | 494                       | 25.17                      | 606               | 0.571 | 350                 | 529                             | 2.2               | 1.4             | 14.201    | B                             |
| 2   | 255                   | 64                      | 627                       |                            | 493               | 0.518 | 259                 | 217                             | 2.1               | 1.1             | 15.643    | C                             |
| 3   | 1033                  | 258                     | 207                       | 51.24                      | 686               | 1.506 | 686                 | 679                             | 429.2             | 516.0           | 2452.853  | F                             |
| 4   | 457                   | 114                     | 515                       | 32.36                      | 526               | 0.869 | 509                 | 378                             | 29.8              | 16.9            | 170.216   | F                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 290                   | 72                      | 438                       | 21.08                      | 627               | 0.462 | 292                 | 507                             | 1.4               | 0.9             | 10.789    | B                             |
| 2   | 214                   | 53                      | 533                       |                            | 548               | 0.390 | 216                 | 197                             | 1.1               | 0.7             | 10.898    | B                             |
| 3   | 865                   | 216                     | 173                       | 42.91                      | 701               | 1.234 | 701                 | 576                             | 516.0             | 557.0           | 2761.397  | F                             |
| 4   | 382                   | 96                      | 507                       | 27.10                      | 531               | 0.720 | 438                 | 367                             | 16.9              | 2.9             | 52.907    | F                             |

# Do Something, 2043, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 727.12             | F            |

### 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 | Do Something, 2043 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 750                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 191                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 868                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 585                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 52.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 52.00                            |
| 4   | [ONEHOUR]    | 37.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      | 1  | 2   | 3  | 4   |     |
| From | 1  | 0   | 93 | 591 | 66  |
|      | 2  | 70  | 0  | 92  | 29  |
|      | 3  | 369 | 58 | 1   | 440 |
|      | 4  | 62  | 37 | 485 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |   |
|------|----|---|---|---|---|
|      | 1  | 2 | 3 | 4 |   |
|      | 1  | 0 | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.41    | 1031.52       | 169.0           | F       | 688                     | 1032                          |
| 2   | 0.72    | 41.87         | 2.3             | E       | 175                     | 263                           |
| 3   | 1.39    | 914.65        | 183.8           | F       | 796                     | 1195                          |
| 4   | 1.14    | 282.36        | 48.0            | F       | 537                     | 805                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 565                   | 141                     | 427                       | 39.15                      | 631               | 0.894 | 541                 | 363                             | 0.0               | 6.0             | 33.866    | D                             |
| 2   | 144                   | 36                      | 832                       |                            | 388               | 0.370 | 142                 | 136                             | 0.0               | 0.6             | 14.453    | B                             |
| 3   | 653                   | 163                     | 122                       | 39.15                      | 715               | 0.913 | 626                 | 851                             | 0.0               | 7.0             | 33.548    | D                             |
| 4   | 440                   | 110                     | 360                       | 27.86                      | 593               | 0.743 | 430                 | 387                             | 0.0               | 2.6             | 20.962    | C                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 674                   | 169                     | 502                       | 46.75                      | 603               | 1.118 | 591                 | 409                             | 6.0               | 26.7            | 117.777   | F                             |
| 2   | 172                   | 43                      | 942                       |                            | 324               | 0.530 | 170                 | 151                             | 0.6               | 1.1             | 23.066    | C                             |
| 3   | 780                   | 195                     | 141                       | 46.75                      | 699               | 1.116 | 688                 | 971                             | 7.0               | 30.1            | 113.603   | F                             |
| 4   | 526                   | 131                     | 401                       | 33.26                      | 575               | 0.915 | 509                 | 427                             | 2.6               | 6.8             | 45.871    | E                             |

#### 17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 826                   | 206                     | 546                       | 57.25                      | 587               | 1.407 | 586                 | 428                             | 26.7              | 86.6            | 361.290   | F                             |
| 2   | 210                   | 53                      | 978                       |                            | 297               | 0.708 | 206                 | 154                             | 1.1               | 2.1             | 37.909    | E                             |
| 3   | 956                   | 239                     | 159                       | 57.25                      | 691               | 1.384 | 690                 | 1025                            | 30.1              | 96.6            | 341.825   | F                             |
| 4   | 644                   | 161                     | 416                       | 40.74                      | 568               | 1.134 | 558                 | 434                             | 6.8               | 28.2            | 131.397   | F                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 826                   | 206                     | 552                       | 57.25                      | 585               | 1.413 | 584                 | 430                             | 86.6              | 147.0           | 728.254   | F                             |
| 2   | 210                   | 53                      | 982                       |                            | 294               | 0.715 | 210                 | 154                             | 2.1               | 2.3             | 41.866    | E                             |
| 3   | 956                   | 239                     | 161                       | 57.25                      | 690               | 1.385 | 690                 | 1031                            | 96.6              | 163.0           | 682.658   | F                             |
| 4   | 644                   | 161                     | 417                       | 40.74                      | 567               | 1.135 | 565                 | 434                             | 28.2              | 48.0            | 257.032   | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 674                   | 169                     | 548                       | 46.75                      | 586               | 1.150 | 586                 | 420                             | 147.0             | 169.0           | 979.185   | F                             |
| 2   | 172                   | 43                      | 979                       |                            | 303               | 0.567 | 175                 | 155                             | 2.3               | 1.4             | 29.060    | D                             |
| 3   | 780                   | 195                     | 143                       | 46.75                      | 697               | 1.119 | 697                 | 1011                            | 163.0             | 183.8           | 898.372   | F                             |
| 4   | 526                   | 131                     | 408                       | 33.26                      | 572               | 0.920 | 560                 | 433                             | 48.0              | 39.5            | 282.363   | F                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 565                   | 141                     | 550                       | 39.15                      | 586               | 0.964 | 582                 | 411                             | 169.0             | 164.6           | 1031.519  | F                             |
| 2   | 144                   | 36                      | 977                       |                            | 309               | 0.465 | 146                 | 155                             | 1.4               | 0.9             | 22.303    | C                             |
| 3   | 653                   | 163                     | 128                       | 39.15                      | 704               | 0.928 | 701                 | 995                             | 183.8             | 172.1           | 914.646   | F                             |
| 4   | 440                   | 110                     | 399                       | 27.86                      | 576               | 0.765 | 562                 | 429                             | 39.5              | 9.2             | 164.454   | F                             |

# Do Something, 2043 +AT, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 3 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 1039.37            | F            |

### 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 |
|-----|------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D15 | Do Something, 2043 +AT | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 355                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 284                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 1047                    | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 463                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 28.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 57.00                            |
| 4   | [ONEHOUR]    | 36.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 0   | 86  | 243 | 26  |
|      | 2  | 112 | 0   | 89  | 83  |
|      | 3  | 508 | 122 | 5   | 412 |
|      | 4  | 81  | 66  | 314 | 2   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To |   |   |   |
|------|----|---|---|---|
|      | 1  | 2 | 3 | 4 |
|      | 1  | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 |
| From | 4  | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.64    | 16.53         | 1.8             | C       | 326                     | 489                           |
| 2   | 0.65    | 21.13         | 1.8             | C       | 261                     | 391                           |
| 3   | 1.72    | 2077.96       | 415.4           | F       | 961                     | 1441                          |
| 4   | 0.98    | 99.59         | 13.5            | F       | 425                     | 637                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 267                   | 67                      | 364                       | 21.08                      | 655               | 0.408 | 265                 | 474                             | 0.0               | 0.7             | 9.161     | A                             |
| 2   | 214                   | 53                      | 437                       |                            | 599               | 0.357 | 212                 | 192                             | 0.0               | 0.5             | 9.237     | A                             |
| 3   | 788                   | 197                     | 166                       | 42.91                      | 706               | 1.116 | 681                 | 482                             | 0.0               | 26.8            | 84.674    | F                             |
| 4   | 349                   | 87                      | 496                       | 27.10                      | 538               | 0.648 | 342                 | 351                             | 0.0               | 1.7             | 17.778    | C                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 319                   | 80                      | 422                       | 25.17                      | 633               | 0.504 | 318                 | 506                             | 0.7               | 1.0             | 11.361    | B                             |
| 2   | 255                   | 64                      | 524                       |                            | 550               | 0.464 | 254                 | 216                             | 0.5               | 0.8             | 12.125    | B                             |
| 3   | 941                   | 235                     | 200                       | 51.24                      | 690               | 1.364 | 689                 | 579                             | 26.8              | 89.8            | 319.018   | F                             |
| 4   | 416                   | 104                     | 518                       | 32.36                      | 527               | 0.790 | 410                 | 371                             | 1.7               | 3.3             | 29.237    | D                             |

#### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 391                   | 98                      | 479                       | 30.83                      | 612               | 0.639 | 388                 | 532                             | 1.0               | 1.7             | 15.876    | C                             |
| 2   | 313                   | 78                      | 627                       |                            | 488               | 0.640 | 309                 | 241                             | 0.8               | 1.7             | 19.734    | C                             |
| 3   | 1153                  | 288                     | 243                       | 62.76                      | 671               | 1.718 | 671                 | 693                             | 89.8              | 210.3           | 813.575   | F                             |
| 4   | 510                   | 127                     | 529                       | 39.64                      | 520               | 0.980 | 482                 | 385                             | 3.3               | 10.1            | 66.994    | F                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 391                   | 98                      | 491                       | 30.83                      | 608               | 0.643 | 391                 | 535                             | 1.7               | 1.8             | 16.533    | C                             |
| 2   | 313                   | 78                      | 638                       |                            | 482               | 0.649 | 312                 | 243                             | 1.7               | 1.8             | 21.127    | C                             |
| 3   | 1153                  | 288                     | 245                       | 62.76                      | 670               | 1.721 | 670                 | 705                             | 210.3             | 331.0           | 1461.240  | F                             |
| 4   | 510                   | 127                     | 530                       | 39.64                      | 520               | 0.981 | 496                 | 386                             | 10.1              | 13.5            | 99.595    | F                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 319                   | 80                      | 457                       | 25.17                      | 620               | 0.514 | 322                 | 515                             | 1.8               | 1.1             | 12.158    | B                             |
| 2   | 255                   | 64                      | 556                       |                            | 532               | 0.480 | 259                 | 223                             | 1.8               | 0.9             | 13.323    | B                             |
| 3   | 941                   | 235                     | 203                       | 51.24                      | 689               | 1.367 | 688                 | 611                             | 331.0             | 394.2           | 1881.137  | F                             |
| 4   | 416                   | 104                     | 520                       | 32.36                      | 526               | 0.792 | 452                 | 372                             | 13.5              | 4.5             | 58.558    | F                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 267                   | 67                      | 381                       | 21.08                      | 649               | 0.412 | 269                 | 489                             | 1.1               | 0.7             | 9.514     | A                             |
| 2   | 214                   | 53                      | 452                       |                            | 591               | 0.362 | 215                 | 198                             | 0.9               | 0.6             | 9.613     | A                             |
| 3   | 788                   | 197                     | 169                       | 42.91                      | 703               | 1.121 | 703                 | 498                             | 394.2             | 415.4           | 2077.959  | F                             |
| 4   | 349                   | 87                      | 511                       | 27.10                      | 531               | 0.656 | 358                 | 361                             | 4.5               | 2.0             | 21.875    | C                             |



# Do Something, 2043 +AT, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 416.83             | F            |

### 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 |
|-----|------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D16 | Do Something, 2043 +AT | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 684                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 191                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 787                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 530                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 52.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 52.00                            |
| 4   | [ONEHOUR]    | 37.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      |    | 1   | 2  | 3   | 4   |
| From | 1  | 0   | 93 | 532 | 59  |
|      | 2  | 70  | 0  | 92  | 29  |
|      | 3  | 332 | 58 | 1   | 396 |
|      | 4  | 55  | 37 | 437 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |   |
|--|----|---|---|---|---|
|  |    | 1 | 2 | 3 | 4 |
|  | 1  | 0 | 0 | 0 | 0 |
|  | 2  | 0 | 0 | 0 | 0 |
|  | 3  | 0 | 0 | 0 | 0 |
|  | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.29    | 597.66        | 101.9           | F       | 628                     | 941                           |
| 2   | 0.69    | 37.87         | 2.1             | E       | 175                     | 263                           |
| 3   | 1.25    | 542.36        | 105.3           | F       | 722                     | 1083                          |
| 4   | 1.03    | 133.61        | 21.8            | F       | 486                     | 730                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 515                   | 129                     | 394                       | 39.15                      | 644               | 0.800 | 501                 | 336                             | 0.0               | 3.5             | 23.369    | C                             |
| 2   | 144                   | 36                      | 757                       |                            | 428               | 0.336 | 142                 | 138                             | 0.0               | 0.5             | 12.476    | B                             |
| 3   | 592                   | 148                     | 117                       | 39.15                      | 723               | 0.819 | 577                 | 781                             | 0.0               | 3.9             | 22.653    | C                             |
| 4   | 399                   | 100                     | 339                       | 27.86                      | 602               | 0.663 | 392                 | 356                             | 0.0               | 1.9             | 16.585    | C                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 615                   | 154                     | 470                       | 46.75                      | 615               | 0.999 | 579                 | 392                             | 3.5               | 12.5            | 66.098    | F                             |
| 2   | 172                   | 43                      | 888                       |                            | 353               | 0.487 | 170                 | 161                             | 0.5               | 0.9             | 19.525    | C                             |
| 3   | 707                   | 177                     | 139                       | 46.75                      | 703               | 1.006 | 667                 | 919                             | 3.9               | 14.1            | 63.999    | F                             |
| 4   | 476                   | 119                     | 394                       | 33.26                      | 579               | 0.823 | 468                 | 412                             | 1.9               | 3.9             | 30.363    | D                             |

#### 17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 753                   | 188                     | 536                       | 57.25                      | 590               | 1.276 | 588                 | 422                             | 12.5              | 53.9            | 219.143   | F                             |
| 2   | 210                   | 53                      | 956                       |                            | 309               | 0.681 | 206                 | 168                             | 0.9               | 1.9             | 33.822    | D                             |
| 3   | 867                   | 217                     | 159                       | 57.25                      | 692               | 1.253 | 689                 | 1003                            | 14.1              | 58.5            | 203.677   | F                             |
| 4   | 584                   | 146                     | 418                       | 40.74                      | 568               | 1.028 | 541                 | 430                             | 3.9               | 14.6            | 79.638    | F                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 753                   | 188                     | 549                       | 57.25                      | 586               | 1.286 | 585                 | 426                             | 53.9              | 95.8            | 470.020   | F                             |
| 2   | 210                   | 53                      | 965                       |                            | 303               | 0.694 | 210                 | 169                             | 1.9               | 2.1             | 37.875    | E                             |
| 3   | 867                   | 217                     | 160                       | 57.25                      | 691               | 1.254 | 690                 | 1014                            | 58.5              | 102.5           | 428.358   | F                             |
| 4   | 584                   | 146                     | 420                       | 40.74                      | 567               | 1.029 | 555                 | 431                             | 14.6              | 21.8            | 133.608   | F                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 615                   | 154                     | 533                       | 46.75                      | 592               | 1.039 | 591                 | 414                             | 95.8              | 101.9           | 597.665   | F                             |
| 2   | 172                   | 43                      | 955                       |                            | 316               | 0.544 | 175                 | 169                             | 2.1               | 1.3             | 26.150    | D                             |
| 3   | 707                   | 177                     | 143                       | 46.75                      | 698               | 1.013 | 696                 | 987                             | 102.5             | 105.3           | 542.359   | F                             |
| 4   | 476                   | 119                     | 410                       | 33.26                      | 572               | 0.834 | 537                 | 429                             | 21.8              | 6.8             | 97.870    | F                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 515                   | 129                     | 426                       | 39.15                      | 632               | 0.815 | 626                 | 391                             | 101.9             | 74.2            | 507.812   | F                             |
| 2   | 144                   | 36                      | 886                       |                            | 359               | 0.400 | 146                 | 166                             | 1.3               | 0.7             | 17.043    | C                             |
| 3   | 592                   | 148                     | 130                       | 39.15                      | 704               | 0.842 | 697                 | 901                             | 105.3             | 79.1            | 477.324   | F                             |
| 4   | 399                   | 100                     | 400                       | 27.86                      | 577               | 0.691 | 417                 | 428                             | 6.8               | 2.4             | 24.458    | C                             |

# Do Something, 2043+ Ring Road, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 535.89             | F            |

### 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 |
|-----|-------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D17 | Do Something, 2043+ Ring Road | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 311                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 284                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 892                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 397                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 28.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 57.00                            |
| 4   | [ONEHOUR]    | 36.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |     |     |     |
|------|----|-----|-----|-----|-----|
|      |    | 1   | 2   | 3   | 4   |
| From | 1  | 0   | 86  | 203 | 22  |
|      | 2  | 112 | 0   | 89  | 83  |
|      | 3  | 423 | 122 | 4   | 343 |
|      | 4  | 67  | 66  | 262 | 2   |

## Vehicle Mix

### Heavy Vehicle Percentages

|  | To |   |   |   |   |
|--|----|---|---|---|---|
|  |    | 1 | 2 | 3 | 4 |
|  | 1  | 0 | 0 | 0 | 0 |
|  | 2  | 0 | 0 | 0 | 0 |
|  | 3  | 0 | 0 | 0 | 0 |
|  | 4  | 0 | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.55    | 12.94         | 1.2             | B       | 285                     | 428                           |
| 2   | 0.58    | 16.08         | 1.4             | C       | 261                     | 391                           |
| 3   | 1.46    | 1103.92       | 219.5           | F       | 819                     | 1228                          |
| 4   | 0.84    | 41.14         | 4.7             | E       | 364                     | 546                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 234                   | 59                      | 335                       | 21.08                      | 666               | 0.352 | 232                 | 435                             | 0.0               | 0.5             | 8.256     | A                             |
| 2   | 214                   | 53                      | 366                       |                            | 636               | 0.336 | 212                 | 200                             | 0.0               | 0.5             | 8.456     | A                             |
| 3   | 672                   | 168                     | 163                       | 42.91                      | 712               | 0.943 | 637                 | 415                             | 0.0               | 8.6             | 38.576    | E                             |
| 4   | 299                   | 75                      | 476                       | 27.10                      | 548               | 0.545 | 294                 | 325                             | 0.0               | 1.2             | 13.933    | B                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 280                   | 70                      | 391                       | 25.17                      | 645               | 0.433 | 279                 | 485                             | 0.5               | 0.8             | 9.805     | A                             |
| 2   | 255                   | 64                      | 440                       |                            | 595               | 0.429 | 254                 | 230                             | 0.5               | 0.7             | 10.545    | B                             |
| 3   | 802                   | 200                     | 196                       | 51.24                      | 693               | 1.157 | 686                 | 498                             | 8.6               | 37.6            | 137.704   | F                             |
| 4   | 357                   | 89                      | 522                       | 32.36                      | 528               | 0.676 | 354                 | 360                             | 1.2               | 2.0             | 20.275    | C                             |

#### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 342                   | 86                      | 451                       | 30.83                      | 623               | 0.550 | 341                 | 514                             | 0.8               | 1.2             | 12.688    | B                             |
| 2   | 313                   | 78                      | 534                       |                            | 540               | 0.579 | 310                 | 257                             | 0.7               | 1.3             | 15.541    | C                             |
| 3   | 982                   | 246                     | 239                       | 62.76                      | 674               | 1.457 | 674                 | 605                             | 37.6              | 114.8           | 417.874   | F                             |
| 4   | 437                   | 109                     | 537                       | 39.64                      | 520               | 0.841 | 428                 | 376                             | 2.0               | 4.3             | 35.851    | E                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 342                   | 86                      | 457                       | 30.83                      | 620               | 0.552 | 342                 | 516                             | 1.2               | 1.2             | 12.940    | B                             |
| 2   | 313                   | 78                      | 540                       |                            | 536               | 0.583 | 313                 | 259                             | 1.3               | 1.4             | 16.084    | C                             |
| 3   | 982                   | 246                     | 241                       | 62.76                      | 673               | 1.459 | 673                 | 612                             | 114.8             | 192.0           | 817.326   | F                             |
| 4   | 437                   | 109                     | 538                       | 39.64                      | 519               | 0.842 | 435                 | 377                             | 4.3               | 4.7             | 41.143    | E                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 280                   | 70                      | 402                       | 25.17                      | 641               | 0.436 | 281                 | 491                             | 1.2               | 0.8             | 10.062    | B                             |
| 2   | 255                   | 64                      | 450                       |                            | 589               | 0.433 | 258                 | 233                             | 1.4               | 0.8             | 10.939    | B                             |
| 3   | 802                   | 200                     | 199                       | 51.24                      | 692               | 1.159 | 692                 | 509                             | 192.0             | 219.5           | 1074.455  | F                             |
| 4   | 357                   | 89                      | 527                       | 32.36                      | 526               | 0.679 | 367                 | 363                             | 4.7               | 2.3             | 23.830    | C                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 234                   | 59                      | 351                       | 21.08                      | 660               | 0.355 | 235                 | 469                             | 0.8               | 0.6             | 8.492     | A                             |
| 2   | 214                   | 53                      | 374                       |                            | 631               | 0.339 | 215                 | 211                             | 0.8               | 0.5             | 8.665     | A                             |
| 3   | 672                   | 168                     | 166                       | 42.91                      | 706               | 0.951 | 703                 | 424                             | 219.5             | 211.6           | 1103.923  | F                             |
| 4   | 299                   | 75                      | 518                       | 27.10                      | 531               | 0.563 | 303                 | 351                             | 2.3               | 1.3             | 15.986    | C                             |

# Do Something, 2043+ Ring Road, PM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 2 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 6 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4 | 116.43             | F            |

### 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 |
|-----|-------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D18 | Do Something, 2043+ Ring Road | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 585                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 191                     | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 666                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 448                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 52.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 52.00                            |
| 4   | [ONEHOUR]    | 37.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |
|------|----|-----|----|-----|-----|
|      |    | 1   | 2  | 3   | 4   |
| From | 1  | 0   | 93 | 443 | 49  |
|      | 2  | 70  | 0  | 92  | 29  |
|      | 3  | 277 | 58 | 1   | 330 |
|      | 4  | 46  | 37 | 364 | 1   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To |   |   |   |
|------|----|---|---|---|
|      | 1  | 2 | 3 | 4 |
|      | 1  | 0 | 0 | 0 |
|      | 2  | 0 | 0 | 0 |
|      | 3  | 0 | 0 | 0 |
|      | 4  | 0 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 1.07    | 163.30        | 30.6            | F       | 537                     | 805                           |
| 2   | 0.62    | 27.98         | 1.6             | D       | 175                     | 263                           |
| 3   | 1.06    | 149.33        | 31.8            | F       | 611                     | 917                           |
| 4   | 0.87    | 44.03         | 5.6             | E       | 411                     | 617                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 440                   | 110                     | 342                       | 39.15                      | 663               | 0.664 | 433                 | 291                             | 0.0               | 1.9             | 15.198    | C                             |
| 2   | 144                   | 36                      | 636                       |                            | 494               | 0.291 | 142                 | 139                             | 0.0               | 0.4             | 10.178    | B                             |
| 3   | 501                   | 125                     | 111                       | 39.15                      | 735               | 0.682 | 493                 | 667                             | 0.0               | 2.0             | 14.461    | B                             |
| 4   | 337                   | 84                      | 301                       | 27.86                      | 617               | 0.546 | 333                 | 303                             | 0.0               | 1.2             | 12.451    | B                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 526                   | 131                     | 411                       | 46.75                      | 637               | 0.825 | 517                 | 349                             | 1.9               | 4.0             | 28.097    | D                             |
| 2   | 172                   | 43                      | 761                       |                            | 422               | 0.407 | 171                 | 167                             | 0.4               | 0.7             | 14.284    | B                             |
| 3   | 599                   | 150                     | 133                       | 46.75                      | 716               | 0.837 | 589                 | 799                             | 2.0               | 4.4             | 26.652    | D                             |
| 4   | 403                   | 101                     | 360                       | 33.26                      | 594               | 0.678 | 399                 | 362                             | 1.2               | 2.0             | 18.223    | C                             |

#### 17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 644                   | 161                     | 491                       | 57.25                      | 607               | 1.061 | 585                 | 405                             | 4.0               | 18.7            | 87.799    | F                             |
| 2   | 210                   | 53                      | 886                       |                            | 347               | 0.606 | 207                 | 191                             | 0.7               | 1.4             | 25.216    | D                             |
| 3   | 733                   | 183                     | 158                       | 57.25                      | 695               | 1.054 | 672                 | 935                             | 4.4               | 19.7            | 81.072    | F                             |
| 4   | 493                   | 123                     | 415                       | 40.74                      | 570               | 0.865 | 481                 | 414                             | 2.0               | 5.0             | 36.289    | E                             |



**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 644                   | 161                     | 501                       | 57.25                      | 604               | 1.067 | 597                 | 412                             | 18.7              | 30.6            | 163.299   | F                             |
| 2   | 210                   | 53                      | 902                       |                            | 337               | 0.623 | 210                 | 195                             | 1.4               | 1.6             | 27.979    | D                             |
| 3   | 733                   | 183                     | 160                       | 57.25                      | 693               | 1.058 | 685                 | 952                             | 19.7              | 31.8            | 149.335   | F                             |
| 4   | 493                   | 123                     | 422                       | 40.74                      | 567               | 0.870 | 491                 | 422                             | 5.0               | 5.6             | 44.031    | E                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 526                   | 131                     | 433                       | 46.75                      | 629               | 0.836 | 612                 | 390                             | 30.6              | 9.2             | 127.148   | F                             |
| 2   | 172                   | 43                      | 854                       |                            | 372               | 0.462 | 174                 | 191                             | 1.6               | 0.9             | 18.497    | C                             |
| 3   | 599                   | 150                     | 143                       | 46.75                      | 701               | 0.854 | 682                 | 885                             | 31.8              | 11.0            | 121.530   | F                             |
| 4   | 403                   | 101                     | 408                       | 33.26                      | 574               | 0.701 | 415                 | 416                             | 5.6               | 2.5             | 24.112    | C                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 440                   | 110                     | 355                       | 39.15                      | 658               | 0.669 | 469                 | 312                             | 9.2               | 2.1             | 21.451    | C                             |
| 2   | 144                   | 36                      | 674                       |                            | 474               | 0.304 | 146                 | 149                             | 0.9               | 0.4             | 11.034    | B                             |
| 3   | 501                   | 125                     | 115                       | 39.15                      | 729               | 0.688 | 536                 | 704                             | 11.0              | 2.3             | 21.677    | C                             |
| 4   | 337                   | 84                      | 324                       | 27.86                      | 608               | 0.554 | 342                 | 328                             | 2.5               | 1.3             | 13.761    | B                             |

| Junctions 9                                                                                                                                                      |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| ARCADY 9 - Roundabout Module                                                                                                                                     |  |  |  |
| Version: 9.5.0.6896<br>© Copyright TRL Limited, 2018                                                                                                             |  |  |  |
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**Filename:** Junction 3- Gort na Bro-peak traffic + GFA Final.j9

**Path:** I:\DWGS\233\101-150\233114\3.0 Calculations\1. Civils\233114-PUNCH-XX-XX-CA-C-0002 Design Calculations\2.0 Traffic Calculations\Junction 3- Gort na Bro- Western distributor +An Logan Roundabout

**Report generation date:** 17/09/2025 17:55:09

»Existing, 2023, AM  
 »Existing, 2023, PM  
 »Do Nothing, 2028, AM  
 »Do Nothing, 2028, PM  
 »Do Nothing, 2033, AM  
 »Do Nothing, 2033, PM  
 »Do Nothing, 2043, AM  
 »Do Nothing, 2043, PM  
 »Do Something, 2028, AM  
 »Do Something, 2028, PM  
 »Do Something, 2033, AM  
 »Do Something, 2033, PM  
 »Do Something, 2043 , AM  
 »Do Something, 2043 , PM  
 »Do Something, 2043+AT, AM  
 »Do Something, 2043+AT, PM  
 »Do Something, 2043+Ring Road, AM  
 »Do Something, 2043+Ring Road, PM

### Summary of junction performance

|                  | AM          |           |      |     | PM          |           |      |     |
|------------------|-------------|-----------|------|-----|-------------|-----------|------|-----|
|                  | Queue (PCU) | Delay (s) | RFC  | LOS | Queue (PCU) | Delay (s) | RFC  | LOS |
| Existing, 2023   |             |           |      |     |             |           |      |     |
| Arm 1            | 0.5         | 4.25      | 0.34 | A   | 1.2         | 6.24      | 0.55 | A   |
| Arm 2            | 0.0         | 4.35      | 0.03 | A   | 0.0         | 5.22      | 0.02 | A   |
| Arm 3            | 1.6         | 10.19     | 0.62 | B   | 0.7         | 6.76      | 0.40 | A   |
| Arm 4            | 0.3         | 4.91      | 0.20 | A   | 0.4         | 4.62      | 0.26 | A   |
| Arm 5            | 0.2         | 4.54      | 0.19 | A   | 0.0         | 3.28      | 0.04 | A   |
| Do Nothing, 2028 |             |           |      |     |             |           |      |     |
| Arm 1            | 0.9         | 5.34      | 0.47 | A   | 2.1         | 9.33      | 0.68 | A   |
| Arm 2            | 0.1         | 5.05      | 0.05 | A   | 0.0         | 6.63      | 0.03 | A   |
| Arm 3            | 8.6         | 42.08     | 0.92 | E   | 1.4         | 10.28     | 0.59 | B   |
| Arm 4            | 0.5         | 7.29      | 0.33 | A   | 0.5         | 5.66      | 0.35 | A   |
| Arm 5            | 0.4         | 6.07      | 0.31 | A   | 0.3         | 4.77      | 0.23 | A   |
| Do Nothing, 2033 |             |           |      |     |             |           |      |     |
| Arm 1            | 1.0         | 5.71      | 0.50 | A   | 2.7         | 11.03     | 0.73 | B   |
| Arm 2            | 0.1         | 5.26      | 0.06 | A   | 0.0         | 7.12      | 0.03 | A   |

|                              |      |        |      |   |     |       |      |   |
|------------------------------|------|--------|------|---|-----|-------|------|---|
| Arm 3                        | 17.5 | 77.04  | 0.99 | F | 1.8 | 11.75 | 0.64 | B |
| Arm 4                        | 0.6  | 7.97   | 0.36 | A | 0.6 | 6.02  | 0.37 | A |
| Arm 5                        | 0.5  | 6.84   | 0.35 | A | 0.3 | 5.18  | 0.26 | A |
| Do Nothing, 2043             |      |        |      |   |     |       |      |   |
| Arm 1                        | 1.0  | 5.74   | 0.50 | A | 2.8 | 11.51 | 0.74 | B |
| Arm 2                        | 0.1  | 5.29   | 0.06 | A | 0.0 | 7.26  | 0.03 | A |
| Arm 3                        | 22.5 | 93.80  | 1.01 | F | 1.8 | 12.08 | 0.65 | B |
| Arm 4                        | 0.6  | 8.18   | 0.37 | A | 0.6 | 6.13  | 0.38 | A |
| Arm 5                        | 0.6  | 6.92   | 0.36 | A | 0.4 | 5.33  | 0.28 | A |
| Do Something, 2028           |      |        |      |   |     |       |      |   |
| Arm 1                        | 0.9  | 5.56   | 0.49 | A | 2.7 | 11.15 | 0.73 | B |
| Arm 2                        | 0.1  | 5.18   | 0.05 | A | 0.0 | 7.23  | 0.03 | A |
| Arm 3                        | 11.6 | 54.72  | 0.95 | F | 1.9 | 12.49 | 0.66 | B |
| Arm 4                        | 0.5  | 7.60   | 0.34 | A | 0.6 | 6.12  | 0.37 | A |
| Arm 5                        | 0.5  | 6.39   | 0.33 | A | 0.4 | 5.49  | 0.30 | A |
| Do Something, 2033           |      |        |      |   |     |       |      |   |
| Arm 1                        | 1.1  | 5.95   | 0.52 | A | 3.4 | 13.60 | 0.78 | B |
| Arm 2                        | 0.1  | 5.39   | 0.06 | A | 0.0 | 7.82  | 0.03 | A |
| Arm 3                        | 25.1 | 102.47 | 1.02 | F | 2.4 | 14.71 | 0.71 | B |
| Arm 4                        | 0.6  | 8.26   | 0.37 | A | 0.6 | 6.39  | 0.40 | A |
| Arm 5                        | 0.6  | 7.10   | 0.37 | A | 0.5 | 6.03  | 0.34 | A |
| Do Something, 2043           |      |        |      |   |     |       |      |   |
| Arm 1                        | 1.1  | 6.04   | 0.53 | A | 3.6 | 14.24 | 0.79 | B |
| Arm 2                        | 0.1  | 5.46   | 0.06 | A | 0.0 | 8.03  | 0.04 | A |
| Arm 3                        | 32.4 | 126.04 | 1.04 | F | 2.5 | 15.24 | 0.72 | C |
| Arm 4                        | 0.6  | 8.41   | 0.38 | A | 0.7 | 6.61  | 0.40 | A |
| Arm 5                        | 0.6  | 7.08   | 0.38 | A | 0.5 | 6.26  | 0.36 | A |
| Do Something, 2043+AT        |      |        |      |   |     |       |      |   |
| Arm 1                        | 1.0  | 5.70   | 0.50 | A | 3.0 | 12.24 | 0.75 | B |
| Arm 2                        | 0.1  | 5.28   | 0.06 | A | 0.0 | 7.61  | 0.03 | A |
| Arm 3                        | 26.5 | 105.42 | 1.02 | F | 2.3 | 14.14 | 0.70 | B |
| Arm 4                        | 0.5  | 7.85   | 0.34 | A | 0.6 | 6.14  | 0.36 | A |
| Arm 5                        | 0.5  | 6.50   | 0.34 | A | 0.5 | 5.70  | 0.32 | A |
| Do Something, 2043+Ring Road |      |        |      |   |     |       |      |   |
| Arm 1                        | 0.8  | 5.29   | 0.46 | A | 2.4 | 10.41 | 0.71 | B |
| Arm 2                        | 0.0  | 5.06   | 0.05 | A | 0.0 | 7.28  | 0.03 | A |
| Arm 3                        | 19.0 | 78.86  | 0.99 | F | 2.1 | 12.72 | 0.68 | B |
| Arm 4                        | 0.4  | 7.21   | 0.29 | A | 0.5 | 5.76  | 0.32 | A |
| Arm 5                        | 0.4  | 5.77   | 0.28 | A | 0.4 | 5.12  | 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       |               |
| Location    |               |
| Site number |               |
| Date        | 29/07/2025    |
| Version     |               |
| Status      | (new file)    |
| Identifier  |               |
| Client      |               |
| Jobnumber   |               |
| Enumerator  | MPPNET\WNCube |
| Description |               |

## Units

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

## Analysis Options

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

## Demand Set Summary

| ID  | Scenario name                | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1  | Existing, 2023               | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D2  | Existing, 2023               | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D3  | Do Nothing, 2028             | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D4  | Do Nothing, 2028             | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D5  | Do Nothing, 2033             | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D6  | Do Nothing, 2033             | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D7  | Do Nothing, 2043             | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D8  | Do Nothing, 2043             | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D9  | Do Something, 2028           | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D10 | Do Something, 2028           | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D11 | Do Something, 2033           | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D12 | Do Something, 2033           | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D13 | Do Something, 2043           | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D14 | Do Something, 2043           | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D15 | Do Something, 2043+AT        | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D16 | Do Something, 2043+AT        | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |
| D17 | Do Something, 2043+Ring Road | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |
| D18 | Do Something, 2043+Ring Road | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

## Analysis Set Details

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

# Existing, 2023, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 5 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 6.80               | A            |

### Junction Network Options

| Driving side | Lighting       |
|--------------|----------------|
| Left         | Normal/unknown |

## Arms

### Arms

| Arm | Name     | Description |
|-----|----------|-------------|
| 1   | untitled |             |
| 2   | untitled |             |
| 3   | untitled |             |
| 4   | untitled |             |
| 5   | untitled |             |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit only |
|-----|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|-----------|
| 1   | 3.20                             | 5.50                | 8.6                             | 9.6                  | 47.0                              | 20.0                               |           |
| 2   | 3.00                             | 4.50                | 3.0                             | 20.0                 | 47.0                              | 20.0                               |           |
| 3   | 3.40                             | 3.50                | 1.0                             | 6.9                  | 47.0                              | 10.0                               |           |
| 4   | 4.20                             | 4.20                | 0.0                             | 8.9                  | 47.0                              | 20.0                               |           |
| 5   | 3.50                             | 5.50                | 21.0                            | 11.0                 | 47.0                              | 20.0                               |           |

### Zebra Crossings

| Arm | Space between crossing and junction entry (Zebra) (PCU) | Vehicles queueing on exit (Zebra) (PCU) | Central Refuge | Crossing data type | Crossing length (entry side) (m) | Crossing time (entry side) (s) | Crossing length (exit side) (m) | Crossing time (exit side) (s) |
|-----|---------------------------------------------------------|-----------------------------------------|----------------|--------------------|----------------------------------|--------------------------------|---------------------------------|-------------------------------|
| 1   | 1.00                                                    | 1.00                                    | ✓              | Distance           | 3.80                             | 2.71                           | 2.91                            | 2.08                          |
| 3   | 1.00                                                    | 1.00                                    | ✓              | Distance           | 2.22                             | 1.59                           | 2.56                            | 1.83                          |
| 5   | 1.00                                                    | 1.00                                    | ✓              | Distance           | 3.35                             | 2.39                           | 3.32                            | 2.37                          |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Final slope | Final intercept (PCU/hr) |
|-----|-------------|--------------------------|
| 1   | 0.542       | 1321                     |
| 2   | 0.519       | 1121                     |
| 3   | 0.484       | 1028                     |
| 4   | 0.524       | 1239                     |
| 5   | 0.584       | 1517                     |

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 | Existing, 2023 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 393                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 22                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 521                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 168                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 172                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 23.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 46.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 13.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |   |     |     |    |
|------|----|-----|---|-----|-----|----|
|      |    | 1   | 2 | 3   | 4   | 5  |
| From | 1  | 0   | 1 | 227 | 139 | 26 |
|      | 2  | 13  | 0 | 6   | 1   | 2  |
|      | 3  | 451 | 1 | 3   | 8   | 58 |
|      | 4  | 128 | 1 | 21  | 3   | 15 |
|      | 5  | 134 | 1 | 32  | 5   | 0  |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.34    | 4.25          | 0.5             | A       | 361                     | 541                           |
| 2   | 0.03    | 4.35          | 0.0             | A       | 20                      | 30                            |
| 3   | 0.62    | 10.19         | 1.6             | B       | 478                     | 717                           |
| 4   | 0.20    | 4.91          | 0.3             | A       | 154                     | 231                           |
| 5   | 0.19    | 4.54          | 0.2             | A       | 158                     | 237                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 296                   | 74                      | 50                        | 17.32                      | 1293              | 0.229 | 295                 | 543                             | 0.0               | 0.3             | 3.600     | A                             |
| 2   | 17                    | 4                       | 342                       |                            | 941               | 0.018 | 16                  | 3                               | 0.0               | 0.0             | 3.895     | A                             |
| 3   | 392                   | 98                      | 142                       | 34.63                      | 959               | 0.409 | 390                 | 217                             | 0.0               | 0.7             | 6.288     | A                             |
| 4   | 126                   | 32                      | 414                       |                            | 1021              | 0.124 | 126                 | 117                             | 0.0               | 0.1             | 4.017     | A                             |
| 5   | 129                   | 32                      | 465                       | 9.79                       | 1189              | 0.109 | 129                 | 76                              | 0.0               | 0.1             | 3.393     | A                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 353                   | 88                      | 60                        | 20.68                      | 1287              | 0.274 | 353                 | 651                             | 0.3               | 0.4             | 3.852     | A                             |
| 2   | 20                    | 5                       | 410                       |                            | 904               | 0.022 | 20                  | 4                               | 0.0               | 0.0             | 4.073     | A                             |
| 3   | 468                   | 117                     | 170                       | 41.35                      | 945               | 0.495 | 467                 | 260                             | 0.7               | 1.0             | 7.508     | A                             |
| 4   | 151                   | 38                      | 497                       |                            | 978               | 0.154 | 151                 | 140                             | 0.1               | 0.2             | 4.352     | A                             |
| 5   | 155                   | 39                      | 557                       | 11.69                      | 1106              | 0.140 | 154                 | 91                              | 0.1               | 0.2             | 3.782     | A                             |

#### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 433                   | 108                     | 74                        | 25.32                      | 1280              | 0.338 | 432                 | 797                             | 0.4               | 0.5             | 4.245     | A                             |
| 2   | 24                    | 6                       | 501                       |                            | 853               | 0.028 | 24                  | 4                               | 0.0               | 0.0             | 4.345     | A                             |
| 3   | 574                   | 143                     | 208                       | 50.65                      | 927               | 0.619 | 571                 | 318                             | 1.0               | 1.6             | 10.053    | B                             |
| 4   | 185                   | 46                      | 607                       |                            | 919               | 0.201 | 185                 | 172                             | 0.2               | 0.3             | 4.899     | A                             |
| 5   | 189                   | 47                      | 681                       | 14.31                      | 985               | 0.192 | 189                 | 111                             | 0.2               | 0.2             | 4.523     | A                             |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 433                   | 108                     | 74                        | 25.32                      | 1280              | 0.338 | 433                 | 799                             | 0.5               | 0.5             | 4.250     | A                             |
| 2   | 24                    | 6                       | 502                       |                            | 852               | 0.028 | 24                  | 4                               | 0.0               | 0.0             | 4.347     | A                             |
| 3   | 574                   | 143                     | 208                       | 50.65                      | 927               | 0.619 | 574                 | 318                             | 1.6               | 1.6             | 10.190    | B                             |
| 4   | 185                   | 46                      | 610                       |                            | 918               | 0.201 | 185                 | 172                             | 0.3               | 0.3             | 4.909     | A                             |
| 5   | 189                   | 47                      | 684                       | 14.31                      | 983               | 0.193 | 189                 | 111                             | 0.2               | 0.2             | 4.537     | A                             |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 353                   | 88                      | 60                        | 20.68                      | 1287              | 0.274 | 354                 | 655                             | 0.5               | 0.4             | 3.859     | A                             |
| 2   | 20                    | 5                       | 411                       |                            | 903               | 0.022 | 20                  | 4                               | 0.0               | 0.0             | 4.077     | A                             |
| 3   | 468                   | 117                     | 170                       | 41.35                      | 945               | 0.495 | 471                 | 260                             | 1.6               | 1.0             | 7.623     | A                             |
| 4   | 151                   | 38                      | 500                       |                            | 976               | 0.155 | 151                 | 140                             | 0.3               | 0.2             | 4.368     | A                             |
| 5   | 155                   | 39                      | 561                       | 11.69                      | 1103              | 0.140 | 155                 | 91                              | 0.2               | 0.2             | 3.797     | A                             |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 296                   | 74                      | 51                        | 17.32                      | 1293              | 0.229 | 296                 | 548                             | 0.4               | 0.3             | 3.611     | A                             |
| 2   | 17                    | 4                       | 344                       |                            | 940               | 0.018 | 17                  | 3                               | 0.0               | 0.0             | 3.901     | A                             |
| 3   | 392                   | 98                      | 142                       | 34.63                      | 959               | 0.409 | 393                 | 218                             | 1.0               | 0.7             | 6.381     | A                             |
| 4   | 126                   | 32                      | 418                       |                            | 1019              | 0.124 | 127                 | 118                             | 0.2               | 0.1             | 4.035     | A                             |
| 5   | 129                   | 32                      | 469                       | 9.79                       | 1186              | 0.109 | 130                 | 76                              | 0.2               | 0.1             | 3.410     | A                             |



# Existing, 2023, PM

## Data Errors and Warnings

| Severity | Area                | Item                        | Description                                                                                                                                                                                  |
|----------|---------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning  | Pedestrian Crossing | Arm 5 - Pedestrian crossing | Pedestrian crossing uses default flow of 0. Is this correct?                                                                                                                                 |
| Warning  | Vehicle Mix         |                             | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 5.94               | 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 | Existing, 2023 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 634                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 12                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 326                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 249                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 45                      | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 25.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 26.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 2.00                             |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |    |
|------|----|-----|----|-----|-----|----|
|      |    | 1   | 2  | 3   | 4   | 5  |
| From | 1  | 0   | 11 | 383 | 211 | 29 |
|      | 2  | 3   | 0  | 7   | 1   | 1  |
|      | 3  | 258 | 0  | 0   | 39  | 29 |
|      | 4  | 188 | 3  | 50  | 0   | 8  |
|      | 5  | 24  | 0  | 10  | 10  | 1  |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.55    | 6.24          | 1.2             | A       | 582                     | 873                           |
| 2   | 0.02    | 5.22          | 0.0             | A       | 11                      | 17                            |
| 3   | 0.40    | 6.76          | 0.7             | A       | 299                     | 449                           |
| 4   | 0.26    | 4.62          | 0.4             | A       | 228                     | 343                           |
| 5   | 0.04    | 3.28          | 0.0             | A       | 41                      | 62                            |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 477                   | 119                     | 55                        | 18.82                      | 1290              | 0.370 | 475                 | 354                             | 0.0               | 0.6             | 4.404     | A                             |
| 2   | 9                     | 2                       | 520                       |                            | 842               | 0.011 | 9                   | 10                              | 0.0               | 0.0             | 4.321     | A                             |
| 3   | 245                   | 61                      | 192                       | 19.57                      | 935               | 0.262 | 244                 | 337                             | 0.0               | 0.4             | 5.196     | A                             |
| 4   | 187                   | 47                      | 240                       |                            | 1113              | 0.168 | 187                 | 196                             | 0.0               | 0.2             | 3.882     | A                             |
| 5   | 34                    | 8                       | 376                       | 0.00                       | 1277              | 0.027 | 34                  | 51                              | 0.0               | 0.0             | 2.894     | A                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 570                   | 142                     | 66                        | 22.47                      | 1284              | 0.444 | 569                 | 425                             | 0.6               | 0.8             | 5.030     | A                             |
| 2   | 11                    | 3                       | 623                       |                            | 784               | 0.014 | 11                  | 13                              | 0.0               | 0.0             | 4.657     | A                             |
| 3   | 293                   | 73                      | 230                       | 23.37                      | 917               | 0.320 | 293                 | 404                             | 0.4               | 0.5             | 5.762     | A                             |
| 4   | 224                   | 56                      | 288                       |                            | 1088              | 0.206 | 224                 | 234                             | 0.2               | 0.3             | 4.163     | A                             |
| 5   | 40                    | 10                      | 451                       | 0.00                       | 1223              | 0.033 | 40                  | 61                              | 0.0               | 0.0             | 3.043     | A                             |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 698                   | 175                     | 81                        | 27.53                      | 1275              | 0.547 | 696                 | 520                             | 0.8               | 1.2             | 6.202     | A                             |
| 2   | 13                    | 3                       | 762                       |                            | 703               | 0.019 | 13                  | 15                              | 0.0               | 0.0             | 5.217     | A                             |
| 3   | 359                   | 90                      | 281                       | 28.63                      | 892               | 0.402 | 358                 | 494                             | 0.5               | 0.7             | 6.734     | A                             |
| 4   | 274                   | 69                      | 353                       |                            | 1054              | 0.260 | 274                 | 287                             | 0.3               | 0.3             | 4.610     | A                             |
| 5   | 50                    | 12                      | 552                       | 0.00                       | 1146              | 0.043 | 50                  | 75                              | 0.0               | 0.0             | 3.283     | A                             |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 698                   | 175                     | 81                        | 27.53                      | 1275              | 0.547 | 698                 | 521                             | 1.2               | 1.2             | 6.237     | A                             |
| 2   | 13                    | 3                       | 764                       |                            | 702               | 0.019 | 13                  | 15                              | 0.0               | 0.0             | 5.224     | A                             |
| 3   | 359                   | 90                      | 282                       | 28.63                      | 892               | 0.403 | 359                 | 495                             | 0.7               | 0.7             | 6.756     | A                             |
| 4   | 274                   | 69                      | 353                       |                            | 1054              | 0.260 | 274                 | 287                             | 0.3               | 0.4             | 4.616     | A                             |
| 5   | 50                    | 12                      | 553                       | 0.00                       | 1145              | 0.043 | 50                  | 75                              | 0.0               | 0.0             | 3.285     | A                             |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 570                   | 142                     | 67                        | 22.47                      | 1284              | 0.444 | 572                 | 426                             | 1.2               | 0.8             | 5.065     | A                             |
| 2   | 11                    | 3                       | 626                       |                            | 782               | 0.014 | 11                  | 13                              | 0.0               | 0.0             | 4.668     | A                             |
| 3   | 293                   | 73                      | 231                       | 23.37                      | 917               | 0.320 | 294                 | 406                             | 0.7               | 0.5             | 5.790     | A                             |
| 4   | 224                   | 56                      | 289                       |                            | 1088              | 0.206 | 224                 | 235                             | 0.4               | 0.3             | 4.171     | A                             |
| 5   | 40                    | 10                      | 452                       | 0.00                       | 1222              | 0.033 | 40                  | 61                              | 0.0               | 0.0             | 3.046     | A                             |

18:15 - 18:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 477                   | 119                     | 56                        | 18.82                      | 1290              | 0.370 | 478                 | 357                             | 0.8               | 0.6             | 4.440     | A                             |
| 2   | 9                     | 2                       | 523                       |                            | 840               | 0.011 | 9                   | 11                              | 0.0               | 0.0             | 4.331     | A                             |
| 3   | 245                   | 61                      | 193                       | 19.57                      | 935               | 0.263 | 246                 | 339                             | 0.5               | 0.4             | 5.230     | A                             |
| 4   | 187                   | 47                      | 242                       |                            | 1112              | 0.169 | 188                 | 197                             | 0.3               | 0.2             | 3.894     | A                             |
| 5   | 34                    | 8                       | 379                       | 0.00                       | 1275              | 0.027 | 34                  | 51                              | 0.0               | 0.0             | 2.901     | A                             |

# Do Nothing, 2028, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 5 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 4 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 20.77              | 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 |
|----|------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D3 | Do Nothing, 2028 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 536                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 35                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 719                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 217                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 243                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 23.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 46.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 13.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |   |     |     |     |
|------|----|-----|---|-----|-----|-----|
|      |    | 1   | 2 | 3   | 4   | 5   |
| From | 1  | 0   | 1 | 266 | 155 | 114 |
|      | 2  | 14  | 0 | 8   | 1   | 12  |
|      | 3  | 526 | 1 | 4   | 9   | 179 |
|      | 4  | 143 | 1 | 24  | 3   | 46  |
|      | 5  | 183 | 1 | 52  | 7   | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.47    | 5.34          | 0.9             | A       | 492                     | 738                           |
| 2   | 0.05    | 5.05          | 0.1             | A       | 32                      | 48                            |
| 3   | 0.92    | 42.08         | 8.6             | E       | 660                     | 990                           |
| 4   | 0.33    | 7.29          | 0.5             | A       | 199                     | 299                           |
| 5   | 0.31    | 6.07          | 0.4             | A       | 223                     | 334                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 404                   | 101                     | 70                        | 17.32                      | 1283              | 0.315 | 402                 | 647                             | 0.0               | 0.5             | 4.078     | A                             |
| 2   | 26                    | 7                       | 468                       |                            | 873               | 0.030 | 26                  | 3                               | 0.0               | 0.0             | 4.252     | A                             |
| 3   | 541                   | 135                     | 229                       | 34.63                      | 917               | 0.590 | 536                 | 265                             | 0.0               | 1.4             | 9.312     | A                             |
| 4   | 163                   | 41                      | 634                       |                            | 898               | 0.182 | 162                 | 131                             | 0.0               | 0.2             | 4.890     | A                             |
| 5   | 183                   | 46                      | 534                       | 9.79                       | 1121              | 0.163 | 182                 | 262                             | 0.0               | 0.2             | 3.831     | A                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 482                   | 120                     | 83                        | 20.68                      | 1275              | 0.378 | 481                 | 775                             | 0.5               | 0.6             | 4.534     | A                             |
| 2   | 31                    | 8                       | 561                       |                            | 822               | 0.038 | 31                  | 4                               | 0.0               | 0.0             | 4.553     | A                             |
| 3   | 646                   | 162                     | 275                       | 41.35                      | 895               | 0.722 | 642                 | 318                             | 1.4               | 2.5             | 14.007    | B                             |
| 4   | 195                   | 49                      | 760                       |                            | 828               | 0.236 | 195                 | 157                             | 0.2               | 0.3             | 5.682     | A                             |
| 5   | 218                   | 55                      | 640                       | 11.69                      | 1016              | 0.215 | 218                 | 314                             | 0.2               | 0.3             | 4.507     | A                             |

**08:30 - 08:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 590                   | 148                     | 102                       | 25.32                      | 1264              | 0.467 | 589                 | 938                             | 0.6               | 0.9             | 5.322     | A                             |
| 2   | 39                    | 10                      | 687                       |                            | 752               | 0.051 | 38                  | 4                               | 0.0               | 0.1             | 5.045     | A                             |
| 3   | 792                   | 198                     | 336                       | 50.65                      | 865               | 0.915 | 771                 | 389                             | 2.5               | 7.5             | 33.064    | D                             |
| 4   | 239                   | 60                      | 916                       |                            | 741               | 0.322 | 238                 | 192                             | 0.3               | 0.5             | 7.152     | A                             |
| 5   | 268                   | 67                      | 773                       | 14.31                      | 873               | 0.307 | 267                 | 381                             | 0.3               | 0.4             | 5.937     | A                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 590                   | 148                     | 102                       | 25.32                      | 1264              | 0.467 | 590                 | 950                             | 0.9               | 0.9             | 5.340     | A                             |
| 2   | 39                    | 10                      | 688                       |                            | 751               | 0.051 | 39                  | 4                               | 0.1               | 0.1             | 5.050     | A                             |
| 3   | 792                   | 198                     | 337                       | 50.65                      | 864               | 0.916 | 787                 | 390                             | 7.5               | 8.6             | 42.084    | E                             |
| 4   | 239                   | 60                      | 931                       |                            | 732               | 0.326 | 239                 | 193                             | 0.5               | 0.5             | 7.292     | A                             |
| 5   | 268                   | 67                      | 785                       | 14.31                      | 860               | 0.311 | 268                 | 385                             | 0.4               | 0.4             | 6.071     | A                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 482                   | 120                     | 84                        | 20.68                      | 1275              | 0.378 | 483                 | 797                             | 0.9               | 0.6             | 4.554     | A                             |
| 2   | 31                    | 8                       | 563                       |                            | 821               | 0.038 | 32                  | 4                               | 0.1               | 0.0             | 4.561     | A                             |
| 3   | 646                   | 162                     | 276                       | 41.35                      | 894               | 0.723 | 670                 | 319                             | 8.6               | 2.8             | 17.507    | C                             |
| 4   | 195                   | 49                      | 788                       |                            | 813               | 0.240 | 196                 | 158                             | 0.5               | 0.3             | 5.837     | A                             |
| 5   | 218                   | 55                      | 662                       | 11.69                      | 996               | 0.219 | 219                 | 322                             | 0.4               | 0.3             | 4.637     | A                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 404                   | 101                     | 70                        | 17.32                      | 1282              | 0.315 | 404                 | 656                             | 0.6               | 0.5             | 4.103     | A                             |
| 2   | 26                    | 7                       | 471                       |                            | 871               | 0.030 | 26                  | 3                               | 0.0               | 0.0             | 4.260     | A                             |
| 3   | 541                   | 135                     | 231                       | 34.63                      | 916               | 0.591 | 546                 | 267                             | 2.8               | 1.5             | 9.863     | A                             |
| 4   | 163                   | 41                      | 645                       |                            | 892               | 0.183 | 164                 | 132                             | 0.3               | 0.2             | 4.947     | A                             |
| 5   | 183                   | 46                      | 543                       | 9.79                       | 1113              | 0.164 | 183                 | 266                             | 0.3               | 0.2             | 3.876     | A                             |

# Do Nothing, 2028, PM

## Data Errors and Warnings

| Severity | Area                | Item                        | Description                                                                                                                                                                                  |
|----------|---------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run            | Arm 5 - Capacity            | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Warning  | Pedestrian Crossing | Arm 5 - Pedestrian crossing | Pedestrian crossing uses default flow of 0. Is this correct?                                                                                                                                 |
| Warning  | Vehicle Mix         |                             | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 8.38               | 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 | Do Nothing, 2028 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 753                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 15                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 466                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 306                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 207                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 25.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 26.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 2.00                             |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |    |
|------|----|-----|----|-----|-----|----|
|      |    | 1   | 2  | 3   | 4   | 5  |
| From | 1  | 0   | 12 | 465 | 230 | 46 |
|      | 2  | 4   | 0  | 9   | 1   | 1  |
|      | 3  | 353 | 4  | 2   | 57  | 50 |
|      | 4  | 219 | 2  | 66  | 3   | 16 |
|      | 5  | 108 | 2  | 72  | 24  | 1  |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.68    | 9.33          | 2.1             | A       | 691                     | 1036                          |
| 2   | 0.03    | 6.63          | 0.0             | A       | 14                      | 21                            |
| 3   | 0.59    | 10.28         | 1.4             | B       | 428                     | 641                           |
| 4   | 0.35    | 5.66          | 0.5             | A       | 281                     | 421                           |
| 5   | 0.23    | 4.77          | 0.3             | A       | 190                     | 285                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 567                   | 142                     | 132                       | 18.82                      | 1249              | 0.454 | 564                 | 512                             | 0.0               | 0.8             | 5.229     | A                             |
| 2   | 11                    | 3                       | 681                       |                            | 749               | 0.015 | 11                  | 15                              | 0.0               | 0.0             | 4.881     | A                             |
| 3   | 351                   | 88                      | 232                       | 19.57                      | 916               | 0.383 | 348                 | 460                             | 0.0               | 0.6             | 6.317     | A                             |
| 4   | 230                   | 58                      | 345                       |                            | 1059              | 0.218 | 229                 | 236                             | 0.0               | 0.3             | 4.336     | A                             |
| 5   | 156                   | 39                      | 489                       | 0.00                       | 1184              | 0.132 | 155                 | 85                              | 0.0               | 0.2             | 3.498     | A                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 677                   | 169                     | 158                       | 22.47                      | 1234              | 0.548 | 675                 | 614                             | 0.8               | 1.2             | 6.424     | A                             |
| 2   | 13                    | 3                       | 816                       |                            | 670               | 0.020 | 13                  | 18                              | 0.0               | 0.0             | 5.486     | A                             |
| 3   | 419                   | 105                     | 278                       | 23.37                      | 894               | 0.469 | 418                 | 551                             | 0.6               | 0.9             | 7.550     | A                             |
| 4   | 275                   | 69                      | 413                       |                            | 1022              | 0.269 | 275                 | 283                             | 0.3               | 0.4             | 4.812     | A                             |
| 5   | 186                   | 47                      | 586                       | 0.00                       | 1102              | 0.169 | 186                 | 102                             | 0.2               | 0.2             | 3.927     | A                             |



**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 829                   | 207                     | 193                       | 27.53                      | 1215              | 0.683 | 826                 | 751                             | 1.2               | 2.1             | 9.165     | A                             |
| 2   | 17                    | 4                       | 997                       |                            | 562               | 0.029 | 16                  | 22                              | 0.0               | 0.0             | 6.602     | A                             |
| 3   | 513                   | 128                     | 340                       | 28.63                      | 864               | 0.594 | 511                 | 674                             | 0.9               | 1.4             | 10.142    | B                             |
| 4   | 337                   | 84                      | 505                       |                            | 974               | 0.346 | 336                 | 345                             | 0.4               | 0.5             | 5.636     | A                             |
| 5   | 228                   | 57                      | 717                       | 0.00                       | 985               | 0.231 | 228                 | 125                             | 0.2               | 0.3             | 4.751     | A                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 829                   | 207                     | 194                       | 27.53                      | 1215              | 0.683 | 829                 | 753                             | 2.1               | 2.1             | 9.328     | A                             |
| 2   | 17                    | 4                       | 1001                      |                            | 560               | 0.030 | 17                  | 22                              | 0.0               | 0.0             | 6.628     | A                             |
| 3   | 513                   | 128                     | 341                       | 28.63                      | 863               | 0.595 | 513                 | 676                             | 1.4               | 1.4             | 10.281    | B                             |
| 4   | 337                   | 84                      | 507                       |                            | 973               | 0.346 | 337                 | 347                             | 0.5               | 0.5             | 5.657     | A                             |
| 5   | 228                   | 57                      | 719                       | 0.00                       | 983               | 0.232 | 228                 | 125                             | 0.3               | 0.3             | 4.767     | A                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 677                   | 169                     | 159                       | 22.47                      | 1234              | 0.549 | 680                 | 617                             | 2.1               | 1.2             | 6.545     | A                             |
| 2   | 13                    | 3                       | 821                       |                            | 666               | 0.020 | 14                  | 18                              | 0.0               | 0.0             | 5.514     | A                             |
| 3   | 419                   | 105                     | 280                       | 23.37                      | 893               | 0.469 | 421                 | 554                             | 1.4               | 0.9             | 7.671     | A                             |
| 4   | 275                   | 69                      | 417                       |                            | 1021              | 0.269 | 276                 | 285                             | 0.5               | 0.4             | 4.836     | A                             |
| 5   | 186                   | 47                      | 589                       | 0.00                       | 1099              | 0.169 | 186                 | 103                             | 0.3               | 0.2             | 3.944     | A                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 567                   | 142                     | 133                       | 18.82                      | 1248              | 0.454 | 568                 | 516                             | 1.2               | 0.8             | 5.308     | A                             |
| 2   | 11                    | 3                       | 686                       |                            | 746               | 0.015 | 11                  | 15                              | 0.0               | 0.0             | 4.904     | A                             |
| 3   | 351                   | 88                      | 234                       | 19.57                      | 915               | 0.383 | 352                 | 463                             | 0.9               | 0.6             | 6.404     | A                             |
| 4   | 230                   | 58                      | 348                       |                            | 1057              | 0.218 | 231                 | 238                             | 0.4               | 0.3             | 4.360     | A                             |
| 5   | 156                   | 39                      | 493                       | 0.00                       | 1180              | 0.132 | 156                 | 86                              | 0.2               | 0.2             | 3.514     | A                             |

# Do Nothing, 2033, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 5 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 4 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 35.37              | E            |

### 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 | Do Nothing, 2033 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 572                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 37                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 764                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 231                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 260                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 23.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 46.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 13.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |   |     |     |     |
|------|----|-----|---|-----|-----|-----|
|      |    | 1   | 2 | 3   | 4   | 5   |
| From | 1  | 0   | 1 | 284 | 165 | 122 |
|      | 2  | 15  | 0 | 8   | 1   | 13  |
|      | 3  | 560 | 1 | 4   | 9   | 190 |
|      | 4  | 153 | 1 | 25  | 3   | 49  |
|      | 5  | 195 | 1 | 56  | 8   | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.50    | 5.71          | 1.0             | A       | 525                     | 787                           |
| 2   | 0.06    | 5.26          | 0.1             | A       | 34                      | 51                            |
| 3   | 0.99    | 77.04         | 17.5            | F       | 701                     | 1052                          |
| 4   | 0.36    | 7.97          | 0.6             | A       | 212                     | 318                           |
| 5   | 0.35    | 6.84          | 0.5             | A       | 239                     | 358                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 431                   | 108                     | 74                        | 17.32                      | 1280              | 0.336 | 429                 | 689                             | 0.0               | 0.5             | 4.221     | A                             |
| 2   | 28                    | 7                       | 500                       |                            | 856               | 0.033 | 28                  | 3                               | 0.0               | 0.0             | 4.347     | A                             |
| 3   | 575                   | 144                     | 245                       | 34.63                      | 909               | 0.633 | 569                 | 282                             | 0.0               | 1.7             | 10.371    | B                             |
| 4   | 174                   | 43                      | 674                       |                            | 875               | 0.199 | 173                 | 139                             | 0.0               | 0.2             | 5.117     | A                             |
| 5   | 196                   | 49                      | 568                       | 9.79                       | 1088              | 0.180 | 195                 | 279                             | 0.0               | 0.2             | 4.027     | A                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 514                   | 129                     | 89                        | 20.68                      | 1272              | 0.404 | 514                 | 825                             | 0.5               | 0.7             | 4.743     | A                             |
| 2   | 33                    | 8                       | 599                       |                            | 801               | 0.042 | 33                  | 4                               | 0.0               | 0.0             | 4.687     | A                             |
| 3   | 687                   | 172                     | 294                       | 41.35                      | 886               | 0.775 | 681                 | 338                             | 1.7               | 3.2             | 17.055    | C                             |
| 4   | 208                   | 52                      | 807                       |                            | 802               | 0.259 | 207                 | 167                             | 0.2               | 0.3             | 6.053     | A                             |
| 5   | 234                   | 58                      | 680                       | 11.69                      | 974               | 0.240 | 233                 | 334                             | 0.2               | 0.3             | 4.856     | A                             |

**08:30 - 08:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 630                   | 157                     | 108                       | 25.32                      | 1261              | 0.499 | 629                 | 986                             | 0.7               | 1.0             | 5.681     | A                             |
| 2   | 41                    | 10                      | 733                       |                            | 726               | 0.056 | 41                  | 4                               | 0.0               | 0.1             | 5.250     | A                             |
| 3   | 841                   | 210                     | 359                       | 50.65                      | 854               | 0.985 | 802                 | 414                             | 3.2               | 13.0            | 49.487    | E                             |
| 4   | 254                   | 64                      | 957                       |                            | 717               | 0.355 | 254                 | 204                             | 0.3               | 0.5             | 7.748     | A                             |
| 5   | 286                   | 72                      | 809                       | 14.31                      | 829               | 0.345 | 285                 | 402                             | 0.3               | 0.5             | 6.610     | A                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 630                   | 157                     | 109                       | 25.32                      | 1261              | 0.500 | 630                 | 1003                            | 1.0               | 1.0             | 5.706     | A                             |
| 2   | 41                    | 10                      | 734                       |                            | 725               | 0.056 | 41                  | 4                               | 0.1               | 0.1             | 5.257     | A                             |
| 3   | 841                   | 210                     | 360                       | 50.65                      | 853               | 0.986 | 823                 | 415                             | 13.0              | 17.5            | 77.038    | F                             |
| 4   | 254                   | 64                      | 978                       |                            | 706               | 0.360 | 254                 | 205                             | 0.5               | 0.6             | 7.968     | A                             |
| 5   | 286                   | 72                      | 826                       | 14.31                      | 813               | 0.352 | 286                 | 407                             | 0.5               | 0.5             | 6.837     | A                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 514                   | 129                     | 90                        | 20.68                      | 1272              | 0.404 | 515                 | 871                             | 1.0               | 0.7             | 4.770     | A                             |
| 2   | 33                    | 8                       | 601                       |                            | 800               | 0.042 | 33                  | 4                               | 0.1               | 0.0             | 4.697     | A                             |
| 3   | 687                   | 172                     | 295                       | 41.35                      | 885               | 0.776 | 742                 | 340                             | 17.5              | 3.8             | 31.870    | D                             |
| 4   | 208                   | 52                      | 868                       |                            | 769               | 0.270 | 208                 | 168                             | 0.6               | 0.4             | 6.431     | A                             |
| 5   | 234                   | 58                      | 726                       | 11.69                      | 930               | 0.251 | 235                 | 350                             | 0.5               | 0.3             | 5.182     | A                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 431                   | 108                     | 75                        | 17.32                      | 1280              | 0.336 | 431                 | 702                             | 0.7               | 0.5             | 4.245     | A                             |
| 2   | 28                    | 7                       | 503                       |                            | 854               | 0.033 | 28                  | 3                               | 0.0               | 0.0             | 4.357     | A                             |
| 3   | 575                   | 144                     | 247                       | 34.63                      | 909               | 0.633 | 583                 | 284                             | 3.8               | 1.8             | 11.330    | B                             |
| 4   | 174                   | 43                      | 690                       |                            | 867               | 0.201 | 174                 | 140                             | 0.4               | 0.3             | 5.200     | A                             |
| 5   | 196                   | 49                      | 580                       | 9.79                       | 1077              | 0.182 | 196                 | 284                             | 0.3               | 0.2             | 4.089     | A                             |

# Do Nothing, 2033, PM

## Data Errors and Warnings

| Severity | Area                | Item                        | Description                                                                                                                                                                                  |
|----------|---------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run            | Arm 5 - Capacity            | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Warning  | Pedestrian Crossing | Arm 5 - Pedestrian crossing | Pedestrian crossing uses default flow of 0. Is this correct?                                                                                                                                 |
| Warning  | Vehicle Mix         |                             | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 9.62               | 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 | Do Nothing, 2033 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 801                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 15                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 496                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 325                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 221                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 25.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 26.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 2.00                             |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |    |
|------|----|-----|----|-----|-----|----|
|      |    | 1   | 2  | 3   | 4   | 5  |
| From | 1  | 1   | 13 | 494 | 244 | 49 |
|      | 2  | 4   | 0  | 9   | 1   | 1  |
|      | 3  | 376 | 5  | 2   | 60  | 53 |
|      | 4  | 233 | 2  | 70  | 3   | 17 |
|      | 5  | 115 | 2  | 77  | 26  | 1  |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.73    | 11.03         | 2.7             | B       | 735                     | 1103                          |
| 2   | 0.03    | 7.12          | 0.0             | A       | 14                      | 21                            |
| 3   | 0.64    | 11.75         | 1.8             | B       | 455                     | 683                           |
| 4   | 0.37    | 6.02          | 0.6             | A       | 298                     | 447                           |
| 5   | 0.26    | 5.18          | 0.3             | A       | 203                     | 304                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 603                   | 151                     | 141                       | 18.82                      | 1244              | 0.485 | 599                 | 546                             | 0.0               | 0.9             | 5.552     | A                             |
| 2   | 11                    | 3                       | 724                       |                            | 724               | 0.016 | 11                  | 16                              | 0.0               | 0.0             | 5.052     | A                             |
| 3   | 373                   | 93                      | 247                       | 19.57                      | 909               | 0.411 | 371                 | 488                             | 0.0               | 0.7             | 6.658     | A                             |
| 4   | 245                   | 61                      | 368                       |                            | 1046              | 0.234 | 243                 | 250                             | 0.0               | 0.3             | 4.477     | A                             |
| 5   | 166                   | 42                      | 521                       | 0.00                       | 1158              | 0.144 | 166                 | 91                              | 0.0               | 0.2             | 3.628     | A                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 720                   | 180                     | 169                       | 22.47                      | 1229              | 0.586 | 718                 | 654                             | 0.9               | 1.4             | 7.029     | A                             |
| 2   | 13                    | 3                       | 867                       |                            | 639               | 0.021 | 13                  | 20                              | 0.0               | 0.0             | 5.753     | A                             |
| 3   | 446                   | 111                     | 296                       | 23.37                      | 885               | 0.504 | 445                 | 585                             | 0.7               | 1.0             | 8.152     | A                             |
| 4   | 292                   | 73                      | 441                       |                            | 1008              | 0.290 | 292                 | 300                             | 0.3               | 0.4             | 5.024     | A                             |
| 5   | 199                   | 50                      | 624                       | 0.00                       | 1069              | 0.186 | 198                 | 109                             | 0.2               | 0.2             | 4.134     | A                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 882                   | 220                     | 207                       | 27.53                      | 1208              | 0.730 | 877                 | 800                             | 1.4               | 2.6             | 10.735    | B                             |
| 2   | 17                    | 4                       | 1060                      |                            | 525               | 0.031 | 16                  | 24                              | 0.0               | 0.0             | 7.081     | A                             |
| 3   | 546                   | 137                     | 361                       | 28.63                      | 853               | 0.640 | 543                 | 715                             | 1.0               | 1.7             | 11.506    | B                             |
| 4   | 358                   | 89                      | 539                       |                            | 957               | 0.374 | 357                 | 366                             | 0.4               | 0.6             | 5.996     | A                             |
| 5   | 243                   | 61                      | 763                       | 0.00                       | 941               | 0.258 | 243                 | 133                             | 0.2               | 0.3             | 5.151     | A                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 882                   | 220                     | 207                       | 27.53                      | 1207              | 0.730 | 882                 | 803                             | 2.6               | 2.7             | 11.032    | B                             |
| 2   | 17                    | 4                       | 1064                      |                            | 522               | 0.032 | 17                  | 24                              | 0.0               | 0.0             | 7.122     | A                             |
| 3   | 546                   | 137                     | 363                       | 28.63                      | 852               | 0.641 | 546                 | 718                             | 1.7               | 1.8             | 11.748    | B                             |
| 4   | 358                   | 89                      | 542                       |                            | 955               | 0.375 | 358                 | 368                             | 0.6               | 0.6             | 6.024     | A                             |
| 5   | 243                   | 61                      | 766                       | 0.00                       | 939               | 0.259 | 243                 | 133                             | 0.3               | 0.3             | 5.176     | A                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 720                   | 180                     | 169                       | 22.47                      | 1228              | 0.586 | 725                 | 658                             | 2.7               | 1.4             | 7.222     | A                             |
| 2   | 13                    | 3                       | 874                       |                            | 635               | 0.021 | 14                  | 20                              | 0.0               | 0.0             | 5.795     | A                             |
| 3   | 446                   | 111                     | 299                       | 23.37                      | 884               | 0.505 | 449                 | 589                             | 1.8               | 1.0             | 8.329     | A                             |
| 4   | 292                   | 73                      | 445                       |                            | 1006              | 0.290 | 293                 | 302                             | 0.6               | 0.4             | 5.054     | A                             |
| 5   | 199                   | 50                      | 629                       | 0.00                       | 1065              | 0.187 | 199                 | 109                             | 0.3               | 0.2             | 4.158     | A                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 603                   | 151                     | 142                       | 18.82                      | 1243              | 0.485 | 605                 | 550                             | 1.4               | 1.0             | 5.655     | A                             |
| 2   | 11                    | 3                       | 730                       |                            | 720               | 0.016 | 11                  | 17                              | 0.0               | 0.0             | 5.081     | A                             |
| 3   | 373                   | 93                      | 249                       | 19.57                      | 908               | 0.411 | 375                 | 492                             | 1.0               | 0.7             | 6.773     | A                             |
| 4   | 245                   | 61                      | 372                       |                            | 1044              | 0.234 | 245                 | 252                             | 0.4               | 0.3             | 4.506     | A                             |
| 5   | 166                   | 42                      | 525                       | 0.00                       | 1154              | 0.144 | 167                 | 91                              | 0.2               | 0.2             | 3.650     | A                             |

# Do Nothing, 2043, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 5 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 4 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 42.53              | E            |

### 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 | Do Nothing, 2043 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 574                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 38                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 781                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 235                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 265                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 23.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 46.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 13.00                            |

## Origin-Destination Data



### Demand (PCU/hr)

|      | To |     |   |     |     |     |
|------|----|-----|---|-----|-----|-----|
|      |    | 1   | 2 | 3   | 4   | 5   |
| From | 1  | 0   | 1 | 286 | 165 | 122 |
|      | 2  | 15  | 0 | 8   | 1   | 14  |
|      | 3  | 564 | 1 | 4   | 9   | 203 |
|      | 4  | 153 | 1 | 26  | 3   | 52  |
|      | 5  | 199 | 1 | 57  | 8   | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.50    | 5.74          | 1.0             | A       | 527                     | 790                           |
| 2   | 0.06    | 5.29          | 0.1             | A       | 35                      | 52                            |
| 3   | 1.01    | 93.80         | 22.5            | F       | 717                     | 1075                          |
| 4   | 0.37    | 8.18          | 0.6             | A       | 216                     | 323                           |
| 5   | 0.36    | 6.92          | 0.6             | A       | 243                     | 365                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 432                   | 108                     | 76                        | 17.32                      | 1279              | 0.338 | 430                 | 694                             | 0.0               | 0.5             | 4.228     | A                             |
| 2   | 29                    | 7                       | 503                       |                            | 854               | 0.034 | 28                  | 3                               | 0.0               | 0.0             | 4.360     | A                             |
| 3   | 588                   | 147                     | 246                       | 34.63                      | 909               | 0.647 | 581                 | 285                             | 0.0               | 1.8             | 10.756    | B                             |
| 4   | 177                   | 44                      | 687                       |                            | 868               | 0.204 | 176                 | 139                             | 0.0               | 0.3             | 5.197     | A                             |
| 5   | 200                   | 50                      | 571                       | 9.79                       | 1084              | 0.184 | 199                 | 292                             | 0.0               | 0.2             | 4.061     | A                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 516                   | 129                     | 91                        | 20.68                      | 1271              | 0.406 | 515                 | 831                             | 0.5               | 0.7             | 4.760     | A                             |
| 2   | 34                    | 9                       | 602                       |                            | 799               | 0.043 | 34                  | 4                               | 0.0               | 0.0             | 4.705     | A                             |
| 3   | 702                   | 176                     | 294                       | 41.35                      | 885               | 0.793 | 695                 | 342                             | 1.8               | 3.5             | 18.280    | C                             |
| 4   | 211                   | 53                      | 823                       |                            | 792               | 0.267 | 211                 | 167                             | 0.3               | 0.4             | 6.189     | A                             |
| 5   | 238                   | 60                      | 684                       | 11.69                      | 969               | 0.246 | 238                 | 349                             | 0.2               | 0.3             | 4.919     | A                             |

**08:30 - 08:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 632                   | 158                     | 111                       | 25.32                      | 1260              | 0.502 | 631                 | 989                             | 0.7               | 1.0             | 5.712     | A                             |
| 2   | 42                    | 10                      | 737                       |                            | 724               | 0.058 | 42                  | 4                               | 0.0               | 0.1             | 5.279     | A                             |
| 3   | 860                   | 215                     | 360                       | 50.65                      | 853               | 1.008 | 812                 | 418                             | 3.5               | 15.6            | 56.319    | F                             |
| 4   | 259                   | 65                      | 968                       |                            | 710               | 0.364 | 258                 | 204                             | 0.4               | 0.6             | 7.947     | A                             |
| 5   | 292                   | 73                      | 809                       | 14.31                      | 828               | 0.352 | 291                 | 417                             | 0.3               | 0.5             | 6.687     | A                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 632                   | 158                     | 111                       | 25.32                      | 1259              | 0.502 | 632                 | 1005                            | 1.0               | 1.0             | 5.736     | A                             |
| 2   | 42                    | 10                      | 739                       |                            | 723               | 0.058 | 42                  | 4                               | 0.1               | 0.1             | 5.286     | A                             |
| 3   | 860                   | 215                     | 361                       | 50.65                      | 853               | 1.008 | 832                 | 419                             | 15.6              | 22.5            | 93.801    | F                             |
| 4   | 259                   | 65                      | 989                       |                            | 699               | 0.370 | 259                 | 204                             | 0.6               | 0.6             | 8.177     | A                             |
| 5   | 292                   | 73                      | 824                       | 14.31                      | 812               | 0.359 | 292                 | 423                             | 0.5               | 0.6             | 6.919     | A                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 516                   | 129                     | 92                        | 20.68                      | 1270              | 0.406 | 517                 | 890                             | 1.0               | 0.7             | 4.788     | A                             |
| 2   | 34                    | 9                       | 605                       |                            | 798               | 0.043 | 34                  | 4                               | 0.1               | 0.0             | 4.718     | A                             |
| 3   | 702                   | 176                     | 296                       | 41.35                      | 885               | 0.794 | 774                 | 344                             | 22.5              | 4.4             | 44.097    | E                             |
| 4   | 211                   | 53                      | 902                       |                            | 749               | 0.282 | 212                 | 168                             | 0.6               | 0.4             | 6.707     | A                             |
| 5   | 238                   | 60                      | 743                       | 11.69                      | 912               | 0.261 | 239                 | 371                             | 0.6               | 0.4             | 5.351     | A                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 432                   | 108                     | 76                        | 17.32                      | 1279              | 0.338 | 433                 | 709                             | 0.7               | 0.5             | 4.259     | A                             |
| 2   | 29                    | 7                       | 506                       |                            | 852               | 0.034 | 29                  | 3                               | 0.0               | 0.0             | 4.372     | A                             |
| 3   | 588                   | 147                     | 247                       | 34.63                      | 908               | 0.647 | 598                 | 287                             | 4.4               | 1.9             | 11.945    | B                             |
| 4   | 177                   | 44                      | 705                       |                            | 858               | 0.206 | 177                 | 140                             | 0.4               | 0.3             | 5.295     | A                             |
| 5   | 200                   | 50                      | 585                       | 9.79                       | 1072              | 0.186 | 200                 | 297                             | 0.4               | 0.2             | 4.132     | A                             |

# Do Nothing, 2043, PM

## Data Errors and Warnings

| Severity | Area                | Item                        | Description                                                                                                                                                                                  |
|----------|---------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run            | Arm 5 - Capacity            | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Warning  | Pedestrian Crossing | Arm 5 - Pedestrian crossing | Pedestrian crossing uses default flow of 0. Is this correct?                                                                                                                                 |
| Warning  | Vehicle Mix         |                             | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 9.93               | 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 | Do Nothing, 2043 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 809                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 14                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 503                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 327                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 234                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 25.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 26.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 2.00                             |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |    |
|------|----|-----|----|-----|-----|----|
|      |    | 1   | 2  | 3   | 4   | 5  |
| From | 1  | 1   | 13 | 500 | 244 | 51 |
|      | 2  | 3   | 0  | 9   | 1   | 1  |
|      | 3  | 380 | 5  | 2   | 54  | 62 |
|      | 4  | 233 | 2  | 71  | 3   | 18 |
|      | 5  | 121 | 2  | 83  | 27  | 1  |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.74    | 11.51         | 2.8             | B       | 742                     | 1114                          |
| 2   | 0.03    | 7.26          | 0.0             | A       | 13                      | 19                            |
| 3   | 0.65    | 12.08         | 1.8             | B       | 462                     | 692                           |
| 4   | 0.38    | 6.13          | 0.6             | A       | 300                     | 450                           |
| 5   | 0.28    | 5.33          | 0.4             | A       | 215                     | 322                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 609                   | 152                     | 147                       | 18.82                      | 1241              | 0.491 | 605                 | 552                             | 0.0               | 1.0             | 5.632     | A                             |
| 2   | 11                    | 3                       | 736                       |                            | 717               | 0.015 | 10                  | 16                              | 0.0               | 0.0             | 5.098     | A                             |
| 3   | 379                   | 95                      | 248                       | 19.57                      | 908               | 0.417 | 376                 | 498                             | 0.0               | 0.7             | 6.731     | A                             |
| 4   | 246                   | 62                      | 378                       |                            | 1041              | 0.236 | 245                 | 246                             | 0.0               | 0.3             | 4.516     | A                             |
| 5   | 176                   | 44                      | 524                       | 0.00                       | 1154              | 0.153 | 175                 | 99                              | 0.0               | 0.2             | 3.677     | A                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 727                   | 182                     | 176                       | 22.47                      | 1225              | 0.594 | 725                 | 662                             | 1.0               | 1.4             | 7.180     | A                             |
| 2   | 13                    | 3                       | 882                       |                            | 630               | 0.020 | 13                  | 20                              | 0.0               | 0.0             | 5.826     | A                             |
| 3   | 452                   | 113                     | 298                       | 23.37                      | 884               | 0.511 | 451                 | 596                             | 0.7               | 1.0             | 8.285     | A                             |
| 4   | 294                   | 73                      | 454                       |                            | 1001              | 0.294 | 294                 | 295                             | 0.3               | 0.4             | 5.082     | A                             |
| 5   | 210                   | 53                      | 628                       | 0.00                       | 1064              | 0.198 | 210                 | 119                             | 0.2               | 0.2             | 4.213     | A                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 891                   | 223                     | 215                       | 27.53                      | 1203              | 0.741 | 886                 | 809                             | 1.4               | 2.7             | 11.163    | B                             |
| 2   | 15                    | 4                       | 1077                      |                            | 514               | 0.030 | 15                  | 24                              | 0.0               | 0.0             | 7.217     | A                             |
| 3   | 554                   | 138                     | 364                       | 28.63                      | 852               | 0.650 | 551                 | 729                             | 1.0               | 1.8             | 11.823    | B                             |
| 4   | 360                   | 90                      | 554                       |                            | 949               | 0.379 | 359                 | 360                             | 0.4               | 0.6             | 6.099     | A                             |
| 5   | 258                   | 64                      | 768                       | 0.00                       | 935               | 0.276 | 257                 | 146                             | 0.2               | 0.4             | 5.302     | A                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 891                   | 223                     | 216                       | 27.53                      | 1203              | 0.741 | 890                 | 812                             | 2.7               | 2.8             | 11.508    | B                             |
| 2   | 15                    | 4                       | 1082                      |                            | 511               | 0.030 | 15                  | 24                              | 0.0               | 0.0             | 7.262     | A                             |
| 3   | 554                   | 138                     | 365                       | 28.63                      | 851               | 0.651 | 554                 | 732                             | 1.8               | 1.8             | 12.082    | B                             |
| 4   | 360                   | 90                      | 557                       |                            | 947               | 0.380 | 360                 | 362                             | 0.6               | 0.6             | 6.129     | A                             |
| 5   | 258                   | 64                      | 771                       | 0.00                       | 932               | 0.276 | 258                 | 146                             | 0.4               | 0.4             | 5.335     | A                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 727                   | 182                     | 177                       | 22.47                      | 1224              | 0.594 | 732                 | 667                             | 2.8               | 1.5             | 7.394     | A                             |
| 2   | 13                    | 3                       | 889                       |                            | 626               | 0.020 | 13                  | 20                              | 0.0               | 0.0             | 5.870     | A                             |
| 3   | 452                   | 113                     | 300                       | 23.37                      | 883               | 0.512 | 455                 | 601                             | 1.8               | 1.1             | 8.479     | A                             |
| 4   | 294                   | 73                      | 458                       |                            | 999               | 0.294 | 295                 | 298                             | 0.6               | 0.4             | 5.117     | A                             |
| 5   | 210                   | 53                      | 632                       | 0.00                       | 1060              | 0.198 | 211                 | 120                             | 0.4               | 0.2             | 4.239     | A                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 609                   | 152                     | 148                       | 18.82                      | 1240              | 0.491 | 611                 | 557                             | 1.5               | 1.0             | 5.742     | A                             |
| 2   | 11                    | 3                       | 742                       |                            | 713               | 0.015 | 11                  | 17                              | 0.0               | 0.0             | 5.129     | A                             |
| 3   | 379                   | 95                      | 251                       | 19.57                      | 907               | 0.418 | 380                 | 502                             | 1.1               | 0.7             | 6.852     | A                             |
| 4   | 246                   | 62                      | 382                       |                            | 1039              | 0.237 | 247                 | 248                             | 0.4               | 0.3             | 4.546     | A                             |
| 5   | 176                   | 44                      | 528                       | 0.00                       | 1150              | 0.153 | 176                 | 100                             | 0.2               | 0.2             | 3.699     | A                             |

# Do Something, 2028, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 5 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 4 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 26.03              | D            |

### 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 | Do Something, 2028 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 557                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 35                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 741                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 221                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 257                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 23.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 46.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 13.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |   |     |     |     |
|------|----|-----|---|-----|-----|-----|
|      |    | 1   | 2 | 3   | 4   | 5   |
| From | 1  | 0   | 1 | 282 | 155 | 119 |
|      | 2  | 14  | 0 | 8   | 1   | 12  |
|      | 3  | 536 | 1 | 4   | 9   | 191 |
|      | 4  | 143 | 1 | 25  | 3   | 49  |
|      | 5  | 192 | 1 | 56  | 8   | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.49    | 5.56          | 0.9             | A       | 511                     | 767                           |
| 2   | 0.05    | 5.18          | 0.1             | A       | 32                      | 48                            |
| 3   | 0.95    | 54.72         | 11.6            | F       | 680                     | 1020                          |
| 4   | 0.34    | 7.60          | 0.5             | A       | 203                     | 304                           |
| 5   | 0.33    | 6.39          | 0.5             | A       | 236                     | 354                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 419                   | 105                     | 74                        | 17.32                      | 1280              | 0.328 | 417                 | 661                             | 0.0               | 0.5             | 4.163     | A                             |
| 2   | 26                    | 7                       | 489                       |                            | 862               | 0.031 | 26                  | 3                               | 0.0               | 0.0             | 4.309     | A                             |
| 3   | 558                   | 139                     | 234                       | 34.63                      | 915               | 0.610 | 552                 | 281                             | 0.0               | 1.5             | 9.763     | A                             |
| 4   | 166                   | 42                      | 654                       |                            | 886               | 0.188 | 165                 | 132                             | 0.0               | 0.2             | 4.988     | A                             |
| 5   | 193                   | 48                      | 542                       | 9.79                       | 1112              | 0.174 | 193                 | 277                             | 0.0               | 0.2             | 3.914     | A                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 501                   | 125                     | 89                        | 20.68                      | 1272              | 0.394 | 500                 | 791                             | 0.5               | 0.6             | 4.660     | A                             |
| 2   | 31                    | 8                       | 585                       |                            | 808               | 0.039 | 31                  | 4                               | 0.0               | 0.0             | 4.634     | A                             |
| 3   | 666                   | 167                     | 280                       | 41.35                      | 892               | 0.747 | 661                 | 337                             | 1.5               | 2.8             | 15.248    | C                             |
| 4   | 199                   | 50                      | 783                       |                            | 814               | 0.244 | 198                 | 158                             | 0.2               | 0.3             | 5.841     | A                             |
| 5   | 231                   | 58                      | 650                       | 11.69                      | 1004              | 0.230 | 231                 | 332                             | 0.2               | 0.3             | 4.650     | A                             |

**08:30 - 08:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 613                   | 153                     | 109                       | 25.32                      | 1261              | 0.486 | 612                 | 954                             | 0.6               | 0.9             | 5.539     | A                             |
| 2   | 39                    | 10                      | 716                       |                            | 735               | 0.052 | 38                  | 4                               | 0.0               | 0.1             | 5.169     | A                             |
| 3   | 816                   | 204                     | 343                       | 50.65                      | 862               | 0.947 | 789                 | 412                             | 2.8               | 9.5             | 39.491    | E                             |
| 4   | 243                   | 61                      | 939                       |                            | 727               | 0.335 | 243                 | 193                             | 0.3               | 0.5             | 7.420     | A                             |
| 5   | 283                   | 71                      | 780                       | 14.31                      | 861               | 0.329 | 282                 | 401                             | 0.3               | 0.5             | 6.214     | A                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 613                   | 153                     | 109                       | 25.32                      | 1261              | 0.486 | 613                 | 968                             | 0.9               | 0.9             | 5.560     | A                             |
| 2   | 39                    | 10                      | 718                       |                            | 734               | 0.053 | 39                  | 4                               | 0.1               | 0.1             | 5.176     | A                             |
| 3   | 816                   | 204                     | 344                       | 50.65                      | 861               | 0.947 | 807                 | 413                             | 9.5               | 11.6            | 54.722    | F                             |
| 4   | 243                   | 61                      | 957                       |                            | 717               | 0.339 | 243                 | 194                             | 0.5               | 0.5             | 7.600     | A                             |
| 5   | 283                   | 71                      | 794                       | 14.31                      | 846               | 0.334 | 283                 | 406                             | 0.5               | 0.5             | 6.389     | A                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 501                   | 125                     | 90                        | 20.68                      | 1272              | 0.394 | 502                 | 821                             | 0.9               | 0.7             | 4.683     | A                             |
| 2   | 31                    | 8                       | 588                       |                            | 807               | 0.039 | 32                  | 4                               | 0.1               | 0.0             | 4.643     | A                             |
| 3   | 666                   | 167                     | 281                       | 41.35                      | 892               | 0.747 | 700                 | 338                             | 11.6              | 3.2             | 21.546    | C                             |
| 4   | 199                   | 50                      | 822                       |                            | 793               | 0.251 | 199                 | 159                             | 0.5               | 0.3             | 6.069     | A                             |
| 5   | 231                   | 58                      | 679                       | 11.69                      | 977               | 0.237 | 232                 | 343                             | 0.5               | 0.3             | 4.840     | A                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 419                   | 105                     | 75                        | 17.32                      | 1280              | 0.328 | 420                 | 671                             | 0.7               | 0.5             | 4.191     | A                             |
| 2   | 26                    | 7                       | 492                       |                            | 860               | 0.031 | 26                  | 3                               | 0.0               | 0.0             | 4.320     | A                             |
| 3   | 558                   | 139                     | 235                       | 34.63                      | 914               | 0.610 | 564                 | 283                             | 3.2               | 1.6             | 10.463    | B                             |
| 4   | 166                   | 42                      | 667                       |                            | 879               | 0.189 | 167                 | 133                             | 0.3               | 0.2             | 5.057     | A                             |
| 5   | 193                   | 48                      | 552                       | 9.79                       | 1103              | 0.175 | 194                 | 281                             | 0.3               | 0.2             | 3.962     | A                             |



# Do Something, 2028, PM

## Data Errors and Warnings

| Severity | Area                | Item                        | Description                                                                                                                                                                                  |
|----------|---------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run            | Arm 5 - Capacity            | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Warning  | Pedestrian Crossing | Arm 5 - Pedestrian crossing | Pedestrian crossing uses default flow of 0. Is this correct?                                                                                                                                 |
| Warning  | Vehicle Mix         |                             | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 9.87               | 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 | Do Something, 2028 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 795                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 15                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 511                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 315                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 261                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 25.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 26.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 2.00                             |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |    |
|------|----|-----|----|-----|-----|----|
|      |    | 1   | 2  | 3   | 4   | 5  |
| From | 1  | 1   | 12 | 491 | 230 | 61 |
|      | 2  | 4   | 0  | 9   | 1   | 1  |
|      | 3  | 376 | 5  | 2   | 53  | 75 |
|      | 4  | 219 | 2  | 70  | 3   | 21 |
|      | 5  | 138 | 2  | 88  | 31  | 2  |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.73    | 11.15         | 2.7             | B       | 730                     | 1094                          |
| 2   | 0.03    | 7.23          | 0.0             | A       | 14                      | 21                            |
| 3   | 0.66    | 12.49         | 1.9             | B       | 469                     | 703                           |
| 4   | 0.37    | 6.12          | 0.6             | A       | 289                     | 434                           |
| 5   | 0.30    | 5.49          | 0.4             | A       | 239                     | 359                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 599                   | 150                     | 154                       | 18.82                      | 1237              | 0.484 | 595                 | 552                             | 0.0               | 0.9             | 5.573     | A                             |
| 2   | 11                    | 3                       | 733                       |                            | 718               | 0.016 | 11                  | 16                              | 0.0               | 0.0             | 5.090     | A                             |
| 3   | 385                   | 96                      | 250                       | 19.57                      | 907               | 0.424 | 382                 | 494                             | 0.0               | 0.7             | 6.815     | A                             |
| 4   | 237                   | 59                      | 394                       |                            | 1033              | 0.230 | 236                 | 238                             | 0.0               | 0.3             | 4.512     | A                             |
| 5   | 196                   | 49                      | 510                       | 0.00                       | 1162              | 0.169 | 196                 | 120                             | 0.0               | 0.2             | 3.723     | A                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 715                   | 179                     | 184                       | 22.47                      | 1220              | 0.586 | 713                 | 662                             | 0.9               | 1.4             | 7.069     | A                             |
| 2   | 13                    | 3                       | 878                       |                            | 633               | 0.021 | 13                  | 19                              | 0.0               | 0.0             | 5.812     | A                             |
| 3   | 459                   | 115                     | 300                       | 23.37                      | 883               | 0.520 | 458                 | 592                             | 0.7               | 1.1             | 8.438     | A                             |
| 4   | 283                   | 71                      | 472                       |                            | 992               | 0.286 | 283                 | 285                             | 0.3               | 0.4             | 5.077     | A                             |
| 5   | 235                   | 59                      | 612                       | 0.00                       | 1073              | 0.219 | 234                 | 143                             | 0.2               | 0.3             | 4.291     | A                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 875                   | 219                     | 225                       | 27.53                      | 1198              | 0.731 | 870                 | 809                             | 1.4               | 2.6             | 10.844    | B                             |
| 2   | 17                    | 4                       | 1073                      |                            | 517               | 0.032 | 16                  | 23                              | 0.0               | 0.0             | 7.191     | A                             |
| 3   | 563                   | 141                     | 366                       | 28.63                      | 851               | 0.661 | 559                 | 723                             | 1.1               | 1.9             | 12.202    | B                             |
| 4   | 347                   | 87                      | 577                       |                            | 937               | 0.370 | 346                 | 348                             | 0.4               | 0.6             | 6.086     | A                             |
| 5   | 287                   | 72                      | 748                       | 0.00                       | 945               | 0.304 | 287                 | 175                             | 0.3               | 0.4             | 5.462     | A                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 875                   | 219                     | 226                       | 27.53                      | 1197              | 0.731 | 875                 | 812                             | 2.6               | 2.7             | 11.153    | B                             |
| 2   | 17                    | 4                       | 1078                      |                            | 514               | 0.032 | 17                  | 23                              | 0.0               | 0.0             | 7.234     | A                             |
| 3   | 563                   | 141                     | 368                       | 28.63                      | 850               | 0.662 | 562                 | 727                             | 1.9               | 1.9             | 12.494    | B                             |
| 4   | 347                   | 87                      | 580                       |                            | 935               | 0.371 | 347                 | 350                             | 0.6               | 0.6             | 6.118     | A                             |
| 5   | 287                   | 72                      | 751                       | 0.00                       | 942               | 0.305 | 287                 | 176                             | 0.4               | 0.4             | 5.495     | A                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 715                   | 179                     | 185                       | 22.47                      | 1220              | 0.586 | 720                 | 667                             | 2.7               | 1.4             | 7.265     | A                             |
| 2   | 13                    | 3                       | 885                       |                            | 628               | 0.021 | 14                  | 19                              | 0.0               | 0.0             | 5.856     | A                             |
| 3   | 459                   | 115                     | 302                       | 23.37                      | 882               | 0.521 | 463                 | 597                             | 1.9               | 1.1             | 8.649     | A                             |
| 4   | 283                   | 71                      | 477                       |                            | 989               | 0.286 | 284                 | 288                             | 0.6               | 0.4             | 5.109     | A                             |
| 5   | 235                   | 59                      | 616                       | 0.00                       | 1069              | 0.219 | 235                 | 145                             | 0.4               | 0.3             | 4.321     | A                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 599                   | 150                     | 155                       | 18.82                      | 1237              | 0.484 | 600                 | 557                             | 1.4               | 0.9             | 5.679     | A                             |
| 2   | 11                    | 3                       | 739                       |                            | 715               | 0.016 | 11                  | 16                              | 0.0               | 0.0             | 5.118     | A                             |
| 3   | 385                   | 96                      | 252                       | 19.57                      | 906               | 0.425 | 386                 | 498                             | 1.1               | 0.7             | 6.943     | A                             |
| 4   | 237                   | 59                      | 398                       |                            | 1030              | 0.230 | 238                 | 240                             | 0.4               | 0.3             | 4.542     | A                             |
| 5   | 196                   | 49                      | 515                       | 0.00                       | 1158              | 0.170 | 197                 | 121                             | 0.3               | 0.2             | 3.749     | A                             |

# Do Something, 2033, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 5 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 4 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 45.86              | E            |

### 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 | Do Something, 2033 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 592                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 37                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 787                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 236                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 272                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 23.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 46.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 13.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |   |     |     |     |
|------|----|-----|---|-----|-----|-----|
|      |    | 1   | 2 | 3   | 4   | 5   |
| From | 1  | 0   | 1 | 299 | 165 | 127 |
|      | 2  | 15  | 0 | 8   | 1   | 13  |
|      | 3  | 570 | 1 | 4   | 9   | 203 |
|      | 4  | 153 | 1 | 27  | 3   | 52  |
|      | 5  | 203 | 1 | 60  | 8   | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.52    | 5.95          | 1.1             | A       | 543                     | 815                           |
| 2   | 0.06    | 5.39          | 0.1             | A       | 34                      | 51                            |
| 3   | 1.02    | 102.47        | 25.1            | F       | 722                     | 1083                          |
| 4   | 0.37    | 8.26          | 0.6             | A       | 217                     | 325                           |
| 5   | 0.37    | 7.10          | 0.6             | A       | 250                     | 374                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 446                   | 111                     | 79                        | 17.32                      | 1278              | 0.349 | 444                 | 702                             | 0.0               | 0.5             | 4.305     | A                             |
| 2   | 28                    | 7                       | 519                       |                            | 845               | 0.033 | 28                  | 3                               | 0.0               | 0.0             | 4.405     | A                             |
| 3   | 592                   | 148                     | 249                       | 34.63                      | 908               | 0.653 | 585                 | 298                             | 0.0               | 1.8             | 10.940    | B                             |
| 4   | 178                   | 44                      | 695                       |                            | 863               | 0.206 | 177                 | 139                             | 0.0               | 0.3             | 5.234     | A                             |
| 5   | 205                   | 51                      | 577                       | 9.79                       | 1079              | 0.190 | 204                 | 295                             | 0.0               | 0.2             | 4.110     | A                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 532                   | 133                     | 94                        | 20.68                      | 1269              | 0.419 | 531                 | 840                             | 0.5               | 0.7             | 4.875     | A                             |
| 2   | 33                    | 8                       | 622                       |                            | 788               | 0.042 | 33                  | 4                               | 0.0               | 0.0             | 4.770     | A                             |
| 3   | 707                   | 177                     | 298                       | 41.35                      | 884               | 0.801 | 700                 | 357                             | 1.8               | 3.7             | 18.890    | C                             |
| 4   | 212                   | 53                      | 831                       |                            | 787               | 0.269 | 212                 | 167                             | 0.3               | 0.4             | 6.250     | A                             |
| 5   | 245                   | 61                      | 690                       | 11.69                      | 962               | 0.254 | 244                 | 353                             | 0.2               | 0.3             | 5.008     | A                             |

**08:30 - 08:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 652                   | 163                     | 115                       | 25.32                      | 1257              | 0.518 | 650                 | 996                             | 0.7               | 1.1             | 5.918     | A                             |
| 2   | 41                    | 10                      | 761                       |                            | 710               | 0.057 | 41                  | 4                               | 0.0               | 0.1             | 5.381     | A                             |
| 3   | 867                   | 217                     | 365                       | 50.65                      | 851               | 1.018 | 813                 | 437                             | 3.7               | 16.9            | 59.745    | F                             |
| 4   | 260                   | 65                      | 974                       |                            | 706               | 0.368 | 259                 | 204                             | 0.4               | 0.6             | 8.030     | A                             |
| 5   | 299                   | 75                      | 813                       | 14.31                      | 822               | 0.364 | 299                 | 421                             | 0.3               | 0.6             | 6.864     | A                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 652                   | 163                     | 115                       | 25.32                      | 1257              | 0.519 | 652                 | 1012                            | 1.1               | 1.1             | 5.946     | A                             |
| 2   | 41                    | 10                      | 763                       |                            | 709               | 0.057 | 41                  | 4                               | 0.1               | 0.1             | 5.389     | A                             |
| 3   | 867                   | 217                     | 366                       | 50.65                      | 851               | 1.019 | 834                 | 438                             | 16.9              | 25.1            | 102.466   | F                             |
| 4   | 260                   | 65                      | 995                       |                            | 695               | 0.374 | 260                 | 204                             | 0.6               | 0.6             | 8.262     | A                             |
| 5   | 299                   | 75                      | 828                       | 14.31                      | 806               | 0.372 | 299                 | 426                             | 0.6               | 0.6             | 7.104     | A                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 532                   | 133                     | 95                        | 20.68                      | 1268              | 0.420 | 534                 | 906                             | 1.1               | 0.7             | 4.908     | A                             |
| 2   | 33                    | 8                       | 625                       |                            | 786               | 0.042 | 33                  | 4                               | 0.1               | 0.0             | 4.782     | A                             |
| 3   | 707                   | 177                     | 299                       | 41.35                      | 883               | 0.801 | 789                 | 359                             | 25.1              | 4.7             | 52.095    | F                             |
| 4   | 212                   | 53                      | 920                       |                            | 740               | 0.287 | 213                 | 169                             | 0.6               | 0.4             | 6.844     | A                             |
| 5   | 245                   | 61                      | 756                       | 11.69                      | 898               | 0.272 | 245                 | 377                             | 0.6               | 0.4             | 5.520     | A                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 446                   | 111                     | 79                        | 17.32                      | 1277              | 0.349 | 446                 | 717                             | 0.7               | 0.5             | 4.337     | A                             |
| 2   | 28                    | 7                       | 523                       |                            | 843               | 0.033 | 28                  | 3                               | 0.0               | 0.0             | 4.416     | A                             |
| 3   | 592                   | 148                     | 250                       | 34.63                      | 907               | 0.653 | 603                 | 300                             | 4.7               | 2.0             | 12.264    | B                             |
| 4   | 178                   | 44                      | 713                       |                            | 853               | 0.208 | 178                 | 140                             | 0.4               | 0.3             | 5.336     | A                             |
| 5   | 205                   | 51                      | 591                       | 9.79                       | 1065              | 0.192 | 205                 | 300                             | 0.4               | 0.2             | 4.188     | A                             |

# Do Something, 2033, PM

## Data Errors and Warnings

| Severity | Area                | Item                        | Description                                                                                                                                                                                  |
|----------|---------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run            | Arm 5 - Capacity            | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Warning  | Pedestrian Crossing | Arm 5 - Pedestrian crossing | Pedestrian crossing uses default flow of 0. Is this correct?                                                                                                                                 |
| Warning  | Vehicle Mix         |                             | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 11.62              | 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 |
|-----|--------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D12 | Do Something, 2033 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 843                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 15                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 542                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 334                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 274                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 25.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 26.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 2.00                             |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |    |
|------|----|-----|----|-----|-----|----|
|      |    | 1   | 2  | 3   | 4   | 5  |
| From | 1  | 1   | 13 | 521 | 244 | 64 |
|      | 2  | 4   | 0  | 9   | 1   | 1  |
|      | 3  | 399 | 5  | 2   | 79  | 57 |
|      | 4  | 233 | 2  | 74  | 3   | 22 |
|      | 5  | 145 | 2  | 93  | 32  | 2  |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.78    | 13.60         | 3.4             | B       | 774                     | 1160                          |
| 2   | 0.03    | 7.82          | 0.0             | A       | 14                      | 21                            |
| 3   | 0.71    | 14.71         | 2.4             | B       | 497                     | 746                           |
| 4   | 0.40    | 6.39          | 0.6             | A       | 306                     | 460                           |
| 5   | 0.34    | 6.03          | 0.5             | A       | 251                     | 377                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 635                   | 159                     | 161                       | 18.82                      | 1233              | 0.515 | 630                 | 585                             | 0.0               | 1.0             | 5.935     | A                             |
| 2   | 11                    | 3                       | 775                       |                            | 694               | 0.016 | 11                  | 16                              | 0.0               | 0.0             | 5.275     | A                             |
| 3   | 408                   | 102                     | 263                       | 19.57                      | 901               | 0.453 | 405                 | 523                             | 0.0               | 0.8             | 7.210     | A                             |
| 4   | 251                   | 63                      | 400                       |                            | 1030              | 0.244 | 250                 | 268                             | 0.0               | 0.3             | 4.610     | A                             |
| 5   | 206                   | 52                      | 541                       | 0.00                       | 1136              | 0.182 | 205                 | 109                             | 0.0               | 0.2             | 3.866     | A                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 758                   | 189                     | 193                       | 22.47                      | 1215              | 0.624 | 756                 | 701                             | 1.0               | 1.6             | 7.788     | A                             |
| 2   | 13                    | 3                       | 929                       |                            | 603               | 0.022 | 13                  | 20                              | 0.0               | 0.0             | 6.110     | A                             |
| 3   | 487                   | 122                     | 316                       | 23.37                      | 875               | 0.557 | 486                 | 627                             | 0.8               | 1.2             | 9.194     | A                             |
| 4   | 300                   | 75                      | 479                       |                            | 988               | 0.304 | 300                 | 322                             | 0.3               | 0.4             | 5.228     | A                             |
| 5   | 246                   | 62                      | 648                       | 0.00                       | 1040              | 0.237 | 246                 | 131                             | 0.2               | 0.3             | 4.531     | A                             |



**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 928                   | 232                     | 236                       | 27.53                      | 1192              | 0.779 | 921                 | 857                             | 1.6               | 3.3             | 13.001    | B                             |
| 2   | 17                    | 4                       | 1133                      |                            | 481               | 0.034 | 16                  | 24                              | 0.0               | 0.0             | 7.748     | A                             |
| 3   | 597                   | 149                     | 385                       | 28.63                      | 842               | 0.709 | 592                 | 765                             | 1.2               | 2.3             | 14.188    | B                             |
| 4   | 368                   | 92                      | 585                       |                            | 933               | 0.394 | 367                 | 393                             | 0.4               | 0.6             | 6.354     | A                             |
| 5   | 302                   | 75                      | 792                       | 0.00                       | 902               | 0.334 | 301                 | 160                             | 0.3               | 0.5             | 5.979     | A                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 928                   | 232                     | 237                       | 27.53                      | 1191              | 0.779 | 928                 | 861                             | 3.3               | 3.4             | 13.602    | B                             |
| 2   | 17                    | 4                       | 1140                      |                            | 477               | 0.035 | 17                  | 24                              | 0.0               | 0.0             | 7.816     | A                             |
| 3   | 597                   | 149                     | 387                       | 28.63                      | 841               | 0.710 | 596                 | 769                             | 2.3               | 2.4             | 14.707    | B                             |
| 4   | 368                   | 92                      | 589                       |                            | 931               | 0.395 | 368                 | 395                             | 0.6               | 0.6             | 6.395     | A                             |
| 5   | 302                   | 75                      | 796                       | 0.00                       | 899               | 0.336 | 302                 | 161                             | 0.5               | 0.5             | 6.031     | A                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 758                   | 189                     | 194                       | 22.47                      | 1215              | 0.624 | 765                 | 707                             | 3.4               | 1.7             | 8.113     | A                             |
| 2   | 13                    | 3                       | 939                       |                            | 597               | 0.023 | 14                  | 20                              | 0.0               | 0.0             | 6.174     | A                             |
| 3   | 487                   | 122                     | 319                       | 23.37                      | 874               | 0.558 | 492                 | 633                             | 2.4               | 1.3             | 9.525     | A                             |
| 4   | 300                   | 75                      | 485                       |                            | 985               | 0.305 | 301                 | 325                             | 0.6               | 0.4             | 5.272     | A                             |
| 5   | 246                   | 62                      | 654                       | 0.00                       | 1035              | 0.238 | 247                 | 132                             | 0.5               | 0.3             | 4.575     | A                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 635                   | 159                     | 162                       | 18.82                      | 1232              | 0.515 | 637                 | 591                             | 1.7               | 1.1             | 6.074     | A                             |
| 2   | 11                    | 3                       | 783                       |                            | 689               | 0.016 | 11                  | 17                              | 0.0               | 0.0             | 5.310     | A                             |
| 3   | 408                   | 102                     | 266                       | 19.57                      | 900               | 0.454 | 410                 | 528                             | 1.3               | 0.8             | 7.380     | A                             |
| 4   | 251                   | 63                      | 405                       |                            | 1027              | 0.245 | 252                 | 271                             | 0.4               | 0.3             | 4.646     | A                             |
| 5   | 206                   | 52                      | 546                       | 0.00                       | 1131              | 0.182 | 207                 | 110                             | 0.3               | 0.2             | 3.896     | A                             |

# Do Something, 2043 , AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 5 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 4 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 55.78              | F            |

### 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 | Do Something, 2043 | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 599                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 39                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 803                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 234                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 279                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 23.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 46.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 13.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |   |     |     |     |
|------|----|-----|---|-----|-----|-----|
|      |    | 1   | 2 | 3   | 4   | 5   |
| From | 1  | 0   | 1 | 301 | 161 | 136 |
|      | 2  | 15  | 0 | 9   | 1   | 14  |
|      | 3  | 574 | 1 | 4   | 9   | 215 |
|      | 4  | 148 | 1 | 27  | 3   | 55  |
|      | 5  | 207 | 1 | 62  | 9   | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.53    | 6.04          | 1.1             | A       | 550                     | 824                           |
| 2   | 0.06    | 5.46          | 0.1             | A       | 36                      | 54                            |
| 3   | 1.04    | 126.04        | 32.4            | F       | 737                     | 1105                          |
| 4   | 0.38    | 8.41          | 0.6             | A       | 215                     | 322                           |
| 5   | 0.38    | 7.08          | 0.6             | A       | 256                     | 384                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 451                   | 113                     | 81                        | 17.32                      | 1277              | 0.353 | 449                 | 704                             | 0.0               | 0.5             | 4.338     | A                             |
| 2   | 29                    | 7                       | 527                       |                            | 841               | 0.035 | 29                  | 3                               | 0.0               | 0.0             | 4.436     | A                             |
| 3   | 605                   | 151                     | 254                       | 34.63                      | 905               | 0.668 | 597                 | 302                             | 0.0               | 1.9             | 11.414    | B                             |
| 4   | 176                   | 44                      | 714                       |                            | 852               | 0.207 | 175                 | 137                             | 0.0               | 0.3             | 5.312     | A                             |
| 5   | 210                   | 53                      | 576                       | 9.79                       | 1079              | 0.195 | 209                 | 313                             | 0.0               | 0.2             | 4.136     | A                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 538                   | 135                     | 97                        | 20.68                      | 1268              | 0.425 | 538                 | 842                             | 0.5               | 0.7             | 4.927     | A                             |
| 2   | 35                    | 9                       | 631                       |                            | 783               | 0.045 | 35                  | 4                               | 0.0               | 0.0             | 4.813     | A                             |
| 3   | 722                   | 180                     | 304                       | 41.35                      | 880               | 0.820 | 713                 | 362                             | 1.9               | 4.1             | 20.536    | C                             |
| 4   | 210                   | 53                      | 854                       |                            | 774               | 0.272 | 210                 | 164                             | 0.3               | 0.4             | 6.381     | A                             |
| 5   | 251                   | 63                      | 688                       | 11.69                      | 962               | 0.261 | 250                 | 375                             | 0.2               | 0.3             | 5.053     | A                             |

**08:30 - 08:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 660                   | 165                     | 118                       | 25.32                      | 1256              | 0.525 | 658                 | 991                             | 0.7               | 1.1             | 6.010     | A                             |
| 2   | 43                    | 11                      | 772                       |                            | 704               | 0.061 | 43                  | 4                               | 0.0               | 0.1             | 5.448     | A                             |
| 3   | 884                   | 221                     | 372                       | 50.65                      | 847               | 1.043 | 818                 | 442                             | 4.1               | 20.5            | 68.837    | F                             |
| 4   | 258                   | 64                      | 990                       |                            | 696               | 0.370 | 257                 | 200                             | 0.4               | 0.6             | 8.190     | A                             |
| 5   | 307                   | 77                      | 803                       | 14.31                      | 830               | 0.370 | 306                 | 444                             | 0.3               | 0.6             | 6.862     | A                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 660                   | 165                     | 119                       | 25.32                      | 1255              | 0.525 | 659                 | 1005                            | 1.1               | 1.1             | 6.041     | A                             |
| 2   | 43                    | 11                      | 774                       |                            | 703               | 0.061 | 43                  | 4                               | 0.1               | 0.1             | 5.457     | A                             |
| 3   | 884                   | 221                     | 373                       | 50.65                      | 847               | 1.044 | 837                 | 443                             | 20.5              | 32.4            | 126.041   | F                             |
| 4   | 258                   | 64                      | 1009                      |                            | 685               | 0.376 | 258                 | 201                             | 0.6               | 0.6             | 8.410     | A                             |
| 5   | 307                   | 77                      | 817                       | 14.31                      | 815               | 0.377 | 307                 | 450                             | 0.6               | 0.6             | 7.083     | A                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 538                   | 135                     | 98                        | 20.68                      | 1267              | 0.425 | 540                 | 926                             | 1.1               | 0.7             | 4.960     | A                             |
| 2   | 35                    | 9                       | 634                       |                            | 781               | 0.045 | 35                  | 4                               | 0.1               | 0.0             | 4.826     | A                             |
| 3   | 722                   | 180                     | 306                       | 41.35                      | 880               | 0.820 | 828                 | 364                             | 32.4              | 5.8             | 79.215    | F                             |
| 4   | 210                   | 53                      | 968                       |                            | 712               | 0.296 | 211                 | 166                             | 0.6               | 0.4             | 7.203     | A                             |
| 5   | 251                   | 63                      | 772                       | 11.69                      | 880               | 0.285 | 252                 | 407                             | 0.6               | 0.4             | 5.733     | A                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 451                   | 113                     | 82                        | 17.32                      | 1276              | 0.353 | 452                 | 722                             | 0.7               | 0.6             | 4.370     | A                             |
| 2   | 29                    | 7                       | 530                       |                            | 839               | 0.035 | 29                  | 3                               | 0.0               | 0.0             | 4.449     | A                             |
| 3   | 605                   | 151                     | 256                       | 34.63                      | 904               | 0.669 | 619                 | 304                             | 5.8               | 2.1             | 13.248    | B                             |
| 4   | 176                   | 44                      | 737                       |                            | 839               | 0.210 | 177                 | 138                             | 0.4               | 0.3             | 5.438     | A                             |
| 5   | 210                   | 53                      | 593                       | 9.79                       | 1062              | 0.198 | 211                 | 321                             | 0.4               | 0.2             | 4.231     | A                             |

# Do Something, 2043 , PM

## Data Errors and Warnings

| Severity | Area                | Item                        | Description                                                                                                                                                                                  |
|----------|---------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run            | Arm 2 - Capacity            | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Last Run | Last Run            | Arm 5 - Capacity            | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 2 timesegment(s).                                                                        |
| Warning  | Pedestrian Crossing | Arm 5 - Pedestrian crossing | Pedestrian crossing uses default flow of 0. Is this correct?                                                                                                                                 |
| Warning  | Vehicle Mix         |                             | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 12.07              | 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 |
|-----|--------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D14 | Do Something, 2043 | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 849                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 17                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 548                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 335                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 288                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 25.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 26.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 2.00                             |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |    |
|------|----|-----|----|-----|-----|----|
|      |    | 1   | 2  | 3   | 4   | 5  |
| From | 1  | 1   | 13 | 526 | 244 | 65 |
|      | 2  | 3   | 0  | 10  | 1   | 3  |
|      | 3  | 403 | 5  | 2   | 57  | 81 |
|      | 4  | 233 | 2  | 75  | 3   | 22 |
|      | 5  | 151 | 2  | 99  | 34  | 2  |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.79    | 14.24         | 3.6             | B       | 779                     | 1169                          |
| 2   | 0.04    | 8.03          | 0.0             | A       | 16                      | 23                            |
| 3   | 0.72    | 15.24         | 2.5             | C       | 503                     | 754                           |
| 4   | 0.40    | 6.61          | 0.7             | A       | 307                     | 461                           |
| 5   | 0.36    | 6.26          | 0.5             | A       | 264                     | 396                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 639                   | 160                     | 168                       | 18.82                      | 1229              | 0.520 | 635                 | 592                             | 0.0               | 1.1             | 6.013     | A                             |
| 2   | 13                    | 3                       | 786                       |                            | 687               | 0.019 | 13                  | 16                              | 0.0               | 0.0             | 5.341     | A                             |
| 3   | 413                   | 103                     | 266                       | 19.57                      | 899               | 0.459 | 409                 | 533                             | 0.0               | 0.8             | 7.296     | A                             |
| 4   | 252                   | 63                      | 422                       |                            | 1018              | 0.248 | 251                 | 254                             | 0.0               | 0.3             | 4.685     | A                             |
| 5   | 217                   | 54                      | 544                       | 0.00                       | 1132              | 0.191 | 216                 | 129                             | 0.0               | 0.2             | 3.924     | A                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 763                   | 191                     | 201                       | 22.47                      | 1211              | 0.630 | 761                 | 709                             | 1.1               | 1.7             | 7.953     | A                             |
| 2   | 15                    | 4                       | 942                       |                            | 594               | 0.026 | 15                  | 20                              | 0.0               | 0.0             | 6.217     | A                             |
| 3   | 493                   | 123                     | 319                       | 23.37                      | 874               | 0.564 | 491                 | 638                             | 0.8               | 1.3             | 9.360     | A                             |
| 4   | 301                   | 75                      | 506                       |                            | 974               | 0.309 | 301                 | 304                             | 0.3               | 0.4             | 5.344     | A                             |
| 5   | 259                   | 65                      | 652                       | 0.00                       | 1035              | 0.250 | 259                 | 155                             | 0.2               | 0.3             | 4.632     | A                             |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 935                   | 234                     | 246                       | 27.53                      | 1186              | 0.788 | 928                 | 866                             | 1.7               | 3.5             | 13.539    | B                             |
| 2   | 19                    | 5                       | 1149                      |                            | 471               | 0.040 | 19                  | 24                              | 0.0               | 0.0             | 7.957     | A                             |
| 3   | 603                   | 151                     | 389                       | 28.63                      | 840               | 0.719 | 599                 | 779                             | 1.3               | 2.4             | 14.656    | B                             |
| 4   | 369                   | 92                      | 617                       |                            | 916               | 0.403 | 368                 | 371                             | 0.4               | 0.7             | 6.562     | A                             |
| 5   | 317                   | 79                      | 796                       | 0.00                       | 896               | 0.354 | 316                 | 189                             | 0.3               | 0.5             | 6.203     | A                             |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 935                   | 234                     | 247                       | 27.53                      | 1186              | 0.788 | 934                 | 871                             | 3.5               | 3.6             | 14.235    | B                             |
| 2   | 19                    | 5                       | 1157                      |                            | 467               | 0.040 | 19                  | 24                              | 0.0               | 0.0             | 8.034     | A                             |
| 3   | 603                   | 151                     | 392                       | 28.63                      | 838               | 0.720 | 603                 | 784                             | 2.4               | 2.5             | 15.243    | C                             |
| 4   | 369                   | 92                      | 622                       |                            | 913               | 0.404 | 369                 | 373                             | 0.7               | 0.7             | 6.611     | A                             |
| 5   | 317                   | 79                      | 800                       | 0.00                       | 892               | 0.356 | 317                 | 190                             | 0.5               | 0.5             | 6.263     | A                             |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 763                   | 191                     | 202                       | 22.47                      | 1211              | 0.630 | 771                 | 716                             | 3.6               | 1.7             | 8.314     | A                             |
| 2   | 15                    | 4                       | 953                       |                            | 588               | 0.026 | 15                  | 20                              | 0.0               | 0.0             | 6.288     | A                             |
| 3   | 493                   | 123                     | 323                       | 23.37                      | 872               | 0.565 | 497                 | 645                             | 2.5               | 1.3             | 9.725     | A                             |
| 4   | 301                   | 75                      | 513                       |                            | 970               | 0.310 | 302                 | 307                             | 0.7               | 0.5             | 5.394     | A                             |
| 5   | 259                   | 65                      | 658                       | 0.00                       | 1030              | 0.251 | 260                 | 157                             | 0.5               | 0.3             | 4.681     | A                             |

18:15 - 18:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 639                   | 160                     | 169                       | 18.82                      | 1229              | 0.520 | 642                 | 597                             | 1.7               | 1.1             | 6.161     | A                             |
| 2   | 13                    | 3                       | 794                       |                            | 682               | 0.019 | 13                  | 17                              | 0.0               | 0.0             | 5.380     | A                             |
| 3   | 413                   | 103                     | 269                       | 19.57                      | 898               | 0.459 | 414                 | 538                             | 1.3               | 0.9             | 7.474     | A                             |
| 4   | 252                   | 63                      | 427                       |                            | 1015              | 0.248 | 253                 | 256                             | 0.5               | 0.3             | 4.723     | A                             |
| 5   | 217                   | 54                      | 549                       | 0.00                       | 1128              | 0.192 | 217                 | 131                             | 0.3               | 0.2             | 3.955     | A                             |

# Do Something, 2043+AT, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 5 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queuing to leave the junction in 4 timesegment(s).                                                                        |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 48.68              | E            |

### 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 |
|-----|-----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D15 | Do Something, 2043+AT | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 569                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 37                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 803                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 211                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 258                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 23.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 46.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 13.00                            |

## Origin-Destination Data



### Demand (PCU/hr)

|      | To |     |   |     |     |     |
|------|----|-----|---|-----|-----|-----|
|      |    | 1   | 2 | 3   | 4   | 5   |
| From | 1  | 0   | 1 | 301 | 145 | 122 |
|      | 2  | 14  | 0 | 9   | 1   | 13  |
|      | 3  | 574 | 1 | 4   | 9   | 215 |
|      | 4  | 133 | 1 | 24  | 3   | 50  |
|      | 5  | 187 | 1 | 62  | 8   | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.50    | 5.70          | 1.0             | A       | 522                     | 783                           |
| 2   | 0.06    | 5.28          | 0.1             | A       | 34                      | 51                            |
| 3   | 1.02    | 105.42        | 26.5            | F       | 737                     | 1105                          |
| 4   | 0.34    | 7.85          | 0.5             | A       | 194                     | 290                           |
| 5   | 0.34    | 6.50          | 0.5             | A       | 237                     | 355                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 428                   | 107                     | 78                        | 17.32                      | 1278              | 0.335 | 426                 | 677                             | 0.0               | 0.5             | 4.217     | A                             |
| 2   | 28                    | 7                       | 501                       |                            | 854               | 0.033 | 28                  | 3                               | 0.0               | 0.0             | 4.357     | A                             |
| 3   | 605                   | 151                     | 229                       | 34.63                      | 917               | 0.659 | 597                 | 300                             | 0.0               | 1.9             | 11.014    | B                             |
| 4   | 159                   | 40                      | 702                       |                            | 859               | 0.185 | 158                 | 124                             | 0.0               | 0.2             | 5.126     | A                             |
| 5   | 194                   | 49                      | 562                       | 9.79                       | 1096              | 0.177 | 193                 | 298                             | 0.0               | 0.2             | 3.987     | A                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 512                   | 128                     | 93                        | 20.68                      | 1270              | 0.403 | 511                 | 810                             | 0.5               | 0.7             | 4.741     | A                             |
| 2   | 33                    | 8                       | 601                       |                            | 799               | 0.042 | 33                  | 4                               | 0.0               | 0.0             | 4.702     | A                             |
| 3   | 722                   | 180                     | 275                       | 41.35                      | 895               | 0.807 | 714                 | 359                             | 1.9               | 3.8             | 19.145    | C                             |
| 4   | 190                   | 47                      | 840                       |                            | 782               | 0.242 | 189                 | 149                             | 0.2               | 0.3             | 6.065     | A                             |
| 5   | 232                   | 58                      | 672                       | 11.69                      | 985               | 0.236 | 232                 | 357                             | 0.2               | 0.3             | 4.777     | A                             |

**08:30 - 08:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 626                   | 157                     | 114                       | 25.32                      | 1258              | 0.498 | 625                 | 959                             | 0.7               | 1.0             | 5.678     | A                             |
| 2   | 41                    | 10                      | 735                       |                            | 723               | 0.056 | 41                  | 4                               | 0.0               | 0.1             | 5.278     | A                             |
| 3   | 884                   | 221                     | 336                       | 50.65                      | 865               | 1.022 | 829                 | 439                             | 3.8               | 17.7            | 60.785    | F                             |
| 4   | 232                   | 58                      | 983                       |                            | 702               | 0.331 | 232                 | 182                             | 0.3               | 0.5             | 7.649     | A                             |
| 5   | 284                   | 71                      | 790                       | 14.31                      | 854               | 0.333 | 283                 | 425                             | 0.3               | 0.5             | 6.306     | A                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 626                   | 157                     | 114                       | 25.32                      | 1258              | 0.498 | 626                 | 974                             | 1.0               | 1.0             | 5.702     | A                             |
| 2   | 41                    | 10                      | 736                       |                            | 722               | 0.056 | 41                  | 4                               | 0.1               | 0.1             | 5.285     | A                             |
| 3   | 884                   | 221                     | 337                       | 50.65                      | 864               | 1.023 | 849                 | 440                             | 17.7              | 26.5            | 105.419   | F                             |
| 4   | 232                   | 58                      | 1003                      |                            | 691               | 0.336 | 232                 | 182                             | 0.5               | 0.5             | 7.854     | A                             |
| 5   | 284                   | 71                      | 805                       | 14.31                      | 838               | 0.339 | 284                 | 431                             | 0.5               | 0.5             | 6.497     | A                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 512                   | 128                     | 94                        | 20.68                      | 1269              | 0.403 | 513                 | 879                             | 1.0               | 0.7             | 4.767     | A                             |
| 2   | 33                    | 8                       | 603                       |                            | 797               | 0.042 | 33                  | 4                               | 0.1               | 0.0             | 4.713     | A                             |
| 3   | 722                   | 180                     | 276                       | 41.35                      | 894               | 0.807 | 808                 | 361                             | 26.5              | 4.9             | 56.109    | F                             |
| 4   | 190                   | 47                      | 933                       |                            | 732               | 0.259 | 190                 | 151                             | 0.5               | 0.4             | 6.656     | A                             |
| 5   | 232                   | 58                      | 740                       | 11.69                      | 919               | 0.252 | 233                 | 383                             | 0.5               | 0.3             | 5.248     | A                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 428                   | 107                     | 79                        | 17.32                      | 1278              | 0.335 | 429                 | 693                             | 0.7               | 0.5             | 4.246     | A                             |
| 2   | 28                    | 7                       | 505                       |                            | 852               | 0.033 | 28                  | 3                               | 0.0               | 0.0             | 4.367     | A                             |
| 3   | 605                   | 151                     | 231                       | 34.63                      | 916               | 0.660 | 616                 | 302                             | 4.9               | 2.0             | 12.432    | B                             |
| 4   | 159                   | 40                      | 722                       |                            | 849               | 0.187 | 159                 | 125                             | 0.4               | 0.2             | 5.227     | A                             |
| 5   | 194                   | 49                      | 576                       | 9.79                       | 1082              | 0.179 | 195                 | 305                             | 0.3               | 0.2             | 4.060     | A                             |

# Do Something, 2043+AT, PM

## Data Errors and Warnings

| Severity | Area                | Item                        | Description                                                                                                                                                                                  |
|----------|---------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run            | Arm 2 - Capacity            | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 1 timesegment(s).                                                                         |
| Last Run | Last Run            | Arm 5 - Capacity            | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 2 timesegment(s).                                                                         |
| Warning  | Pedestrian Crossing | Arm 5 - Pedestrian crossing | Pedestrian crossing uses default flow of 0. Is this correct?                                                                                                                                 |
| Warning  | Vehicle Mix         |                             | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 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 |
|-----|-----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D16 | Do Something, 2043+AT | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 817                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 15                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 548                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 301                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 270                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 25.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 26.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 2.00                             |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |    |
|------|----|-----|----|-----|-----|----|
|      |    | 1   | 2  | 3   | 4   | 5  |
| From | 1  | 1   | 11 | 526 | 220 | 59 |
|      | 2  | 3   | 0  | 10  | 1   | 1  |
|      | 3  | 403 | 5  | 2   | 57  | 81 |
|      | 4  | 209 | 2  | 67  | 3   | 20 |
|      | 5  | 136 | 2  | 99  | 31  | 2  |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.75    | 12.24         | 3.0             | B       | 750                     | 1125                          |
| 2   | 0.03    | 7.61          | 0.0             | A       | 14                      | 21                            |
| 3   | 0.70    | 14.14         | 2.3             | B       | 503                     | 754                           |
| 4   | 0.36    | 6.14          | 0.6             | A       | 276                     | 414                           |
| 5   | 0.32    | 5.70          | 0.5             | A       | 248                     | 372                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 615                   | 154                     | 160                       | 18.82                      | 1234              | 0.499 | 611                 | 563                             | 0.0               | 1.0             | 5.747     | A                             |
| 2   | 11                    | 3                       | 756                       |                            | 703               | 0.016 | 11                  | 15                              | 0.0               | 0.0             | 5.206     | A                             |
| 3   | 413                   | 103                     | 240                       | 19.57                      | 912               | 0.452 | 409                 | 527                             | 0.0               | 0.8             | 7.117     | A                             |
| 4   | 227                   | 57                      | 416                       |                            | 1021              | 0.222 | 225                 | 233                             | 0.0               | 0.3             | 4.518     | A                             |
| 5   | 203                   | 51                      | 520                       | 0.00                       | 1154              | 0.176 | 202                 | 122                             | 0.0               | 0.2             | 3.781     | A                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 734                   | 184                     | 191                       | 22.47                      | 1216              | 0.604 | 732                 | 674                             | 1.0               | 1.5             | 7.407     | A                             |
| 2   | 13                    | 3                       | 906                       |                            | 613               | 0.022 | 13                  | 18                              | 0.0               | 0.0             | 6.002     | A                             |
| 3   | 493                   | 123                     | 288                       | 23.37                      | 889               | 0.554 | 491                 | 631                             | 0.8               | 1.2             | 9.010     | A                             |
| 4   | 271                   | 68                      | 499                       |                            | 978               | 0.277 | 270                 | 280                             | 0.3               | 0.4             | 5.087     | A                             |
| 5   | 243                   | 61                      | 623                       | 0.00                       | 1063              | 0.228 | 242                 | 146                             | 0.2               | 0.3             | 4.386     | A                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 900                   | 225                     | 234                       | 27.53                      | 1193              | 0.754 | 894                 | 824                             | 1.5               | 2.9             | 11.817    | B                             |
| 2   | 17                    | 4                       | 1106                      |                            | 493               | 0.034 | 16                  | 22                              | 0.0               | 0.0             | 7.557     | A                             |
| 3   | 603                   | 151                     | 351                       | 28.63                      | 858               | 0.703 | 599                 | 771                             | 1.2               | 2.3             | 13.687    | B                             |
| 4   | 331                   | 83                      | 609                       |                            | 920               | 0.360 | 331                 | 341                             | 0.4               | 0.6             | 6.101     | A                             |
| 5   | 297                   | 74                      | 761                       | 0.00                       | 932               | 0.319 | 297                 | 178                             | 0.3               | 0.5             | 5.659     | A                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 900                   | 225                     | 235                       | 27.53                      | 1193              | 0.754 | 899                 | 828                             | 2.9               | 3.0             | 12.241    | B                             |
| 2   | 17                    | 4                       | 1112                      |                            | 489               | 0.034 | 17                  | 22                              | 0.0               | 0.0             | 7.612     | A                             |
| 3   | 603                   | 151                     | 353                       | 28.63                      | 857               | 0.704 | 603                 | 775                             | 2.3               | 2.3             | 14.139    | B                             |
| 4   | 331                   | 83                      | 613                       |                            | 918               | 0.361 | 331                 | 343                             | 0.6               | 0.6             | 6.137     | A                             |
| 5   | 297                   | 74                      | 765                       | 0.00                       | 929               | 0.320 | 297                 | 179                             | 0.5               | 0.5             | 5.701     | A                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 734                   | 184                     | 192                       | 22.47                      | 1216              | 0.604 | 740                 | 680                             | 3.0               | 1.6             | 7.657     | A                             |
| 2   | 13                    | 3                       | 914                       |                            | 608               | 0.022 | 14                  | 18                              | 0.0               | 0.0             | 6.056     | A                             |
| 3   | 493                   | 123                     | 291                       | 23.37                      | 888               | 0.555 | 497                 | 637                             | 2.3               | 1.3             | 9.310     | A                             |
| 4   | 271                   | 68                      | 505                       |                            | 975               | 0.278 | 271                 | 283                             | 0.6               | 0.4             | 5.123     | A                             |
| 5   | 243                   | 61                      | 629                       | 0.00                       | 1058              | 0.229 | 243                 | 148                             | 0.5               | 0.3             | 4.422     | A                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 615                   | 154                     | 161                       | 18.82                      | 1233              | 0.499 | 617                 | 568                             | 1.6               | 1.0             | 5.866     | A                             |
| 2   | 11                    | 3                       | 763                       |                            | 699               | 0.016 | 11                  | 15                              | 0.0               | 0.0             | 5.237     | A                             |
| 3   | 413                   | 103                     | 242                       | 19.57                      | 911               | 0.453 | 414                 | 532                             | 1.3               | 0.8             | 7.273     | A                             |
| 4   | 227                   | 57                      | 421                       |                            | 1018              | 0.223 | 227                 | 236                             | 0.4               | 0.3             | 4.552     | A                             |
| 5   | 203                   | 51                      | 525                       | 0.00                       | 1149              | 0.177 | 204                 | 123                             | 0.3               | 0.2             | 3.807     | A                             |

# Do Something, 2043+Ring Road, AM

## Data Errors and Warnings

| Severity | Area        | Item             | Description                                                                                                                                                                                  |
|----------|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run    | Arm 5 - Capacity | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 4 timesegment(s).                                                                         |
| Warning  | Vehicle Mix |                  | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 38.98              | E            |

### 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 |
|-----|------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D17 | Do Something, 2043+Ring Road | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 524                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 32                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 803                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 183                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 225                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 23.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 46.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 13.00                            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |   |     |     |     |
|------|----|-----|---|-----|-----|-----|
|      |    | 1   | 2 | 3   | 4   | 5   |
| From | 1  | 0   | 1 | 301 | 120 | 102 |
|      | 2  | 11  | 0 | 9   | 1   | 11  |
|      | 3  | 574 | 1 | 4   | 9   | 215 |
|      | 4  | 111 | 1 | 27  | 3   | 41  |
|      | 5  | 156 | 1 | 62  | 6   | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.46    | 5.29          | 0.8             | A       | 481                     | 721                           |
| 2   | 0.05    | 5.06          | 0.0             | A       | 29                      | 44                            |
| 3   | 0.99    | 78.86         | 19.0            | F       | 737                     | 1105                          |
| 4   | 0.29    | 7.21          | 0.4             | A       | 168                     | 252                           |
| 5   | 0.28    | 5.77          | 0.4             | A       | 206                     | 310                           |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 394                   | 99                      | 79                        | 17.32                      | 1278              | 0.309 | 393                 | 635                             | 0.0               | 0.4             | 4.059     | A                             |
| 2   | 24                    | 6                       | 468                       |                            | 871               | 0.028 | 24                  | 3                               | 0.0               | 0.0             | 4.251     | A                             |
| 3   | 605                   | 151                     | 190                       | 34.63                      | 936               | 0.646 | 597                 | 302                             | 0.0               | 1.8             | 10.437    | B                             |
| 4   | 138                   | 34                      | 684                       |                            | 871               | 0.158 | 137                 | 104                             | 0.0               | 0.2             | 4.900     | A                             |
| 5   | 169                   | 42                      | 545                       | 9.79                       | 1118              | 0.151 | 169                 | 275                             | 0.0               | 0.2             | 3.790     | A                             |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 471                   | 118                     | 94                        | 20.68                      | 1269              | 0.371 | 470                 | 761                             | 0.4               | 0.6             | 4.505     | A                             |
| 2   | 29                    | 7                       | 561                       |                            | 819               | 0.035 | 29                  | 4                               | 0.0               | 0.0             | 4.557     | A                             |
| 3   | 722                   | 180                     | 228                       | 41.35                      | 917               | 0.787 | 715                 | 362                             | 1.8               | 3.4             | 17.266    | C                             |
| 4   | 165                   | 41                      | 819                       |                            | 796               | 0.207 | 164                 | 125                             | 0.2               | 0.3             | 5.694     | A                             |
| 5   | 202                   | 51                      | 653                       | 11.69                      | 1015              | 0.199 | 202                 | 330                             | 0.2               | 0.2             | 4.426     | A                             |

**08:30 - 08:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 577                   | 144                     | 115                       | 25.32                      | 1257              | 0.459 | 576                 | 907                             | 0.6               | 0.8             | 5.276     | A                             |
| 2   | 35                    | 9                       | 687                       |                            | 747               | 0.047 | 35                  | 4                               | 0.0               | 0.0             | 5.059     | A                             |
| 3   | 884                   | 221                     | 279                       | 50.65                      | 892               | 0.991 | 842                 | 443                             | 3.4               | 13.9            | 49.962    | E                             |
| 4   | 201                   | 50                      | 969                       |                            | 712               | 0.283 | 201                 | 152                             | 0.3               | 0.4             | 7.034     | A                             |
| 5   | 248                   | 62                      | 775                       | 14.31                      | 887               | 0.279 | 247                 | 395                             | 0.2               | 0.4             | 5.623     | A                             |

**08:45 - 09:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 577                   | 144                     | 115                       | 25.32                      | 1257              | 0.459 | 577                 | 923                             | 0.8               | 0.8             | 5.292     | A                             |
| 2   | 35                    | 9                       | 688                       |                            | 746               | 0.047 | 35                  | 4                               | 0.0               | 0.0             | 5.064     | A                             |
| 3   | 884                   | 221                     | 280                       | 50.65                      | 892               | 0.991 | 864                 | 444                             | 13.9              | 19.0            | 78.855    | F                             |
| 4   | 201                   | 50                      | 991                       |                            | 701               | 0.288 | 201                 | 153                             | 0.4               | 0.4             | 7.212     | A                             |
| 5   | 248                   | 62                      | 791                       | 14.31                      | 871               | 0.284 | 248                 | 401                             | 0.4               | 0.4             | 5.773     | A                             |

**09:00 - 09:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 471                   | 118                     | 95                        | 20.68                      | 1269              | 0.371 | 472                 | 809                             | 0.8               | 0.6             | 4.526     | A                             |
| 2   | 29                    | 7                       | 563                       |                            | 817               | 0.035 | 29                  | 4                               | 0.0               | 0.0             | 4.565     | A                             |
| 3   | 722                   | 180                     | 229                       | 41.35                      | 917               | 0.787 | 781                 | 363                             | 19.0              | 4.1             | 34.236    | D                             |
| 4   | 165                   | 41                      | 884                       |                            | 761               | 0.216 | 165                 | 126                             | 0.4               | 0.3             | 6.050     | A                             |
| 5   | 202                   | 51                      | 701                       | 11.69                      | 970               | 0.208 | 203                 | 348                             | 0.4               | 0.3             | 4.694     | A                             |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 394                   | 99                      | 79                        | 17.32                      | 1277              | 0.309 | 395                 | 648                             | 0.6               | 0.4             | 4.084     | A                             |
| 2   | 24                    | 6                       | 471                       |                            | 869               | 0.028 | 24                  | 3                               | 0.0               | 0.0             | 4.261     | A                             |
| 3   | 605                   | 151                     | 192                       | 34.63                      | 935               | 0.646 | 613                 | 304                             | 4.1               | 1.9             | 11.479    | B                             |
| 4   | 138                   | 34                      | 700                       |                            | 862               | 0.160 | 138                 | 105                             | 0.3               | 0.2             | 4.977     | A                             |
| 5   | 169                   | 42                      | 558                       | 9.79                       | 1107              | 0.153 | 170                 | 280                             | 0.3               | 0.2             | 3.842     | A                             |



# Do Something, 2043+Ring Road, PM

## Data Errors and Warnings

| Severity | Area                | Item                        | Description                                                                                                                                                                                  |
|----------|---------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Run | Last Run            | Arm 2 - Capacity            | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 2 timesegment(s).                                                                         |
| Last Run | Last Run            | Arm 5 - Capacity            | Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 2 timesegment(s).                                                                         |
| Warning  | Pedestrian Crossing | Arm 5 - Pedestrian crossing | Pedestrian crossing uses default flow of 0. Is this correct?                                                                                                                                 |
| Warning  | Vehicle Mix         |                             | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name     | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|-----------------------|---------------|--------------------|--------------|
| 1        | untitled | Standard Roundabout |                       | 1, 2, 3, 4, 5 | 9.69               | 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 |
|-----|------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D18 | Do Something, 2043+Ring Road | PM               | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1   |            | ONE HOUR     | ✓            | 769                     | 100.000            |
| 2   |            | ONE HOUR     | ✓            | 15                      | 100.000            |
| 3   |            | ONE HOUR     | ✓            | 548                     | 100.000            |
| 4   |            | ONE HOUR     | ✓            | 272                     | 100.000            |
| 5   |            | ONE HOUR     | ✓            | 241                     | 100.000            |

### Demand overview (Pedestrians)

| Arm | Profile type | Average pedestrian flow (Ped/hr) |
|-----|--------------|----------------------------------|
| 1   | [ONEHOUR]    | 25.00                            |
| 2   |              |                                  |
| 3   | [ONEHOUR]    | 26.00                            |
| 4   |              |                                  |
| 5   | [ONEHOUR]    | 2.00                             |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To |     |    |     |     |    |
|------|----|-----|----|-----|-----|----|
|      |    | 1   | 2  | 3   | 4   | 5  |
| From | 1  | 1   | 10 | 526 | 183 | 49 |
|      | 2  | 3   | 0  | 10  | 1   | 1  |
|      | 3  | 403 | 5  | 2   | 57  | 81 |
|      | 4  | 175 | 2  | 75  | 3   | 17 |
|      | 5  | 114 | 2  | 99  | 25  | 1  |

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1   | 0.71    | 10.41         | 2.4             | B       | 706                     | 1058                          |
| 2   | 0.03    | 7.28          | 0.0             | A       | 14                      | 21                            |
| 3   | 0.68    | 12.72         | 2.1             | B       | 503                     | 754                           |
| 4   | 0.32    | 5.76          | 0.5             | A       | 250                     | 374                           |
| 5   | 0.27    | 5.12          | 0.4             | A       | 221                     | 332                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 579                   | 145                     | 160                       | 18.82                      | 1233              | 0.469 | 575                 | 521                             | 0.0               | 0.9             | 5.444     | A                             |
| 2   | 11                    | 3                       | 722                       |                            | 719               | 0.016 | 11                  | 14                              | 0.0               | 0.0             | 5.086     | A                             |
| 3   | 413                   | 103                     | 200                       | 19.57                      | 932               | 0.443 | 409                 | 533                             | 0.0               | 0.8             | 6.854     | A                             |
| 4   | 205                   | 51                      | 408                       |                            | 1025              | 0.200 | 204                 | 201                             | 0.0               | 0.2             | 4.376     | A                             |
| 5   | 181                   | 45                      | 500                       | 0.00                       | 1175              | 0.154 | 181                 | 111                             | 0.0               | 0.2             | 3.619     | A                             |

#### 17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 691                   | 173                     | 192                       | 22.47                      | 1216              | 0.569 | 690                 | 624                             | 0.9               | 1.3             | 6.818     | A                             |
| 2   | 13                    | 3                       | 865                       |                            | 632               | 0.021 | 13                  | 17                              | 0.0               | 0.0             | 5.819     | A                             |
| 3   | 493                   | 123                     | 239                       | 23.37                      | 912               | 0.540 | 491                 | 639                             | 0.8               | 1.2             | 8.518     | A                             |
| 4   | 245                   | 61                      | 489                       |                            | 983               | 0.249 | 244                 | 241                             | 0.2               | 0.3             | 4.872     | A                             |
| 5   | 217                   | 54                      | 600                       | 0.00                       | 1091              | 0.199 | 216                 | 134                             | 0.2               | 0.2             | 4.113     | A                             |

**17:30 - 17:45**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 847                   | 212                     | 235                       | 27.53                      | 1192              | 0.710 | 842                 | 763                             | 1.3               | 2.4             | 10.169    | B                             |
| 2   | 17                    | 4                       | 1057                      |                            | 514               | 0.032 | 16                  | 21                              | 0.0               | 0.0             | 7.237     | A                             |
| 3   | 603                   | 151                     | 293                       | 28.63                      | 886               | 0.681 | 600                 | 781                             | 1.2               | 2.0             | 12.399    | B                             |
| 4   | 299                   | 75                      | 598                       |                            | 926               | 0.323 | 299                 | 295                             | 0.3               | 0.5             | 5.737     | A                             |
| 5   | 265                   | 66                      | 733                       | 0.00                       | 971               | 0.273 | 265                 | 163                             | 0.2               | 0.4             | 5.091     | A                             |

**17:45 - 18:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 847                   | 212                     | 236                       | 27.53                      | 1192              | 0.710 | 847                 | 766                             | 2.4               | 2.4             | 10.410    | B                             |
| 2   | 17                    | 4                       | 1061                      |                            | 511               | 0.032 | 17                  | 21                              | 0.0               | 0.0             | 7.276     | A                             |
| 3   | 603                   | 151                     | 294                       | 28.63                      | 886               | 0.681 | 603                 | 784                             | 2.0               | 2.1             | 12.716    | B                             |
| 4   | 299                   | 75                      | 601                       |                            | 924               | 0.324 | 299                 | 296                             | 0.5               | 0.5             | 5.762     | A                             |
| 5   | 265                   | 66                      | 736                       | 0.00                       | 969               | 0.274 | 265                 | 164                             | 0.4               | 0.4             | 5.118     | A                             |

**18:00 - 18:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 691                   | 173                     | 193                       | 22.47                      | 1216              | 0.569 | 696                 | 629                             | 2.4               | 1.3             | 6.978     | A                             |
| 2   | 13                    | 3                       | 871                       |                            | 628               | 0.021 | 14                  | 17                              | 0.0               | 0.0             | 5.860     | A                             |
| 3   | 493                   | 123                     | 241                       | 23.37                      | 911               | 0.541 | 496                 | 643                             | 2.1               | 1.2             | 8.743     | A                             |
| 4   | 245                   | 61                      | 494                       |                            | 980               | 0.249 | 245                 | 243                             | 0.5               | 0.3             | 4.901     | A                             |
| 5   | 217                   | 54                      | 605                       | 0.00                       | 1087              | 0.199 | 217                 | 135                             | 0.4               | 0.3             | 4.138     | A                             |

**18:15 - 18:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Pedestrian demand (Ped/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|----------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1   | 579                   | 145                     | 161                       | 18.82                      | 1233              | 0.470 | 581                 | 525                             | 1.3               | 0.9             | 5.537     | A                             |
| 2   | 11                    | 3                       | 728                       |                            | 715               | 0.016 | 11                  | 14                              | 0.0               | 0.0             | 5.115     | A                             |
| 3   | 413                   | 103                     | 202                       | 19.57                      | 931               | 0.443 | 414                 | 537                             | 1.2               | 0.8             | 6.989     | A                             |
| 4   | 205                   | 51                      | 413                       |                            | 1023              | 0.200 | 205                 | 203                             | 0.3               | 0.3             | 4.403     | A                             |
| 5   | 181                   | 45                      | 505                       | 0.00                       | 1171              | 0.155 | 182                 | 113                             | 0.3               | 0.2             | 3.641     | A                             |