



# **ENVIRONMENTAL STATEMENT – VOLUME 3 – APPENDIX 5.6**

## **Junction Modelling Outputs**

### **Drax Bioenergy with Carbon Capture and Storage**

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations, 2009 - Regulation 5(2)(a)

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PUBLIC

| <b>Junctions 10</b>                                                                                                                                              |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>ARCADY 10 - Roundabout Module</b>                                                                                                                             |  |
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**Report generation date:** 18/03/2022 09:29:09

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- »2018 Baseline, AM
  - »2018 Baseline, PM
  - »2022 Future Baseline , AM
  - »2022 Future Baseline , PM
  - »2026 Future Baseline, AM
  - »2026 Future Baseline, PM
  - »2026 Do Nothing, AM
  - »2026 Do Nothing, PM
  - »2026 Do Something, AM
  - »2026 Do Something, PM

## Summary of junction performance

|                                   | AM                   |             |           |      |     | PM     |             |           |      |     |
|-----------------------------------|----------------------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|
|                                   | Set ID               | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS |
|                                   | 2018 Baseline        |             |           |      |     |        |             |           |      |     |
| A - A645 (West)                   | D1                   | 0.4         | 3.06      | 0.29 | A   | D2     | 0.6         | 3.35      | 0.38 | A   |
| B - New Road                      |                      | 0.1         | 2.77      | 0.06 | A   |        | 0.2         | 3.01      | 0.15 | A   |
| C - Main Road                     |                      | 0.1         | 2.24      | 0.07 | A   |        | 0.1         | 2.45      | 0.07 | A   |
| D - A645 (South)                  |                      | 0.7         | 3.76      | 0.39 | A   |        | 0.4         | 3.21      | 0.25 | A   |
| E - Sports And Social Club Access |                      | 0.0         | 5.10      | 0.01 | A   |        | 0.0         | 4.71      | 0.02 | A   |
|                                   | 2022 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A645 (West)                   | D3                   | 0.4         | 3.11      | 0.30 | A   | D4     | 0.7         | 3.43      | 0.40 | A   |
| B - New Road                      |                      | 0.1         | 2.79      | 0.06 | A   |        | 0.2         | 3.06      | 0.15 | A   |
| C - Main Road                     |                      | 0.1         | 2.26      | 0.08 | A   |        | 0.1         | 2.48      | 0.07 | A   |
| D - A645 (South)                  |                      | 0.7         | 3.86      | 0.40 | A   |        | 0.4         | 3.26      | 0.26 | A   |
| E - Sports And Social Club Access |                      | 0.0         | 5.20      | 0.01 | A   |        | 0.0         | 4.76      | 0.02 | A   |
|                                   | 2026 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A645 (West)                   | D5                   | 0.5         | 3.16      | 0.31 | A   | D6     | 0.7         | 3.50      | 0.41 | A   |
| B - New Road                      |                      | 0.1         | 2.82      | 0.06 | A   |        | 0.2         | 3.11      | 0.16 | A   |
| C - Main Road                     |                      | 0.1         | 2.28      | 0.08 | A   |        | 0.1         | 2.51      | 0.07 | A   |
| D - A645 (South)                  |                      | 0.7         | 3.95      | 0.41 | A   |        | 0.4         | 3.31      | 0.27 | A   |
| E - Sports And Social Club Access |                      | 0.0         | 5.28      | 0.01 | A   |        | 0.0         | 4.82      | 0.02 | A   |
|                                   | 2026 Do Nothing      |             |           |      |     |        |             |           |      |     |
| A - A645 (West)                   | D7                   | 0.5         | 3.30      | 0.33 | A   | D8     | 0.8         | 3.67      | 0.43 | A   |
| B - New Road                      |                      | 0.1         | 3.00      | 0.09 | A   |        | 0.2         | 3.26      | 0.18 | A   |
| C - Main Road                     |                      | 0.1         | 2.35      | 0.09 | A   |        | 0.1         | 2.58      | 0.08 | A   |
| D - A645 (South)                  |                      | 0.9         | 4.23      | 0.45 | A   |        | 0.5         | 3.56      | 0.32 | A   |
| E - Sports And Social Club Access |                      | 0.0         | 5.51      | 0.01 | A   |        | 0.0         | 5.04      | 0.02 | A   |
|                                   | 2026 Do Something    |             |           |      |     |        |             |           |      |     |
| A - A645 (West)                   | D9                   | 0.5         | 3.45      | 0.34 | A   | D10    | 0.8         | 3.86      | 0.44 | A   |
| B - New Road                      |                      | 0.1         | 3.11      | 0.10 | A   |        | 0.4         | 3.58      | 0.26 | A   |
| C - Main Road                     |                      | 0.1         | 2.38      | 0.09 | A   |        | 0.1         | 2.71      | 0.08 | A   |
| D - A645 (South)                  |                      | 1.0         | 4.54      | 0.49 | A   |        | 0.6         | 3.95      | 0.37 | A   |
| E - Sports And Social Club Access |                      | 0.0         | 5.76      | 0.01 | A   |        | 0.0         | 5.38      | 0.02 | A   |

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

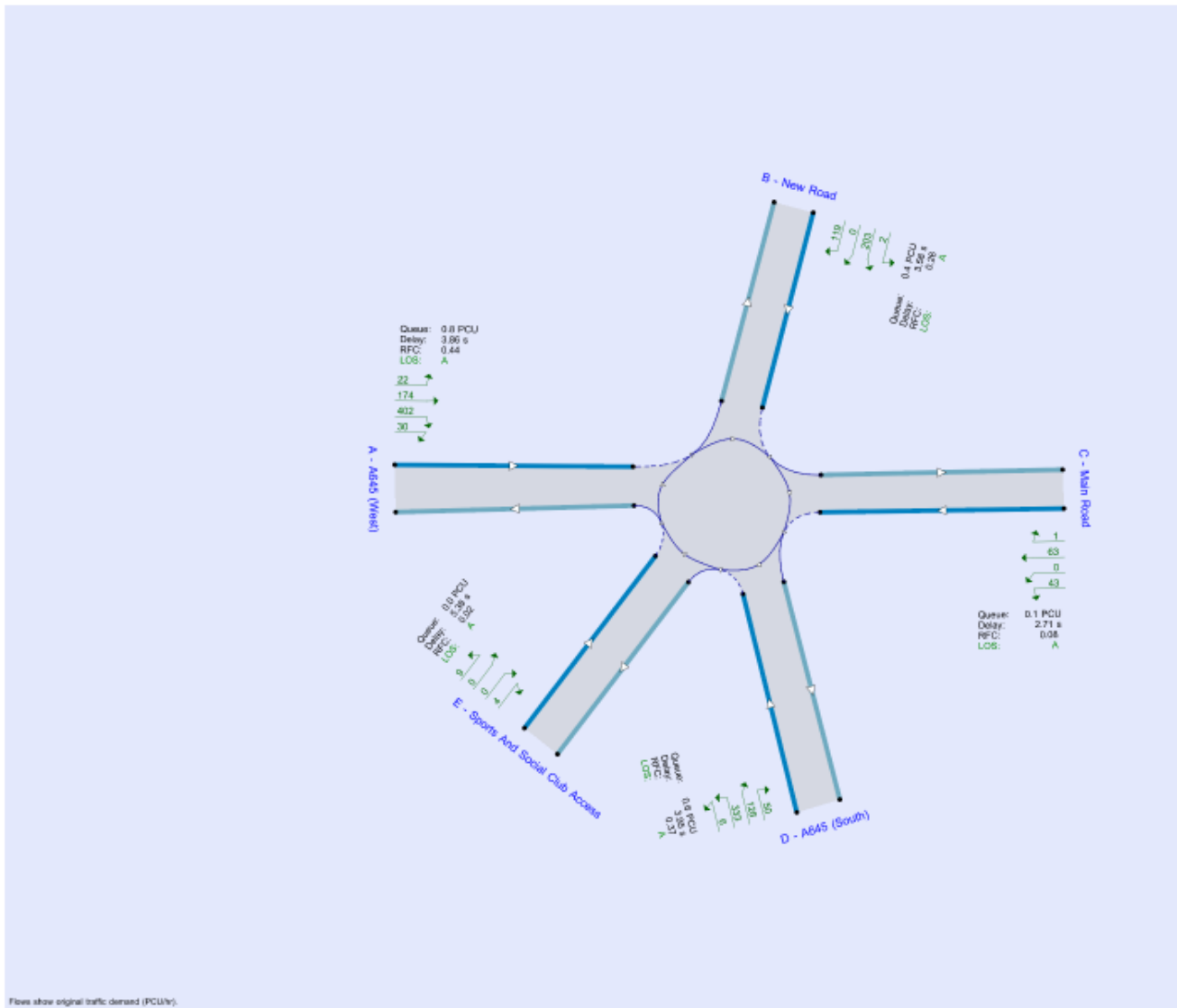
## File summary

### File Description

|             |                |
|-------------|----------------|
| Title       | Site 4         |
| Location    |                |
| Site number |                |
| Date        | 28/03/2018     |
| Version     |                |
| Status      |                |
| Identifier  |                |
| Client      |                |
| Jobnumber   |                |
| Enumerator  | CORP\INTW00749 |
| Description |                |

## Units

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



## Analysis Options

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

## Demand Set Summary

| ID  | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1  | 2018 Baseline        | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D2  | 2018 Baseline        | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D3  | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D4  | 2022 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D5  | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D6  | 2026 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D7  | 2026 Do Nothing      | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D8  | 2026 Do Nothing      | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D9  | 2026 Do Something    | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D10 | 2026 Do Something    | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |



## Analysis Set Details

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

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# 2018 Baseline, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 4        | Site 4 | Standard Roundabout |                       | B, C, D, E, A | 3.29               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 3.29              | A           |

## Arms

### Arms

| Arm | Name                          | Description | No give-way line |
|-----|-------------------------------|-------------|------------------|
| A   | A645 (West)                   |             |                  |
| B   | New Road                      |             |                  |
| C   | Main Road                     |             |                  |
| D   | A645 (South)                  |             |                  |
| E   | Sports And Social Club Access |             |                  |

### Roundabout Geometry

| Arm                               | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Entry only | Exit only |
|-----------------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|------------|-----------|
| A - A645 (West)                   | 3.40                             | 7.40                | 22.0                            | 42.3                 | 56.0                              | 31.0                               |            |           |
| B - New Road                      | 3.80                             | 7.40                | 21.1                            | 30.9                 | 56.0                              | 30.0                               |            |           |
| C - Main Road                     | 4.30                             | 7.80                | 22.9                            | 20.6                 | 56.0                              | 23.5                               |            |           |
| D - A645 (South)                  | 3.80                             | 7.10                | 22.1                            | 15.8                 | 56.0                              | 45.5                               |            |           |
| E - Sports And Social Club Access | 3.20                             | 5.80                | 1.9                             | 9.9                  | 56.0                              | 30.0                               |            |           |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm                               | Final slope | Final intercept (PCU/hr) |
|-----------------------------------|-------------|--------------------------|
| A - A645 (West)                   | 0.610       | 1836                     |
| B - New Road                      | 0.618       | 1889                     |
| C - Main Road                     | 0.651       | 2063                     |
| D - A645 (South)                  | 0.562       | 1706                     |
| E - Sports And Social Club Access | 0.450       | 1057                     |

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2018 Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A645 (West)                   |            | ONE HOUR     | ✓            | 451                     | 100.000            |
| B - New Road                      |            | ONE HOUR     | ✓            | 88                      | 100.000            |
| C - Main Road                     |            | ONE HOUR     | ✓            | 117                     | 100.000            |
| D - A645 (South)                  |            | ONE HOUR     | ✓            | 588                     | 100.000            |
| E - Sports And Social Club Access |            | ONE HOUR     | ✓            | 8                       | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                   | To              |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 11              | 88           | 91            | 274              | 7                                 |
|      | B - New Road                      | 41              | 0            | 2             | 44               | 0                                 |
|      | C - Main Road                     | 78              | 4            | 0             | 38               | 0                                 |
|      | D - A645 (South)                  | 422             | 81           | 83            | 0                | 3                                 |
|      | E - Sports And Social Club Access | 3               | 0            | 2             | 1                | 0                                 |

### Proportions

|      |                                   | To              |              |     |
|------|-----------------------------------|-----------------|--------------|-----|
|      |                                   | A - A645 (West) | B - New Road | M R |
| From | A - A645 (West)                   | 0.03            | 0.15         | 0   |
|      | B - New Road                      | 0.47            | 0.00         | 0   |
|      | C - Main Road                     | 0.65            | 0.03         | 0   |
|      | D - A645 (South)                  | 0.74            | 0.14         | 0   |
|      | E - Sports And Social Club Access | 0.50            | 0.00         | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      |                                   | To              |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 10              | 2            | 8             | 8                | 0                                 |
|      | B - New Road                      | 3               | 0            | 0             | 29               | 0                                 |
|      | C - Main Road                     | 3               | 0            | 0             | 8                | 0                                 |
|      | D - A645 (South)                  | 4               | 4            | 2             | 0                | 0                                 |
|      | E - Sports And Social Club Access | 0               | 0            | 0             | 0                | 0                                 |

### Average PCU Per Veh

|      |                                   | To              |              |     |
|------|-----------------------------------|-----------------|--------------|-----|
|      |                                   | A - A645 (West) | B - New Road | M R |
| From | A - A645 (West)                   | 1.100           | 1.015        | 1   |
|      | B - New Road                      | 1.028           | 1.000        | 1   |
|      | C - Main Road                     | 1.027           | 1.000        | 1   |
|      | D - A645 (South)                  | 1.043           | 1.039        | 1   |
|      | E - Sports And Social Club Access | 1.000           | 1.000        | 1   |

## Detailed Demand Data

### Demand for each time segment

| Arm                               | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-----------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                   | 07:15-07:30  | 340             | 340                    |
|                                   | 07:30-07:45  | 408             | 408                    |
|                                   | 07:45-08:00  | 497             | 497                    |
|                                   | 08:00-08:15  | 497             | 497                    |
|                                   | 08:15-08:30  | 408             | 408                    |
|                                   | 08:30-08:45  | 340             | 340                    |
| B - New Road                      | 07:15-07:30  | 65              | 65                     |
|                                   | 07:30-07:45  | 77              | 77                     |
|                                   | 07:45-08:00  | 95              | 95                     |
|                                   | 08:00-08:15  | 95              | 95                     |
|                                   | 08:15-08:30  | 77              | 77                     |
|                                   | 08:30-08:45  | 65              | 65                     |
| C - Main Road                     | 07:15-07:30  | 88              | 88                     |
|                                   | 07:30-07:45  | 105             | 105                    |
|                                   | 07:45-08:00  | 129             | 129                    |
|                                   | 08:00-08:15  | 129             | 129                    |
|                                   | 08:15-08:30  | 105             | 105                    |
|                                   | 08:30-08:45  | 88              | 88                     |
| D - A645 (South)                  | 07:15-07:30  | 428             | 428                    |
|                                   | 07:30-07:45  | 511             | 511                    |
|                                   | 07:45-08:00  | 626             | 626                    |
|                                   | 08:00-08:15  | 626             | 626                    |
|                                   | 08:15-08:30  | 511             | 511                    |
|                                   | 08:30-08:45  | 428             | 428                    |
| E - Sports And Social Club Access | 07:15-07:30  | 5               | 5                      |
|                                   | 07:30-07:45  | 5               | 5                      |
|                                   | 07:45-08:00  | 7               | 7                      |
|                                   | 08:00-08:15  | 7               | 7                      |
|                                   | 08:15-08:30  | 5               | 5                      |
|                                   | 08:30-08:45  | 5               | 5                      |

## 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) |
|-----------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                   | 0.29    | 3.06          | 0.4             | A       | 414                     | 621                           |
| B - New Road                      | 0.06    | 2.77          | 0.1             | A       | 79                      | 119                           |
| C - Main Road                     | 0.07    | 2.24          | 0.1             | A       | 107                     | 161                           |
| D - A645 (South)                  | 0.39    | 3.76          | 0.7             | A       | 521                     | 782                           |
| E - Sports And Social Club Access | 0.01    | 5.10          | 0.0             | A       | 6                       | 8                             |

## Main Results for each time segment

### 07:15 - 07:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 340                   | 85                      | 112                       | 1768              | 0.192 | 339                 | 415                             | 0.0               | 0.2             | 2.649     | A                             |
| B - New Road                      | 65                    | 16                      | 337                       | 1681              | 0.039 | 65                  | 114                             | 0.0               | 0.0             | 2.548     | A                             |
| C - Main Road                     | 88                    | 22                      | 284                       | 1878              | 0.047 | 88                  | 118                             | 0.0               | 0.1             | 2.082     | A                             |
| D - A645 (South)                  | 428                   | 107                     | 104                       | 1647              | 0.260 | 426                 | 268                             | 0.0               | 0.4             | 3.059     | A                             |
| E - Sports And Social Club Access | 5                     | 1                       | 523                       | 822               | 0.005 | 4                   | 8                               | 0.0               | 0.0             | 4.401     | A                             |

### 07:30 - 07:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 406                   | 101                     | 135                       | 1754              | 0.231 | 405                 | 496                             | 0.2               | 0.3             | 2.807     | A                             |
| B - New Road                      | 77                    | 19                      | 403                       | 1640              | 0.047 | 77                  | 136                             | 0.0               | 0.1             | 2.635     | A                             |
| C - Main Road                     | 105                   | 26                      | 340                       | 1842              | 0.057 | 105                 | 141                             | 0.1               | 0.1             | 2.146     | A                             |
| D - A645 (South)                  | 511                   | 128                     | 124                       | 1636              | 0.312 | 510                 | 320                             | 0.4               | 0.5             | 3.324     | A                             |
| E - Sports And Social Club Access | 5                     | 1                       | 626                       | 776               | 0.007 | 5                   | 9                               | 0.0               | 0.0             | 4.671     | A                             |

### 07:45 - 08:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 497                   | 124                     | 165                       | 1736              | 0.286 | 496                 | 608                             | 0.3               | 0.4             | 3.055     | A                             |
| B - New Road                      | 95                    | 24                      | 494                       | 1584              | 0.060 | 95                  | 167                             | 0.1               | 0.1             | 2.765     | A                             |
| C - Main Road                     | 129                   | 32                      | 416                       | 1792              | 0.072 | 129                 | 173                             | 0.1               | 0.1             | 2.241     | A                             |
| D - A645 (South)                  | 626                   | 156                     | 152                       | 1620              | 0.386 | 625                 | 392                             | 0.5               | 0.6             | 3.757     | A                             |
| E - Sports And Social Club Access | 7                     | 2                       | 766                       | 713               | 0.009 | 7                   | 11                              | 0.0               | 0.0             | 5.096     | A                             |

### 08:00 - 08:15

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 497                   | 124                     | 165                       | 1736              | 0.286 | 497                 | 608                             | 0.4               | 0.4             | 3.056     | A                             |
| B - New Road                      | 95                    | 24                      | 494                       | 1583              | 0.060 | 95                  | 167                             | 0.1               | 0.1             | 2.766     | A                             |
| C - Main Road                     | 129                   | 32                      | 416                       | 1792              | 0.072 | 129                 | 173                             | 0.1               | 0.1             | 2.241     | A                             |
| D - A645 (South)                  | 626                   | 156                     | 152                       | 1620              | 0.386 | 626                 | 393                             | 0.6               | 0.7             | 3.760     | A                             |
| E - Sports And Social Club Access | 7                     | 2                       | 767                       | 713               | 0.009 | 7                   | 11                              | 0.0               | 0.0             | 5.099     | A                             |

### 08:15 - 08:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 406                   | 101                     | 135                       | 1754              | 0.231 | 406                 | 497                             | 0.4               | 0.3             | 2.809     | A                             |
| B - New Road                      | 77                    | 19                      | 404                       | 1639              | 0.047 | 78                  | 137                             | 0.1               | 0.1             | 2.638     | A                             |
| C - Main Road                     | 105                   | 26                      | 340                       | 1842              | 0.057 | 105                 | 142                             | 0.1               | 0.1             | 2.147     | A                             |
| D - A645 (South)                  | 511                   | 128                     | 124                       | 1636              | 0.312 | 512                 | 321                             | 0.7               | 0.5             | 3.328     | A                             |
| E - Sports And Social Club Access | 5                     | 1                       | 627                       | 775               | 0.007 | 5                   | 9                               | 0.0               | 0.0             | 4.676     | A                             |

### 08:30 - 08:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 340                   | 85                      | 113                       | 1768              | 0.192 | 340                 | 416                             | 0.3               | 0.3             | 2.653     | A                             |
| B - New Road                      | 65                    | 16                      | 338                       | 1680              | 0.039 | 65                  | 114                             | 0.1               | 0.0             | 2.549     | A                             |
| C - Main Road                     | 88                    | 22                      | 285                       | 1878              | 0.047 | 88                  | 119                             | 0.1               | 0.1             | 2.084     | A                             |
| D - A645 (South)                  | 428                   | 107                     | 104                       | 1647              | 0.260 | 428                 | 269                             | 0.5               | 0.4             | 3.069     | A                             |
| E - Sports And Social Club Access | 5                     | 1                       | 525                       | 821               | 0.006 | 5                   | 8                               | 0.0               | 0.0             | 4.406     | A                             |





# 2018 Baseline, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 4        | Site 4 | Standard Roundabout |                       | B, C, D, E, A | 3.20               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 3.20              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2018 Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                               | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A645 (West)                   |            | ONE HOUR     | ✓            | 623                     | 100.000            |
| B - New Road                      |            | ONE HOUR     | ✓            | 192                     | 100.000            |
| C - Main Road                     |            | ONE HOUR     | ✓            | 97                      | 100.000            |
| D - A645 (South)                  |            | ONE HOUR     | ✓            | 359                     | 100.000            |
| E - Sports And Social Club Access |            | ONE HOUR     | ✓            | 12                      | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                   | To              |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 56              | 21           | 164           | 355              | 28                                |
|      | B - New Road                      | 94              | 0            | 2             | 96               | 0                                 |
|      | C - Main Road                     | 59              | 1            | 0             | 37               | 0                                 |
|      | D - A645 (South)                  | 283             | 28           | 42            | 1                | 5                                 |
|      | E - Sports And Social Club Access | 8               | 0            | 0             | 4                | 0                                 |

### Proportions

|      |                                   | To              |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
| From | A - A645 (West)                   | 0.09            | 0.03         | 0.00          |
|      | B - New Road                      | 0.49            | 0.00         | 0.00          |
|      | C - Main Road                     | 0.61            | 0.01         | 0.00          |
|      | D - A645 (South)                  | 0.79            | 0.08         | 0.00          |
|      | E - Sports And Social Club Access | 0.67            | 0.00         | 0.00          |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                                |                 |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
|      | A - A645 (West)                   | 2               | 0            | 2             | 3                | 0                                 |
|      | B - New Road                      | 2               | 0            | 0             | 4                | 0                                 |
|      | C - Main Road                     | 2               | 0            | 0             | 3                | 0                                 |
|      | D - A645 (South)                  | 3               | 17           | 0             | 0                | 0                                 |
|      | E - Sports And Social Club Access | 0               | 0            | 0             | 0                | 0                                 |

### Average PCU Per Veh

| From | To                                |                 |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
|      | A - A645 (West)                   | 1.018           | 1.000        | 1.000         |
|      | B - New Road                      | 1.023           | 1.000        | 1.000         |
|      | C - Main Road                     | 1.018           | 1.000        | 1.000         |
|      | D - A645 (South)                  | 1.033           | 1.174        | 1.000         |
|      | E - Sports And Social Club Access | 1.000           | 1.000        | 1.000         |

## Detailed Demand Data

### Demand for each time segment

| Arm                               | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-----------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                   | 16:30-16:45  | 489             | 489                    |
|                                   | 16:45-17:00  | 580             | 580                    |
|                                   | 17:00-17:15  | 688             | 688                    |
|                                   | 17:15-17:30  | 688             | 688                    |
|                                   | 17:30-17:45  | 580             | 580                    |
|                                   | 17:45-18:00  | 489             | 489                    |
| B - New Road                      | 16:30-16:45  | 145             | 145                    |
|                                   | 16:45-17:00  | 173             | 173                    |
|                                   | 17:00-17:15  | 212             | 212                    |
|                                   | 17:15-17:30  | 212             | 212                    |
|                                   | 17:30-17:45  | 173             | 173                    |
|                                   | 17:45-18:00  | 145             | 145                    |
| C - Main Road                     | 16:30-16:45  | 73              | 73                     |
|                                   | 16:45-17:00  | 87              | 87                     |
|                                   | 17:00-17:15  | 107             | 107                    |
|                                   | 17:15-17:30  | 107             | 107                    |
|                                   | 17:30-17:45  | 87              | 87                     |
|                                   | 17:45-18:00  | 73              | 73                     |
| D - A645 (South)                  | 16:30-16:45  | 270             | 270                    |
|                                   | 16:45-17:00  | 323             | 323                    |
|                                   | 17:00-17:15  | 395             | 395                    |
|                                   | 17:15-17:30  | 395             | 395                    |
|                                   | 17:30-17:45  | 323             | 323                    |
|                                   | 17:45-18:00  | 270             | 270                    |
| E - Sports And Social Club Access | 16:30-16:45  | 9               | 9                      |
|                                   | 16:45-17:00  | 11              | 11                     |
|                                   | 17:00-17:15  | 13              | 13                     |
|                                   | 17:15-17:30  | 13              | 13                     |
|                                   | 17:30-17:45  | 11              | 11                     |
|                                   | 17:45-18:00  | 9               | 9                      |

## 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) |
|-----------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                   | 0.38    | 3.35          | 0.6             | A       | 572                     | 858                           |
| B - New Road                      | 0.15    | 3.01          | 0.2             | A       | 176                     | 265                           |
| C - Main Road                     | 0.07    | 2.45          | 0.1             | A       | 89                      | 134                           |
| D - A645 (South)                  | 0.25    | 3.21          | 0.4             | A       | 329                     | 494                           |
| E - Sports And Social Club Access | 0.02    | 4.71          | 0.0             | A       | 11                      | 17                            |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 489                   | 117                     | 57                        | 1802              | 0.260 | 488                 | 375                             | 0.0               | 0.4             | 2.759     | A                             |
| B - New Road                      | 145                   | 36                      | 487                       | 1588              | 0.091 | 144                 | 38                              | 0.0               | 0.1             | 2.577     | A                             |
| C - Main Road                     | 73                    | 18                      | 476                       | 1753              | 0.042 | 73                  | 156                             | 0.0               | 0.0             | 2.187     | A                             |
| D - A645 (South)                  | 270                   | 68                      | 179                       | 1605              | 0.168 | 269                 | 370                             | 0.0               | 0.2             | 2.797     | A                             |
| E - Sports And Social Club Access | 9                     | 2                       | 423                       | 867               | 0.010 | 9                   | 25                              | 0.0               | 0.0             | 4.195     | A                             |

#### 16:45 - 17:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 560                   | 140                     | 68                        | 1795              | 0.312 | 560                 | 449                             | 0.4               | 0.5             | 2.982     | A                             |
| B - New Road                      | 173                   | 43                      | 583                       | 1528              | 0.113 | 173                 | 45                              | 0.1               | 0.1             | 2.743     | A                             |
| C - Main Road                     | 87                    | 22                      | 570                       | 1692              | 0.052 | 87                  | 186                             | 0.0               | 0.1             | 2.290     | A                             |
| D - A645 (South)                  | 323                   | 81                      | 214                       | 1585              | 0.204 | 322                 | 443                             | 0.2               | 0.3             | 2.960     | A                             |
| E - Sports And Social Club Access | 11                    | 3                       | 507                       | 830               | 0.013 | 11                  | 30                              | 0.0               | 0.0             | 4.396     | A                             |

#### 17:00 - 17:15

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 686                   | 172                     | 84                        | 1785              | 0.384 | 686                 | 550                             | 0.5               | 0.6             | 3.347     | A                             |
| B - New Road                      | 212                   | 53                      | 714                       | 1448              | 0.146 | 211                 | 55                              | 0.1               | 0.2             | 3.008     | A                             |
| C - Main Road                     | 107                   | 27                      | 697                       | 1609              | 0.066 | 107                 | 228                             | 0.1               | 0.1             | 2.447     | A                             |
| D - A645 (South)                  | 395                   | 99                      | 262                       | 1558              | 0.254 | 395                 | 542                             | 0.3               | 0.4             | 3.213     | A                             |
| E - Sports And Social Club Access | 13                    | 3                       | 620                       | 778               | 0.017 | 13                  | 36                              | 0.0               | 0.0             | 4.704     | A                             |

#### 17:15 - 17:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 686                   | 172                     | 84                        | 1785              | 0.384 | 686                 | 550                             | 0.6               | 0.6             | 3.350     | A                             |
| B - New Road                      | 212                   | 53                      | 715                       | 1447              | 0.146 | 212                 | 55                              | 0.2               | 0.2             | 3.009     | A                             |
| C - Main Road                     | 107                   | 27                      | 698                       | 1609              | 0.066 | 107                 | 228                             | 0.1               | 0.1             | 2.447     | A                             |
| D - A645 (South)                  | 395                   | 99                      | 262                       | 1558              | 0.254 | 395                 | 543                             | 0.4               | 0.4             | 3.213     | A                             |
| E - Sports And Social Club Access | 13                    | 3                       | 621                       | 778               | 0.017 | 13                  | 36                              | 0.0               | 0.0             | 4.705     | A                             |

## 17:30 - 17:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 580                   | 140                     | 89                        | 1795              | 0.312 | 581                 | 450                             | 0.6               | 0.5             | 2.986     | A                             |
| B - New Road                      | 173                   | 43                      | 584                       | 1528              | 0.113 | 173                 | 45                              | 0.2               | 0.1             | 2.745     | A                             |
| C - Main Road                     | 87                    | 22                      | 571                       | 1692              | 0.052 | 87                  | 187                             | 0.1               | 0.1             | 2.293     | A                             |
| D - A645 (South)                  | 323                   | 81                      | 214                       | 1585              | 0.204 | 323                 | 444                             | 0.4               | 0.3             | 2.984     | A                             |
| E - Sports And Social Club Access | 11                    | 3                       | 508                       | 829               | 0.013 | 11                  | 30                              | 0.0               | 0.0             | 4.398     | A                             |

## 17:45 - 18:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 489                   | 117                     | 57                        | 1801              | 0.280 | 470                 | 377                             | 0.5               | 0.4             | 2.787     | A                             |
| B - New Road                      | 145                   | 38                      | 489                       | 1587              | 0.091 | 145                 | 38                              | 0.1               | 0.1             | 2.581     | A                             |
| C - Main Road                     | 73                    | 18                      | 478                       | 1752              | 0.042 | 73                  | 156                             | 0.1               | 0.0             | 2.191     | A                             |
| D - A645 (South)                  | 270                   | 68                      | 179                       | 1605              | 0.168 | 270                 | 371                             | 0.3               | 0.2             | 2.803     | A                             |
| E - Sports And Social Club Access | 9                     | 2                       | 425                       | 886               | 0.010 | 9                   | 25                              | 0.0               | 0.0             | 4.199     | A                             |

# 2022 Future Baseline , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 4        | Site 4 | Standard Roundabout |                       | B, C, D, E, A | 3.38               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 3.38              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D3 | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A645 (West)                   |            | ONE HOUR     | ✓            | 487                     | 100.000            |
| B - New Road                      |            | ONE HOUR     | ✓            | 89                      | 100.000            |
| C - Main Road                     |            | ONE HOUR     | ✓            | 122                     | 100.000            |
| D - A645 (South)                  |            | ONE HOUR     | ✓            | 588                     | 100.000            |
| E - Sports And Social Club Access |            | ONE HOUR     | ✓            | 7                       | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                   | To              |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 12              | 70           | 94            | 284              | 7                                 |
|      | B - New Road                      | 42              | 0            | 2             | 45               | 0                                 |
|      | C - Main Road                     | 79              | 4            | 0             | 39               | 0                                 |
|      | D - A645 (South)                  | 437             | 83           | 65            | 0                | 3                                 |
|      | E - Sports And Social Club Access | 3               | 0            | 2             | 1                | 0                                 |

### Proportions

|      |                                   | To              |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
| From | A - A645 (West)                   | 0.03            | 0.15         | 0.00          |
|      | B - New Road                      | 0.47            | 0.00         | 0.00          |
|      | C - Main Road                     | 0.65            | 0.03         | 0.00          |
|      | D - A645 (South)                  | 0.74            | 0.14         | 0.00          |
|      | E - Sports And Social Club Access | 0.50            | 0.00         | 0.00          |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                                |                 |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
|      | A - A645 (West)                   | 10              | 2            | 6             | 6                | 0                                 |
|      | B - New Road                      | 3               | 0            | 0             | 29               | 0                                 |
|      | C - Main Road                     | 3               | 0            | 0             | 6                | 0                                 |
|      | D - A645 (South)                  | 4               | 4            | 2             | 0                | 0                                 |
|      | E - Sports And Social Club Access | 0               | 0            | 0             | 0                | 0                                 |

### Average PCU Per Veh

| From | To                                |                 |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
|      | A - A645 (West)                   | 1.100           | 1.015        | 1.000         |
|      | B - New Road                      | 1.028           | 1.000        | 1.000         |
|      | C - Main Road                     | 1.027           | 1.000        | 1.000         |
|      | D - A645 (South)                  | 1.043           | 1.039        | 1.000         |
|      | E - Sports And Social Club Access | 1.000           | 1.000        | 1.000         |

## Detailed Demand Data

### Demand for each time segment

| Arm                               | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-----------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                   | 07:15-07:30  | 352             | 352                    |
|                                   | 07:30-07:45  | 420             | 420                    |
|                                   | 07:45-08:00  | 515             | 515                    |
|                                   | 08:00-08:15  | 515             | 515                    |
|                                   | 08:15-08:30  | 420             | 420                    |
|                                   | 08:30-08:45  | 352             | 352                    |
| B - New Road                      | 07:15-07:30  | 67              | 67                     |
|                                   | 07:30-07:45  | 80              | 80                     |
|                                   | 07:45-08:00  | 98              | 98                     |
|                                   | 08:00-08:15  | 98              | 98                     |
|                                   | 08:15-08:30  | 80              | 80                     |
|                                   | 08:30-08:45  | 67              | 67                     |
| C - Main Road                     | 07:15-07:30  | 92              | 92                     |
|                                   | 07:30-07:45  | 110             | 110                    |
|                                   | 07:45-08:00  | 134             | 134                    |
|                                   | 08:00-08:15  | 134             | 134                    |
|                                   | 08:15-08:30  | 110             | 110                    |
|                                   | 08:30-08:45  | 92              | 92                     |
| D - A645 (South)                  | 07:15-07:30  | 443             | 443                    |
|                                   | 07:30-07:45  | 529             | 529                    |
|                                   | 07:45-08:00  | 648             | 648                    |
|                                   | 08:00-08:15  | 648             | 648                    |
|                                   | 08:15-08:30  | 529             | 529                    |
|                                   | 08:30-08:45  | 443             | 443                    |
| E - Sports And Social Club Access | 07:15-07:30  | 5               | 5                      |
|                                   | 07:30-07:45  | 6               | 6                      |
|                                   | 07:45-08:00  | 7               | 7                      |
|                                   | 08:00-08:15  | 7               | 7                      |
|                                   | 08:15-08:30  | 6               | 6                      |
|                                   | 08:30-08:45  | 5               | 5                      |



## 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) |
|-----------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                   | 0.30    | 3.11          | 0.4             | A       | 429                     | 643                           |
| B - New Road                      | 0.06    | 2.79          | 0.1             | A       | 82                      | 123                           |
| C - Main Road                     | 0.08    | 2.26          | 0.1             | A       | 112                     | 168                           |
| D - A645 (South)                  | 0.40    | 3.88          | 0.7             | A       | 540                     | 810                           |
| E - Sports And Social Club Access | 0.01    | 5.20          | 0.0             | A       | 6                       | 9                             |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 352                   | 88                      | 116                       | 1766              | 0.199 | 351                 | 431                             | 0.0               | 0.3             | 2.677     | A                             |
| B - New Road                      | 67                    | 17                      | 350                       | 1673              | 0.040 | 67                  | 118                             | 0.0               | 0.0             | 2.562     | A                             |
| C - Main Road                     | 92                    | 23                      | 294                       | 1872              | 0.049 | 92                  | 123                             | 0.0               | 0.1             | 2.094     | A                             |
| D - A645 (South)                  | 443                   | 111                     | 108                       | 1645              | 0.269 | 441                 | 277                             | 0.0               | 0.4             | 3.104     | A                             |
| E - Sports And Social Club Access | 5                     | 1                       | 542                       | 814               | 0.006 | 5                   | 8                               | 0.0               | 0.0             | 4.451     | A                             |

#### 07:30 - 07:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 420                   | 105                     | 139                       | 1752              | 0.240 | 420                 | 515                             | 0.3               | 0.3             | 2.844     | A                             |
| B - New Road                      | 80                    | 20                      | 418                       | 1630              | 0.049 | 80                  | 141                             | 0.0               | 0.1             | 2.654     | A                             |
| C - Main Road                     | 110                   | 27                      | 352                       | 1834              | 0.060 | 109                 | 147                             | 0.1               | 0.1             | 2.161     | A                             |
| D - A645 (South)                  | 529                   | 132                     | 130                       | 1633              | 0.324 | 528                 | 332                             | 0.4               | 0.5             | 3.385     | A                             |
| E - Sports And Social Club Access | 6                     | 1                       | 649                       | 766               | 0.008 | 6                   | 9                               | 0.0               | 0.0             | 4.738     | A                             |

#### 07:45 - 08:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 515                   | 129                     | 171                       | 1732              | 0.297 | 514                 | 631                             | 0.3               | 0.4             | 3.109     | A                             |
| B - New Road                      | 98                    | 25                      | 512                       | 1572              | 0.062 | 98                  | 173                             | 0.1               | 0.1             | 2.791     | A                             |
| C - Main Road                     | 134                   | 34                      | 431                       | 1783              | 0.075 | 134                 | 180                             | 0.1               | 0.1             | 2.261     | A                             |
| D - A645 (South)                  | 648                   | 162                     | 159                       | 1616              | 0.401 | 647                 | 406                             | 0.5               | 0.7             | 3.855     | A                             |
| E - Sports And Social Club Access | 7                     | 2                       | 794                       | 700               | 0.010 | 7                   | 11                              | 0.0               | 0.0             | 5.194     | A                             |

#### 08:00 - 08:15

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 515                   | 129                     | 171                       | 1732              | 0.297 | 515                 | 632                             | 0.4               | 0.4             | 3.110     | A                             |
| B - New Road                      | 98                    | 25                      | 513                       | 1572              | 0.062 | 98                  | 173                             | 0.1               | 0.1             | 2.791     | A                             |
| C - Main Road                     | 134                   | 34                      | 431                       | 1782              | 0.075 | 134                 | 180                             | 0.1               | 0.1             | 2.261     | A                             |
| D - A645 (South)                  | 648                   | 162                     | 159                       | 1616              | 0.401 | 648                 | 406                             | 0.7               | 0.7             | 3.861     | A                             |
| E - Sports And Social Club Access | 7                     | 2                       | 795                       | 700               | 0.010 | 7                   | 11                              | 0.0               | 0.0             | 5.197     | A                             |

## 08:15 - 08:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 420                   | 105                     | 140                       | 1751              | 0.240 | 421                 | 516                             | 0.4               | 0.3             | 2.849     | A                             |
| B - New Road                      | 80                    | 20                      | 419                       | 1630              | 0.049 | 80                  | 141                             | 0.1               | 0.1             | 2.657     | A                             |
| C - Main Road                     | 110                   | 27                      | 352                       | 1834              | 0.060 | 110                 | 147                             | 0.1               | 0.1             | 2.162     | A                             |
| D - A645 (South)                  | 529                   | 132                     | 130                       | 1633              | 0.324 | 530                 | 332                             | 0.7               | 0.5             | 3.392     | A                             |
| E - Sports And Social Club Access | 6                     | 1                       | 650                       | 765               | 0.008 | 6                   | 9                               | 0.0               | 0.0             | 4.742     | A                             |

## 08:30 - 08:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 352                   | 88                      | 117                       | 1765              | 0.199 | 352                 | 432                             | 0.3               | 0.3             | 2.680     | A                             |
| B - New Road                      | 67                    | 17                      | 351                       | 1672              | 0.040 | 67                  | 118                             | 0.1               | 0.0             | 2.564     | A                             |
| C - Main Road                     | 92                    | 23                      | 295                       | 1871              | 0.049 | 92                  | 123                             | 0.1               | 0.1             | 2.096     | A                             |
| D - A645 (South)                  | 443                   | 111                     | 109                       | 1644              | 0.269 | 443                 | 278                             | 0.5               | 0.4             | 3.117     | A                             |
| E - Sports And Social Club Access | 5                     | 1                       | 544                       | 813               | 0.006 | 5                   | 8                               | 0.0               | 0.0             | 4.456     | A                             |

# 2022 Future Baseline , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 4        | Site 4 | Standard Roundabout |                       | B, C, D, E, A | 3.27               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 3.27              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D4 | 2022 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                               | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A645 (West)                   |            | ONE HOUR     | ✓            | 844                     | 100.000            |
| B - New Road                      |            | ONE HOUR     | ✓            | 198                     | 100.000            |
| C - Main Road                     |            | ONE HOUR     | ✓            | 101                     | 100.000            |
| D - A645 (South)                  |            | ONE HOUR     | ✓            | 371                     | 100.000            |
| E - Sports And Social Club Access |            | ONE HOUR     | ✓            | 12                      | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                   | To              |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 58              | 22           | 169           | 366              | 29                                |
|      | B - New Road                      | 97              | 0            | 2             | 99               | 0                                 |
|      | C - Main Road                     | 61              | 1            | 0             | 39               | 0                                 |
|      | D - A645 (South)                  | 292             | 29           | 43            | 1                | 5                                 |
|      | E - Sports And Social Club Access | 8               | 0            | 0             | 4                | 0                                 |

### Proportions

|      |                                   | To              |              |     |
|------|-----------------------------------|-----------------|--------------|-----|
|      |                                   | A - A645 (West) | B - New Road | M/R |
| From | A - A645 (West)                   | 0.09            | 0.03         | 0   |
|      | B - New Road                      | 0.49            | 0.00         | 0   |
|      | C - Main Road                     | 0.60            | 0.01         | 0   |
|      | D - A645 (South)                  | 0.79            | 0.08         | 0   |
|      | E - Sports And Social Club Access | 0.65            | 0.00         | 0   |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                                |                 |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 2               | 0            | 2             | 3                | 0                                 |
|      | B - New Road                      | 2               | 0            | 0             | 4                | 0                                 |
|      | C - Main Road                     | 2               | 0            | 0             | 3                | 0                                 |
|      | D - A645 (South)                  | 3               | 17           | 0             | 0                | 0                                 |
|      | E - Sports And Social Club Access | 0               | 0            | 0             | 0                | 0                                 |

### Average PCU Per Veh

| From | To                                |                 |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
|      | A - A645 (West)                   | 1.018           | 1.000        | 1.000         |
|      | B - New Road                      | 1.023           | 1.000        | 1.000         |
|      | C - Main Road                     | 1.018           | 1.000        | 1.000         |
|      | D - A645 (South)                  | 1.033           | 1.174        | 1.000         |
|      | E - Sports And Social Club Access | 1.000           | 1.000        | 1.000         |

## Detailed Demand Data

### Demand for each time segment

| Arm                               | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-----------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                   | 16:30-16:45  | 485             | 485                    |
|                                   | 16:45-17:00  | 579             | 579                    |
|                                   | 17:00-17:15  | 709             | 709                    |
|                                   | 17:15-17:30  | 709             | 709                    |
|                                   | 17:30-17:45  | 579             | 579                    |
|                                   | 17:45-18:00  | 485             | 485                    |
| B - New Road                      | 16:30-16:45  | 149             | 149                    |
|                                   | 16:45-17:00  | 178             | 178                    |
|                                   | 17:00-17:15  | 218             | 218                    |
|                                   | 17:15-17:30  | 218             | 218                    |
|                                   | 17:30-17:45  | 178             | 178                    |
|                                   | 17:45-18:00  | 149             | 149                    |
| C - Main Road                     | 16:30-16:45  | 76              | 76                     |
|                                   | 16:45-17:00  | 91              | 91                     |
|                                   | 17:00-17:15  | 111             | 111                    |
|                                   | 17:15-17:30  | 111             | 111                    |
|                                   | 17:30-17:45  | 91              | 91                     |
|                                   | 17:45-18:00  | 76              | 76                     |
| D - A645 (South)                  | 16:30-16:45  | 279             | 279                    |
|                                   | 16:45-17:00  | 333             | 333                    |
|                                   | 17:00-17:15  | 408             | 408                    |
|                                   | 17:15-17:30  | 408             | 408                    |
|                                   | 17:30-17:45  | 333             | 333                    |
|                                   | 17:45-18:00  | 279             | 279                    |
| E - Sports And Social Club Access | 16:30-16:45  | 9               | 9                      |
|                                   | 16:45-17:00  | 11              | 11                     |
|                                   | 17:00-17:15  | 14              | 14                     |
|                                   | 17:15-17:30  | 14              | 14                     |
|                                   | 17:30-17:45  | 11              | 11                     |
|                                   | 17:45-18:00  | 9               | 9                      |

## 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) |
|-----------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                   | 0.40    | 3.43          | 0.7             | A       | 591                     | 888                           |
| B - New Road                      | 0.15    | 3.06          | 0.2             | A       | 182                     | 273                           |
| C - Main Road                     | 0.07    | 2.48          | 0.1             | A       | 93                      | 139                           |
| D - A645 (South)                  | 0.26    | 3.26          | 0.4             | A       | 340                     | 510                           |
| E - Sports And Social Club Access | 0.02    | 4.76          | 0.0             | A       | 11                      | 17                            |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 485                   | 121                     | 59                        | 1801              | 0.269 | 483                 | 387                             | 0.0               | 0.4             | 2.794     | A                             |
| B - New Road                      | 149                   | 37                      | 503                       | 1578              | 0.095 | 149                 | 39                              | 0.0               | 0.1             | 2.602     | A                             |
| C - Main Road                     | 76                    | 19                      | 491                       | 1743              | 0.044 | 76                  | 161                             | 0.0               | 0.0             | 2.205     | A                             |
| D - A645 (South)                  | 279                   | 70                      | 185                       | 1602              | 0.174 | 278                 | 382                             | 0.0               | 0.2             | 2.823     | A                             |
| E - Sports And Social Club Access | 9                     | 2                       | 437                       | 861               | 0.011 | 9                   | 26                              | 0.0               | 0.0             | 4.227     | A                             |

#### 16:45 - 17:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 579                   | 145                     | 71                        | 1793              | 0.323 | 579                 | 464                             | 0.4               | 0.5             | 3.031     | A                             |
| B - New Road                      | 178                   | 45                      | 602                       | 1517              | 0.117 | 178                 | 47                              | 0.1               | 0.1             | 2.778     | A                             |
| C - Main Road                     | 91                    | 23                      | 588                       | 1680              | 0.054 | 91                  | 192                             | 0.0               | 0.1             | 2.312     | A                             |
| D - A645 (South)                  | 333                   | 83                      | 221                       | 1581              | 0.211 | 333                 | 458                             | 0.2               | 0.3             | 2.994     | A                             |
| E - Sports And Social Club Access | 11                    | 3                       | 523                       | 822               | 0.014 | 11                  | 31                              | 0.0               | 0.0             | 4.438     | A                             |

#### 17:00 - 17:15

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 709                   | 177                     | 86                        | 1784              | 0.398 | 708                 | 568                             | 0.5               | 0.7             | 3.423     | A                             |
| B - New Road                      | 218                   | 55                      | 737                       | 1433              | 0.152 | 218                 | 57                              | 0.1               | 0.2             | 3.060     | A                             |
| C - Main Road                     | 111                   | 28                      | 720                       | 1594              | 0.070 | 111                 | 236                             | 0.1               | 0.1             | 2.478     | A                             |
| D - A645 (South)                  | 408                   | 102                     | 271                       | 1553              | 0.263 | 408                 | 560                             | 0.3               | 0.4             | 3.262     | A                             |
| E - Sports And Social Club Access | 14                    | 3                       | 640                       | 769               | 0.018 | 14                  | 38                              | 0.0               | 0.0             | 4.762     | A                             |

#### 17:15 - 17:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 709                   | 177                     | 87                        | 1784              | 0.398 | 709                 | 568                             | 0.7               | 0.7             | 3.426     | A                             |
| B - New Road                      | 218                   | 55                      | 738                       | 1433              | 0.152 | 218                 | 57                              | 0.2               | 0.2             | 3.061     | A                             |
| C - Main Road                     | 111                   | 28                      | 721                       | 1594              | 0.070 | 111                 | 236                             | 0.1               | 0.1             | 2.479     | A                             |
| D - A645 (South)                  | 408                   | 102                     | 271                       | 1553              | 0.263 | 408                 | 561                             | 0.4               | 0.4             | 3.263     | A                             |
| E - Sports And Social Club Access | 14                    | 3                       | 641                       | 769               | 0.018 | 14                  | 38                              | 0.0               | 0.0             | 4.764     | A                             |

## 17:30 - 17:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 579                   | 145                     | 71                        | 1793              | 0.323 | 580                 | 484                             | 0.7               | 0.5             | 3.037     | A                             |
| B - New Road                      | 178                   | 45                      | 603                       | 1516              | 0.118 | 178                 | 47                              | 0.2               | 0.1             | 2.780     | A                             |
| C - Main Road                     | 91                    | 23                      | 589                       | 1680              | 0.054 | 91                  | 193                             | 0.1               | 0.1             | 2.314     | A                             |
| D - A645 (South)                  | 333                   | 83                      | 221                       | 1581              | 0.211 | 333                 | 459                             | 0.4               | 0.3             | 2.996     | A                             |
| E - Sports And Social Club Access | 11                    | 3                       | 524                       | 822               | 0.014 | 11                  | 31                              | 0.0               | 0.0             | 4.440     | A                             |

## 17:45 - 18:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 485                   | 121                     | 59                        | 1800              | 0.269 | 485                 | 389                             | 0.5               | 0.4             | 2.800     | A                             |
| B - New Road                      | 149                   | 37                      | 505                       | 1577              | 0.095 | 149                 | 39                              | 0.1               | 0.1             | 2.605     | A                             |
| C - Main Road                     | 76                    | 19                      | 493                       | 1742              | 0.044 | 76                  | 161                             | 0.1               | 0.0             | 2.206     | A                             |
| D - A645 (South)                  | 279                   | 70                      | 185                       | 1601              | 0.174 | 279                 | 384                             | 0.3               | 0.2             | 2.829     | A                             |
| E - Sports And Social Club Access | 9                     | 2                       | 439                       | 880               | 0.011 | 9                   | 26                              | 0.0               | 0.0             | 4.231     | A                             |

# 2026 Future Baseline, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 4        | Site 4 | Standard Roundabout |                       | B, C, D, E, A | 3.43               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 3.43              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A645 (West)                   |            | ONE HOUR     | ✓            | 481                     | 100.000            |
| B - New Road                      |            | ONE HOUR     | ✓            | 92                      | 100.000            |
| C - Main Road                     |            | ONE HOUR     | ✓            | 125                     | 100.000            |
| D - A645 (South)                  |            | ONE HOUR     | ✓            | 606                     | 100.000            |
| E - Sports And Social Club Access |            | ONE HOUR     | ✓            | 8                       | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                   | To              |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 12              | 72           | 97            | 293              | 7                                 |
|      | B - New Road                      | 43              | 0            | 2             | 47               | 0                                 |
|      | C - Main Road                     | 81              | 4            | 0             | 40               | 0                                 |
|      | D - A645 (South)                  | 450             | 86           | 67            | 0                | 3                                 |
|      | E - Sports And Social Club Access | 3               | 0            | 2             | 1                | 0                                 |

### Proportions

|      |                                   | To              |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
| From | A - A645 (West)                   | 0.03            | 0.15         | 0.00          |
|      | B - New Road                      | 0.47            | 0.00         | 0.00          |
|      | C - Main Road                     | 0.65            | 0.03         | 0.00          |
|      | D - A645 (South)                  | 0.74            | 0.14         | 0.00          |
|      | E - Sports And Social Club Access | 0.51            | 0.00         | 0.00          |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                                |                 |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
|      | A - A645 (West)                   | 10              | 2            | 6             | 6                | 0                                 |
|      | B - New Road                      | 3               | 0            | 0             | 29               | 0                                 |
|      | C - Main Road                     | 3               | 0            | 0             | 6                | 0                                 |
|      | D - A645 (South)                  | 4               | 4            | 2             | 0                | 0                                 |
|      | E - Sports And Social Club Access | 0               | 0            | 0             | 0                | 0                                 |

### Average PCU Per Veh

| From | To                                |                 |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
|      | A - A645 (West)                   | 1.100           | 1.015        | 1.000         |
|      | B - New Road                      | 1.028           | 1.000        | 1.000         |
|      | C - Main Road                     | 1.027           | 1.000        | 1.000         |
|      | D - A645 (South)                  | 1.043           | 1.039        | 1.000         |
|      | E - Sports And Social Club Access | 1.000           | 1.000        | 1.000         |

## Detailed Demand Data

### Demand for each time segment

| Arm                               | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-----------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                   | 07:15-07:30  | 362             | 362                    |
|                                   | 07:30-07:45  | 433             | 433                    |
|                                   | 07:45-08:00  | 530             | 530                    |
|                                   | 08:00-08:15  | 530             | 530                    |
|                                   | 08:15-08:30  | 433             | 433                    |
|                                   | 08:30-08:45  | 362             | 362                    |
| B - New Road                      | 07:15-07:30  | 69              | 69                     |
|                                   | 07:30-07:45  | 83              | 83                     |
|                                   | 07:45-08:00  | 102             | 102                    |
|                                   | 08:00-08:15  | 102             | 102                    |
|                                   | 08:15-08:30  | 83              | 83                     |
|                                   | 08:30-08:45  | 69              | 69                     |
| C - Main Road                     | 07:15-07:30  | 94              | 94                     |
|                                   | 07:30-07:45  | 112             | 112                    |
|                                   | 07:45-08:00  | 137             | 137                    |
|                                   | 08:00-08:15  | 137             | 137                    |
|                                   | 08:15-08:30  | 112             | 112                    |
|                                   | 08:30-08:45  | 94              | 94                     |
| D - A645 (South)                  | 07:15-07:30  | 457             | 457                    |
|                                   | 07:30-07:45  | 545             | 545                    |
|                                   | 07:45-08:00  | 668             | 668                    |
|                                   | 08:00-08:15  | 668             | 668                    |
|                                   | 08:15-08:30  | 545             | 545                    |
|                                   | 08:30-08:45  | 457             | 457                    |
| E - Sports And Social Club Access | 07:15-07:30  | 5               | 5                      |
|                                   | 07:30-07:45  | 6               | 6                      |
|                                   | 07:45-08:00  | 7               | 7                      |
|                                   | 08:00-08:15  | 7               | 7                      |
|                                   | 08:15-08:30  | 6               | 6                      |
|                                   | 08:30-08:45  | 5               | 5                      |



## 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) |
|-----------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                   | 0.31    | 3.16          | 0.5             | A       | 442                     | 663                           |
| B - New Road                      | 0.06    | 2.82          | 0.1             | A       | 85                      | 127                           |
| C - Main Road                     | 0.08    | 2.28          | 0.1             | A       | 115                     | 172                           |
| D - A645 (South)                  | 0.41    | 3.95          | 0.7             | A       | 556                     | 835                           |
| E - Sports And Social Club Access | 0.01    | 5.28          | 0.0             | A       | 6                       | 9                             |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 362                   | 91                      | 120                       | 1763              | 0.206 | 361                 | 443                             | 0.0               | 0.3             | 2.701     | A                             |
| B - New Road                      | 69                    | 17                      | 360                       | 1666              | 0.042 | 69                  | 121                             | 0.0               | 0.0             | 2.579     | A                             |
| C - Main Road                     | 94                    | 23                      | 303                       | 1666              | 0.050 | 94                  | 126                             | 0.0               | 0.1             | 2.103     | A                             |
| D - A645 (South)                  | 457                   | 114                     | 111                       | 1643              | 0.278 | 455                 | 286                             | 0.0               | 0.4             | 3.143     | A                             |
| E - Sports And Social Club Access | 5                     | 1                       | 558                       | 807               | 0.006 | 5                   | 8                               | 0.0               | 0.0             | 4.490     | A                             |

#### 07:30 - 07:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 433                   | 108                     | 144                       | 1749              | 0.247 | 432                 | 530                             | 0.3               | 0.3             | 2.877     | A                             |
| B - New Road                      | 83                    | 21                      | 431                       | 1623              | 0.051 | 83                  | 145                             | 0.0               | 0.1             | 2.675     | A                             |
| C - Main Road                     | 112                   | 28                      | 362                       | 1627              | 0.061 | 112                 | 151                             | 0.1               | 0.1             | 2.173     | A                             |
| D - A645 (South)                  | 545                   | 136                     | 132                       | 1631              | 0.334 | 545                 | 342                             | 0.4               | 0.5             | 3.440     | A                             |
| E - Sports And Social Club Access | 6                     | 1                       | 668                       | 757               | 0.008 | 6                   | 9                               | 0.0               | 0.0             | 4.791     | A                             |

#### 07:45 - 08:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 530                   | 133                     | 176                       | 1729              | 0.307 | 530                 | 649                             | 0.3               | 0.5             | 3.155     | A                             |
| B - New Road                      | 102                   | 25                      | 528                       | 1563              | 0.065 | 101                 | 178                             | 0.1               | 0.1             | 2.819     | A                             |
| C - Main Road                     | 137                   | 34                      | 444                       | 1774              | 0.077 | 137                 | 185                             | 0.1               | 0.1             | 2.277     | A                             |
| D - A645 (South)                  | 668                   | 167                     | 162                       | 1615              | 0.414 | 667                 | 419                             | 0.5               | 0.7             | 3.944     | A                             |
| E - Sports And Social Club Access | 7                     | 2                       | 817                       | 690               | 0.010 | 7                   | 11                              | 0.0               | 0.0             | 5.272     | A                             |

#### 08:00 - 08:15

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 530                   | 133                     | 176                       | 1729              | 0.307 | 530                 | 649                             | 0.5               | 0.5             | 3.158     | A                             |
| B - New Road                      | 102                   | 25                      | 528                       | 1563              | 0.065 | 102                 | 178                             | 0.1               | 0.1             | 2.819     | A                             |
| C - Main Road                     | 137                   | 34                      | 444                       | 1774              | 0.077 | 137                 | 185                             | 0.1               | 0.1             | 2.277     | A                             |
| D - A645 (South)                  | 668                   | 167                     | 162                       | 1614              | 0.414 | 668                 | 419                             | 0.7               | 0.7             | 3.950     | A                             |
| E - Sports And Social Club Access | 7                     | 2                       | 818                       | 689               | 0.010 | 7                   | 11                              | 0.0               | 0.0             | 5.276     | A                             |

### 08:15 - 08:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 433                   | 108                     | 144                       | 1749              | 0.247 | 433                 | 531                             | 0.5               | 0.3             | 2.882     | A                             |
| B - New Road                      | 83                    | 21                      | 432                       | 1622              | 0.051 | 83                  | 146                             | 0.1               | 0.1             | 2.678     | A                             |
| C - Main Road                     | 112                   | 28                      | 363                       | 1827              | 0.061 | 112                 | 152                             | 0.1               | 0.1             | 2.174     | A                             |
| D - A645 (South)                  | 545                   | 136                     | 132                       | 1631              | 0.334 | 546                 | 343                             | 0.7               | 0.5             | 3.451     | A                             |
| E - Sports And Social Club Access | 6                     | 1                       | 669                       | 757               | 0.008 | 6                   | 9                               | 0.0               | 0.0             | 4.795     | A                             |

### 08:30 - 08:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 382                   | 91                      | 121                       | 1763              | 0.206 | 363                 | 444                             | 0.3               | 0.3             | 2.707     | A                             |
| B - New Road                      | 69                    | 17                      | 361                       | 1666              | 0.042 | 69                  | 122                             | 0.1               | 0.0             | 2.583     | A                             |
| C - Main Road                     | 94                    | 23                      | 304                       | 1865              | 0.050 | 94                  | 127                             | 0.1               | 0.1             | 2.106     | A                             |
| D - A645 (South)                  | 457                   | 114                     | 111                       | 1643              | 0.278 | 457                 | 287                             | 0.5               | 0.4             | 3.156     | A                             |
| E - Sports And Social Club Access | 5                     | 1                       | 560                       | 806               | 0.006 | 5                   | 8                               | 0.0               | 0.0             | 4.497     | A                             |

# 2026 Future Baseline, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 4        | Site 4 | Standard Roundabout |                       | B, C, D, E, A | 3.33               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 3.33              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2026 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                               | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A645 (West)                   |            | ONE HOUR     | ✓            | 663                     | 100.000            |
| B - New Road                      |            | ONE HOUR     | ✓            | 204                     | 100.000            |
| C - Main Road                     |            | ONE HOUR     | ✓            | 104                     | 100.000            |
| D - A645 (South)                  |            | ONE HOUR     | ✓            | 381                     | 100.000            |
| E - Sports And Social Club Access |            | ONE HOUR     | ✓            | 13                      | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                   | To              |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 60              | 22           | 174           | 377              | 30                                |
|      | B - New Road                      | 100             | 0            | 2             | 102              | 0                                 |
|      | C - Main Road                     | 63              | 1            | 0             | 40               | 0                                 |
|      | D - A645 (South)                  | 300             | 30           | 45            | 1                | 5                                 |
|      | E - Sports And Social Club Access | 9               | 0            | 0             | 4                | 0                                 |

### Proportions

|      |                                   | To              |              |     |
|------|-----------------------------------|-----------------|--------------|-----|
|      |                                   | A - A645 (West) | B - New Road | M R |
| From | A - A645 (West)                   | 0.09            | 0.03         | C   |
|      | B - New Road                      | 0.49            | 0.00         | C   |
|      | C - Main Road                     | 0.61            | 0.01         | C   |
|      | D - A645 (South)                  | 0.79            | 0.08         | C   |
|      | E - Sports And Social Club Access | 0.69            | 0.00         | C   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                                |                 |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
|      | A - A645 (West)                   | 2               | 0            | 2             | 3                | 0                                 |
|      | B - New Road                      | 2               | 0            | 0             | 4                | 0                                 |
|      | C - Main Road                     | 2               | 0            | 0             | 3                | 0                                 |
|      | D - A645 (South)                  | 3               | 17           | 0             | 0                | 0                                 |
|      | E - Sports And Social Club Access | 0               | 0            | 0             | 0                | 0                                 |

### Average PCU Per Veh

| From | To                                |                 |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
|      | A - A645 (West)                   | 1.018           | 1.000        | 1.000         |
|      | B - New Road                      | 1.023           | 1.000        | 1.000         |
|      | C - Main Road                     | 1.018           | 1.000        | 1.000         |
|      | D - A645 (South)                  | 1.033           | 1.174        | 1.000         |
|      | E - Sports And Social Club Access | 1.000           | 1.000        | 1.000         |

## Detailed Demand Data

### Demand for each time segment

| Arm                               | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-----------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                   | 16:30-16:45  | 499             | 499                    |
|                                   | 16:45-17:00  | 598             | 598                    |
|                                   | 17:00-17:15  | 730             | 730                    |
|                                   | 17:15-17:30  | 730             | 730                    |
|                                   | 17:30-17:45  | 598             | 598                    |
|                                   | 17:45-18:00  | 499             | 499                    |
| B - New Road                      | 16:30-16:45  | 154             | 154                    |
|                                   | 16:45-17:00  | 184             | 184                    |
|                                   | 17:00-17:15  | 225             | 225                    |
|                                   | 17:15-17:30  | 225             | 225                    |
|                                   | 17:30-17:45  | 184             | 184                    |
|                                   | 17:45-18:00  | 154             | 154                    |
| C - Main Road                     | 16:30-16:45  | 78              | 78                     |
|                                   | 16:45-17:00  | 94              | 94                     |
|                                   | 17:00-17:15  | 115             | 115                    |
|                                   | 17:15-17:30  | 115             | 115                    |
|                                   | 17:30-17:45  | 94              | 94                     |
|                                   | 17:45-18:00  | 78              | 78                     |
| D - A645 (South)                  | 16:30-16:45  | 287             | 287                    |
|                                   | 16:45-17:00  | 343             | 343                    |
|                                   | 17:00-17:15  | 420             | 420                    |
|                                   | 17:15-17:30  | 420             | 420                    |
|                                   | 17:30-17:45  | 343             | 343                    |
|                                   | 17:45-18:00  | 287             | 287                    |
| E - Sports And Social Club Access | 16:30-16:45  | 10              | 10                     |
|                                   | 16:45-17:00  | 11              | 11                     |
|                                   | 17:00-17:15  | 14              | 14                     |
|                                   | 17:15-17:30  | 14              | 14                     |
|                                   | 17:30-17:45  | 11              | 11                     |
|                                   | 17:45-18:00  | 10              | 10                     |

## Results

### Results Summary for whole modelled period

| Arm                               | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                   | 0.41    | 3.50          | 0.7             | A       | 608                     | 913                           |
| B - New Road                      | 0.16    | 3.11          | 0.2             | A       | 187                     | 281                           |
| C - Main Road                     | 0.07    | 2.51          | 0.1             | A       | 96                      | 143                           |
| D - A645 (South)                  | 0.27    | 3.31          | 0.4             | A       | 350                     | 525                           |
| E - Sports And Social Club Access | 0.02    | 4.82          | 0.0             | A       | 12                      | 18                            |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 499                   | 125                     | 61                        | 1799              | 0.277 | 498                 | 399                             | 0.0               | 0.4             | 2.825     | A                             |
| B - New Road                      | 154                   | 38                      | 519                       | 1568              | 0.098 | 153                 | 40                              | 0.0               | 0.1             | 2.628     | A                             |
| C - Main Road                     | 78                    | 20                      | 506                       | 1734              | 0.045 | 78                  | 166                             | 0.0               | 0.0             | 2.220     | A                             |
| D - A645 (South)                  | 287                   | 72                      | 191                       | 1598              | 0.180 | 286                 | 393                             | 0.0               | 0.2             | 2.847     | A                             |
| E - Sports And Social Club Access | 10                    | 2                       | 451                       | 855               | 0.011 | 10                  | 26                              | 0.0               | 0.0             | 4.259     | A                             |

#### 16:45 - 17:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 596                   | 149                     | 73                        | 1792              | 0.333 | 596                 | 478                             | 0.4               | 0.5             | 3.076     | A                             |
| B - New Road                      | 184                   | 46                      | 621                       | 1505              | 0.122 | 183                 | 48                              | 0.1               | 0.1             | 2.813     | A                             |
| C - Main Road                     | 94                    | 23                      | 606                       | 1669              | 0.056 | 94                  | 199                             | 0.0               | 0.1             | 2.333     | A                             |
| D - A645 (South)                  | 343                   | 86                      | 228                       | 1577              | 0.217 | 342                 | 471                             | 0.2               | 0.3             | 3.027     | A                             |
| E - Sports And Social Club Access | 11                    | 3                       | 539                       | 815               | 0.014 | 11                  | 31                              | 0.0               | 0.0             | 4.480     | A                             |

#### 17:00 - 17:15

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 730                   | 182                     | 89                        | 1782              | 0.410 | 729                 | 585                             | 0.5               | 0.7             | 3.497     | A                             |
| B - New Road                      | 225                   | 56                      | 760                       | 1419              | 0.158 | 225                 | 58                              | 0.1               | 0.2             | 3.113     | A                             |
| C - Main Road                     | 115                   | 29                      | 741                       | 1580              | 0.073 | 115                 | 243                             | 0.1               | 0.1             | 2.507     | A                             |
| D - A645 (South)                  | 420                   | 105                     | 280                       | 1549              | 0.271 | 419                 | 577                             | 0.3               | 0.4             | 3.310     | A                             |
| E - Sports And Social Club Access | 14                    | 4                       | 660                       | 780               | 0.018 | 14                  | 38                              | 0.0               | 0.0             | 4.822     | A                             |

#### 17:15 - 17:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 730                   | 182                     | 89                        | 1782              | 0.410 | 730                 | 585                             | 0.7               | 0.7             | 3.500     | A                             |
| B - New Road                      | 225                   | 56                      | 761                       | 1419              | 0.158 | 225                 | 58                              | 0.2               | 0.2             | 3.114     | A                             |
| C - Main Road                     | 115                   | 29                      | 742                       | 1580              | 0.073 | 115                 | 244                             | 0.1               | 0.1             | 2.508     | A                             |
| D - A645 (South)                  | 420                   | 105                     | 280                       | 1548              | 0.271 | 420                 | 577                             | 0.4               | 0.4             | 3.311     | A                             |
| E - Sports And Social Club Access | 14                    | 4                       | 661                       | 780               | 0.018 | 14                  | 39                              | 0.0               | 0.0             | 4.824     | A                             |

**17:30 - 17:45**

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 596                   | 149                     | 73                        | 1792              | 0.333 | 597                 | 479                             | 0.7               | 0.5             | 3.082     | A                             |
| B - New Road                      | 184                   | 46                      | 622                       | 1504              | 0.122 | 184                 | 48                              | 0.2               | 0.1             | 2.818     | A                             |
| C - Main Road                     | 94                    | 23                      | 607                       | 1668              | 0.056 | 94                  | 199                             | 0.1               | 0.1             | 2.335     | A                             |
| D - A645 (South)                  | 343                   | 86                      | 229                       | 1577              | 0.217 | 343                 | 472                             | 0.4               | 0.3             | 3.029     | A                             |
| E - Sports And Social Club Access | 11                    | 3                       | 540                       | 814               | 0.014 | 11                  | 32                              | 0.0               | 0.0             | 4.483     | A                             |

**17:45 - 18:00**

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 499                   | 125                     | 61                        | 1799              | 0.277 | 500                 | 401                             | 0.5               | 0.4             | 2.836     | A                             |
| B - New Road                      | 154                   | 38                      | 521                       | 1567              | 0.098 | 154                 | 40                              | 0.1               | 0.1             | 2.631     | A                             |
| C - Main Road                     | 78                    | 20                      | 508                       | 1732              | 0.045 | 78                  | 167                             | 0.1               | 0.0             | 2.222     | A                             |
| D - A645 (South)                  | 287                   | 72                      | 191                       | 1598              | 0.180 | 287                 | 395                             | 0.3               | 0.2             | 2.854     | A                             |
| E - Sports And Social Club Access | 10                    | 2                       | 452                       | 854               | 0.011 | 10                  | 26                              | 0.0               | 0.0             | 4.264     | A                             |

# 2026 Do Nothing, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 4        | Site 4 | Standard Roundabout |                       | B, C, D, E, A | 3.62               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 3.62              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name   | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D7 | 2026 Do Nothing | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A645 (West)                   |            | ONE HOUR     | ✓            | 508                     | 100.000            |
| B - New Road                      |            | ONE HOUR     | ✓            | 119                     | 100.000            |
| C - Main Road                     |            | ONE HOUR     | ✓            | 138                     | 100.000            |
| D - A645 (South)                  |            | ONE HOUR     | ✓            | 882                     | 100.000            |
| E - Sports And Social Club Access |            | ONE HOUR     | ✓            | 8                       | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                   | To              |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 12              | 72           | 97            | 318              | 7                                 |
|      | B - New Road                      | 43              | 0            | 2             | 74               | 0                                 |
|      | C - Main Road                     | 81              | 4            | 0             | 51               | 0                                 |
|      | D - A645 (South)                  | 474             | 114          | 71            | 0                | 3                                 |
|      | E - Sports And Social Club Access | 3               | 0            | 2             | 2                | 0                                 |

### Proportions

|      |                                   | To              |              |     |
|------|-----------------------------------|-----------------|--------------|-----|
|      |                                   | A - A645 (West) | B - New Road | M R |
| From | A - A645 (West)                   | 0.02            | 0.14         | C   |
|      | B - New Road                      | 0.38            | 0.00         | C   |
|      | C - Main Road                     | 0.60            | 0.03         | C   |
|      | D - A645 (South)                  | 0.72            | 0.17         | C   |
|      | E - Sports And Social Club Access | 0.42            | 0.00         | C   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                                |                 |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
|      | A - A645 (West)                   | 10              | 2            | 6             | 6                | 0                                 |
|      | B - New Road                      | 3               | 0            | 0             | 29               | 0                                 |
|      | C - Main Road                     | 3               | 0            | 0             | 6                | 0                                 |
|      | D - A645 (South)                  | 4               | 4            | 2             | 0                | 0                                 |
|      | E - Sports And Social Club Access | 0               | 0            | 0             | 0                | 0                                 |

### Average PCU Per Veh

| From | To                                |                 |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
|      | A - A645 (West)                   | 1.100           | 1.015        | 1.000         |
|      | B - New Road                      | 1.028           | 1.000        | 1.000         |
|      | C - Main Road                     | 1.027           | 1.000        | 1.000         |
|      | D - A645 (South)                  | 1.043           | 1.039        | 1.000         |
|      | E - Sports And Social Club Access | 1.000           | 1.000        | 1.000         |

## Detailed Demand Data

### Demand for each time segment

| Arm                               | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-----------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                   | 07:15-07:30  | 381             | 381                    |
|                                   | 07:30-07:45  | 455             | 455                    |
|                                   | 07:45-08:00  | 558             | 558                    |
|                                   | 08:00-08:15  | 558             | 558                    |
|                                   | 08:15-08:30  | 455             | 455                    |
|                                   | 08:30-08:45  | 381             | 381                    |
| B - New Road                      | 07:15-07:30  | 90              | 90                     |
|                                   | 07:30-07:45  | 107             | 107                    |
|                                   | 07:45-08:00  | 131             | 131                    |
|                                   | 08:00-08:15  | 131             | 131                    |
|                                   | 08:15-08:30  | 107             | 107                    |
|                                   | 08:30-08:45  | 90              | 90                     |
| C - Main Road                     | 07:15-07:30  | 102             | 102                    |
|                                   | 07:30-07:45  | 122             | 122                    |
|                                   | 07:45-08:00  | 150             | 150                    |
|                                   | 08:00-08:15  | 150             | 150                    |
|                                   | 08:15-08:30  | 122             | 122                    |
|                                   | 08:30-08:45  | 102             | 102                    |
| D - A645 (South)                  | 07:15-07:30  | 499             | 499                    |
|                                   | 07:30-07:45  | 596             | 596                    |
|                                   | 07:45-08:00  | 729             | 729                    |
|                                   | 08:00-08:15  | 729             | 729                    |
|                                   | 08:15-08:30  | 596             | 596                    |
|                                   | 08:30-08:45  | 499             | 499                    |
| E - Sports And Social Club Access | 07:15-07:30  | 6               | 6                      |
|                                   | 07:30-07:45  | 7               | 7                      |
|                                   | 07:45-08:00  | 9               | 9                      |
|                                   | 08:00-08:15  | 9               | 9                      |
|                                   | 08:15-08:30  | 7               | 7                      |
|                                   | 08:30-08:45  | 6               | 6                      |



## 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) |
|-----------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                   | 0.33    | 3.30          | 0.5             | A       | 485                     | 697                           |
| B - New Road                      | 0.09    | 3.00          | 0.1             | A       | 109                     | 164                           |
| C - Main Road                     | 0.09    | 2.35          | 0.1             | A       | 125                     | 187                           |
| D - A645 (South)                  | 0.45    | 4.23          | 0.9             | A       | 608                     | 912                           |
| E - Sports And Social Club Access | 0.01    | 5.51          | 0.0             | A       | 7                       | 11                            |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 381                   | 95                      | 145                       | 1748              | 0.218 | 380                 | 480                             | 0.0               | 0.3             | 2.767     | A                             |
| B - New Road                      | 90                    | 22                      | 383                       | 1652              | 0.054 | 89                  | 142                             | 0.0               | 0.1             | 2.705     | A                             |
| C - Main Road                     | 102                   | 26                      | 343                       | 1840              | 0.056 | 102                 | 129                             | 0.0               | 0.1             | 2.148     | A                             |
| D - A645 (South)                  | 499                   | 125                     | 111                       | 1643              | 0.303 | 497                 | 334                             | 0.0               | 0.5             | 3.263     | A                             |
| E - Sports And Social Club Access | 6                     | 1                       | 600                       | 788               | 0.007 | 6                   | 8                               | 0.0               | 0.0             | 4.604     | A                             |

#### 07:30 - 07:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 455                   | 114                     | 174                       | 1731              | 0.263 | 455                 | 551                             | 0.3               | 0.4             | 2.970     | A                             |
| B - New Road                      | 107                   | 27                      | 458                       | 1606              | 0.067 | 107                 | 171                             | 0.1               | 0.1             | 2.821     | A                             |
| C - Main Road                     | 122                   | 31                      | 410                       | 1796              | 0.068 | 122                 | 155                             | 0.1               | 0.1             | 2.230     | A                             |
| D - A645 (South)                  | 596                   | 149                     | 132                       | 1631              | 0.365 | 595                 | 400                             | 0.5               | 0.6             | 3.607     | A                             |
| E - Sports And Social Club Access | 7                     | 2                       | 718                       | 735               | 0.010 | 7                   | 9                               | 0.0               | 0.0             | 4.947     | A                             |

#### 07:45 - 08:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 558                   | 139                     | 213                       | 1707              | 0.327 | 557                 | 675                             | 0.4               | 0.5             | 3.293     | A                             |
| B - New Road                      | 131                   | 33                      | 561                       | 1542              | 0.085 | 131                 | 209                             | 0.1               | 0.1             | 2.996     | A                             |
| C - Main Road                     | 150                   | 37                      | 502                       | 1736              | 0.086 | 149                 | 190                             | 0.1               | 0.1             | 2.353     | A                             |
| D - A645 (South)                  | 729                   | 182                     | 162                       | 1615              | 0.452 | 728                 | 490                             | 0.6               | 0.8             | 4.217     | A                             |
| E - Sports And Social Club Access | 9                     | 2                       | 879                       | 662               | 0.013 | 9                   | 11                              | 0.0               | 0.0             | 5.507     | A                             |

#### 08:00 - 08:15

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 558                   | 139                     | 213                       | 1707              | 0.327 | 558                 | 676                             | 0.5               | 0.5             | 3.296     | A                             |
| B - New Road                      | 131                   | 33                      | 561                       | 1542              | 0.085 | 131                 | 209                             | 0.1               | 0.1             | 2.997     | A                             |
| C - Main Road                     | 150                   | 37                      | 503                       | 1736              | 0.086 | 150                 | 190                             | 0.1               | 0.1             | 2.354     | A                             |
| D - A645 (South)                  | 729                   | 182                     | 162                       | 1614              | 0.452 | 729                 | 490                             | 0.8               | 0.9             | 4.225     | A                             |
| E - Sports And Social Club Access | 9                     | 2                       | 880                       | 662               | 0.013 | 9                   | 11                              | 0.0               | 0.0             | 5.511     | A                             |

**08:15 - 08:30**

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 455                   | 114                     | 174                       | 1730              | 0.263 | 456                 | 553                             | 0.5               | 0.4             | 2.973     | A                             |
| B - New Road                      | 107                   | 27                      | 459                       | 1605              | 0.067 | 107                 | 171                             | 0.1               | 0.1             | 2.824     | A                             |
| C - Main Road                     | 122                   | 31                      | 411                       | 1795              | 0.068 | 122                 | 155                             | 0.1               | 0.1             | 2.231     | A                             |
| D - A645 (South)                  | 596                   | 149                     | 132                       | 1631              | 0.365 | 597                 | 401                             | 0.9               | 0.6             | 3.620     | A                             |
| E - Sports And Social Club Access | 7                     | 2                       | 720                       | 734               | 0.010 | 7                   | 9                               | 0.0               | 0.0             | 4.955     | A                             |

**08:30 - 08:45**

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 381                   | 95                      | 146                       | 1748              | 0.218 | 382                 | 463                             | 0.4               | 0.3             | 2.776     | A                             |
| B - New Road                      | 90                    | 22                      | 384                       | 1651              | 0.054 | 90                  | 143                             | 0.1               | 0.1             | 2.709     | A                             |
| C - Main Road                     | 102                   | 26                      | 344                       | 1839              | 0.056 | 102                 | 130                             | 0.1               | 0.1             | 2.151     | A                             |
| D - A645 (South)                  | 499                   | 125                     | 111                       | 1643              | 0.304 | 499                 | 336                             | 0.6               | 0.5             | 3.270     | A                             |
| E - Sports And Social Club Access | 6                     | 1                       | 602                       | 787               | 0.007 | 6                   | 8                               | 0.0               | 0.0             | 4.613     | A                             |

# 2026 Do Nothing, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 4        | Site 4 | Standard Roundabout |                       | B, C, D, E, A | 3.51               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 3.51              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name   | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D8 | 2026 Do Nothing | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                               | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A645 (West)                   |            | ONE HOUR     | ✓            | 688                     | 100.000            |
| B - New Road                      |            | ONE HOUR     | ✓            | 234                     | 100.000            |
| C - Main Road                     |            | ONE HOUR     | ✓            | 107                     | 100.000            |
| D - A645 (South)                  |            | ONE HOUR     | ✓            | 447                     | 100.000            |
| E - Sports And Social Club Access |            | ONE HOUR     | ✓            | 13                      | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                   | To              |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 60              | 22           | 174           | 402              | 30                                |
|      | B - New Road                      | 100             | 0            | 2             | 132              | 0                                 |
|      | C - Main Road                     | 63              | 1            | 0             | 43               | 0                                 |
|      | D - A645 (South)                  | 333             | 57           | 50            | 1                | 6                                 |
|      | E - Sports And Social Club Access | 9               | 0            | 0             | 4                | 0                                 |

### Proportions

|      |                                   | To              |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
| From | A - A645 (West)                   | 0.09            | 0.03         | 0.00          |
|      | B - New Road                      | 0.43            | 0.00         | 0.00          |
|      | C - Main Road                     | 0.59            | 0.01         | 0.00          |
|      | D - A645 (South)                  | 0.75            | 0.13         | 0.00          |
|      | E - Sports And Social Club Access | 0.69            | 0.00         | 0.00          |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                                |                 |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
|      | A - A645 (West)                   | 2               | 0            | 2             | 3                | 0                                 |
|      | B - New Road                      | 2               | 0            | 0             | 4                | 0                                 |
|      | C - Main Road                     | 2               | 0            | 0             | 3                | 0                                 |
|      | D - A645 (South)                  | 3               | 17           | 0             | 0                | 0                                 |
|      | E - Sports And Social Club Access | 0               | 0            | 0             | 0                | 0                                 |

### Average PCU Per Veh

| From | To                                |                 |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
|      | A - A645 (West)                   | 1.018           | 1.000        | 1.000         |
|      | B - New Road                      | 1.023           | 1.000        | 1.000         |
|      | C - Main Road                     | 1.018           | 1.000        | 1.000         |
|      | D - A645 (South)                  | 1.033           | 1.174        | 1.000         |
|      | E - Sports And Social Club Access | 1.000           | 1.000        | 1.000         |

## Detailed Demand Data

### Demand for each time segment

| Arm                               | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-----------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                   | 16:30-16:45  | 518             | 518                    |
|                                   | 16:45-17:00  | 618             | 618                    |
|                                   | 17:00-17:15  | 758             | 758                    |
|                                   | 17:15-17:30  | 758             | 758                    |
|                                   | 17:30-17:45  | 618             | 618                    |
|                                   | 17:45-18:00  | 518             | 518                    |
| B - New Road                      | 16:30-16:45  | 176             | 176                    |
|                                   | 16:45-17:00  | 211             | 211                    |
|                                   | 17:00-17:15  | 258             | 258                    |
|                                   | 17:15-17:30  | 258             | 258                    |
|                                   | 17:30-17:45  | 211             | 211                    |
|                                   | 17:45-18:00  | 176             | 176                    |
| C - Main Road                     | 16:30-16:45  | 80              | 80                     |
|                                   | 16:45-17:00  | 96              | 96                     |
|                                   | 17:00-17:15  | 117             | 117                    |
|                                   | 17:15-17:30  | 117             | 117                    |
|                                   | 17:30-17:45  | 96              | 96                     |
|                                   | 17:45-18:00  | 80              | 80                     |
| D - A645 (South)                  | 16:30-16:45  | 336             | 336                    |
|                                   | 16:45-17:00  | 402             | 402                    |
|                                   | 17:00-17:15  | 492             | 492                    |
|                                   | 17:15-17:30  | 492             | 492                    |
|                                   | 17:30-17:45  | 402             | 402                    |
|                                   | 17:45-18:00  | 336             | 336                    |
| E - Sports And Social Club Access | 16:30-16:45  | 10              | 10                     |
|                                   | 16:45-17:00  | 11              | 11                     |
|                                   | 17:00-17:15  | 14              | 14                     |
|                                   | 17:15-17:30  | 14              | 14                     |
|                                   | 17:30-17:45  | 11              | 11                     |
|                                   | 17:45-18:00  | 10              | 10                     |

## Results

### Results Summary for whole modelled period

| Arm                               | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                   | 0.43    | 3.67          | 0.8             | A       | 631                     | 947                           |
| B - New Road                      | 0.18    | 3.26          | 0.2             | A       | 215                     | 322                           |
| C - Main Road                     | 0.08    | 2.58          | 0.1             | A       | 98                      | 147                           |
| D - A645 (South)                  | 0.32    | 3.56          | 0.5             | A       | 410                     | 615                           |
| E - Sports And Social Club Access | 0.02    | 5.04          | 0.0             | A       | 12                      | 18                            |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 518                   | 129                     | 85                        | 1785              | 0.290 | 516                 | 424                             | 0.0               | 0.4             | 2.900     | A                             |
| B - New Road                      | 176                   | 44                      | 541                       | 1554              | 0.113 | 176                 | 60                              | 0.0               | 0.1             | 2.701     | A                             |
| C - Main Road                     | 80                    | 20                      | 547                       | 1707              | 0.047 | 80                  | 170                             | 0.0               | 0.1             | 2.260     | A                             |
| D - A645 (South)                  | 336                   | 84                      | 191                       | 1598              | 0.210 | 335                 | 437                             | 0.0               | 0.3             | 2.975     | A                             |
| E - Sports And Social Club Access | 10                    | 2                       | 499                       | 833               | 0.012 | 10                  | 27                              | 0.0               | 0.0             | 4.372     | A                             |

#### 16:45 - 17:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 618                   | 155                     | 102                       | 1774              | 0.349 | 618                 | 507                             | 0.4               | 0.5             | 3.183     | A                             |
| B - New Road                      | 211                   | 53                      | 648                       | 1489              | 0.141 | 210                 | 72                              | 0.1               | 0.2             | 2.913     | A                             |
| C - Main Road                     | 96                    | 24                      | 655                       | 1637              | 0.059 | 96                  | 203                             | 0.1               | 0.1             | 2.386     | A                             |
| D - A645 (South)                  | 402                   | 100                     | 228                       | 1577              | 0.255 | 401                 | 523                             | 0.3               | 0.4             | 3.198     | A                             |
| E - Sports And Social Club Access | 11                    | 3                       | 598                       | 789               | 0.015 | 11                  | 32                              | 0.0               | 0.0             | 4.631     | A                             |

#### 17:00 - 17:15

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 758                   | 189                     | 125                       | 1761              | 0.430 | 757                 | 621                             | 0.5               | 0.8             | 3.665     | A                             |
| B - New Road                      | 258                   | 64                      | 793                       | 1399              | 0.184 | 258                 | 88                              | 0.2               | 0.2             | 3.263     | A                             |
| C - Main Road                     | 117                   | 29                      | 802                       | 1541              | 0.076 | 117                 | 249                             | 0.1               | 0.1             | 2.582     | A                             |
| D - A645 (South)                  | 492                   | 123                     | 279                       | 1549              | 0.318 | 491                 | 640                             | 0.4               | 0.5             | 3.556     | A                             |
| E - Sports And Social Club Access | 14                    | 4                       | 732                       | 728               | 0.019 | 14                  | 39                              | 0.0               | 0.0             | 5.039     | A                             |

#### 17:15 - 17:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 758                   | 189                     | 125                       | 1760              | 0.430 | 757                 | 622                             | 0.8               | 0.8             | 3.671     | A                             |
| B - New Road                      | 258                   | 64                      | 794                       | 1398              | 0.184 | 258                 | 88                              | 0.2               | 0.2             | 3.265     | A                             |
| C - Main Road                     | 117                   | 29                      | 803                       | 1540              | 0.076 | 117                 | 249                             | 0.1               | 0.1             | 2.583     | A                             |
| D - A645 (South)                  | 492                   | 123                     | 280                       | 1548              | 0.318 | 492                 | 640                             | 0.5               | 0.5             | 3.559     | A                             |
| E - Sports And Social Club Access | 14                    | 4                       | 732                       | 728               | 0.019 | 14                  | 39                              | 0.0               | 0.0             | 5.041     | A                             |

**17:30 - 17:45**

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 618                   | 155                     | 102                       | 1774              | 0.349 | 619                 | 508                             | 0.8               | 0.6             | 3.191     | A                             |
| B - New Road                      | 211                   | 53                      | 849                       | 1488              | 0.142 | 211                 | 72                              | 0.2               | 0.2             | 2.918     | A                             |
| C - Main Road                     | 96                    | 24                      | 856                       | 1636              | 0.059 | 96                  | 204                             | 0.1               | 0.1             | 2.387     | A                             |
| D - A645 (South)                  | 402                   | 100                     | 229                       | 1577              | 0.255 | 402                 | 524                             | 0.5               | 0.4             | 3.202     | A                             |
| E - Sports And Social Club Access | 11                    | 3                       | 599                       | 788               | 0.015 | 11                  | 32                              | 0.0               | 0.0             | 4.636     | A                             |

**17:45 - 18:00**

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 518                   | 129                     | 85                        | 1784              | 0.290 | 518                 | 426                             | 0.6               | 0.4             | 2.910     | A                             |
| B - New Road                      | 176                   | 44                      | 543                       | 1553              | 0.114 | 176                 | 60                              | 0.2               | 0.1             | 2.707     | A                             |
| C - Main Road                     | 80                    | 20                      | 549                       | 1705              | 0.047 | 80                  | 170                             | 0.1               | 0.1             | 2.262     | A                             |
| D - A645 (South)                  | 336                   | 84                      | 191                       | 1598              | 0.211 | 337                 | 438                             | 0.4               | 0.3             | 2.984     | A                             |
| E - Sports And Social Club Access | 10                    | 2                       | 501                       | 832               | 0.012 | 10                  | 27                              | 0.0               | 0.0             | 4.379     | A                             |

# 2026 Do Something, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 4        | Site 4 | Standard Roundabout |                       | B, C, D, E, A | 3.85               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 3.85              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name     | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D9 | 2026 Do Something | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A645 (West)                   |            | ONE HOUR     | ✓            | 519                     | 100.000            |
| B - New Road                      |            | ONE HOUR     | ✓            | 145                     | 100.000            |
| C - Main Road                     |            | ONE HOUR     | ✓            | 136                     | 100.000            |
| D - A645 (South)                  |            | ONE HOUR     | ✓            | 718                     | 100.000            |
| E - Sports And Social Club Access |            | ONE HOUR     | ✓            | 8                       | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                   | To              |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 12              | 85           | 97            | 318              | 7                                 |
|      | B - New Road                      | 43              | 0            | 2             | 100              | 0                                 |
|      | C - Main Road                     | 81              | 4            | 0             | 51               | 0                                 |
|      | D - A645 (South)                  | 474             | 170          | 71            | 0                | 3                                 |
|      | E - Sports And Social Club Access | 3               | 0            | 2             | 2                | 0                                 |

### Proportions

|      |                                   | To              |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
| From | A - A645 (West)                   | 0.02            | 0.16         | 0.03          |
|      | B - New Road                      | 0.30            | 0.00         | 0.00          |
|      | C - Main Road                     | 0.60            | 0.03         | 0.00          |
|      | D - A645 (South)                  | 0.66            | 0.24         | 0.00          |
|      | E - Sports And Social Club Access | 0.42            | 0.00         | 0.00          |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                                |                 |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
|      | A - A645 (West)                   | 10              | 2            | 6             | 6                | 0                                 |
|      | B - New Road                      | 3               | 0            | 0             | 29               | 0                                 |
|      | C - Main Road                     | 3               | 0            | 0             | 6                | 0                                 |
|      | D - A645 (South)                  | 4               | 4            | 2             | 0                | 0                                 |
|      | E - Sports And Social Club Access | 0               | 0            | 0             | 0                | 0                                 |

### Average PCU Per Veh

| From | To                                |                 |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
|      | A - A645 (West)                   | 1.100           | 1.015        | 1.000         |
|      | B - New Road                      | 1.028           | 1.000        | 1.000         |
|      | C - Main Road                     | 1.027           | 1.000        | 1.000         |
|      | D - A645 (South)                  | 1.043           | 1.039        | 1.000         |
|      | E - Sports And Social Club Access | 1.000           | 1.000        | 1.000         |

## Detailed Demand Data

### Demand for each time segment

| Arm                               | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-----------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                   | 07:15-07:30  | 391             | 391                    |
|                                   | 07:30-07:45  | 467             | 467                    |
|                                   | 07:45-08:00  | 572             | 572                    |
|                                   | 08:00-08:15  | 572             | 572                    |
|                                   | 08:15-08:30  | 467             | 467                    |
|                                   | 08:30-08:45  | 391             | 391                    |
| B - New Road                      | 07:15-07:30  | 109             | 109                    |
|                                   | 07:30-07:45  | 131             | 131                    |
|                                   | 07:45-08:00  | 160             | 160                    |
|                                   | 08:00-08:15  | 160             | 160                    |
|                                   | 08:15-08:30  | 131             | 131                    |
|                                   | 08:30-08:45  | 109             | 109                    |
| C - Main Road                     | 07:15-07:30  | 102             | 102                    |
|                                   | 07:30-07:45  | 122             | 122                    |
|                                   | 07:45-08:00  | 150             | 150                    |
|                                   | 08:00-08:15  | 150             | 150                    |
|                                   | 08:15-08:30  | 122             | 122                    |
|                                   | 08:30-08:45  | 102             | 102                    |
| D - A645 (South)                  | 07:15-07:30  | 541             | 541                    |
|                                   | 07:30-07:45  | 646             | 646                    |
|                                   | 07:45-08:00  | 791             | 791                    |
|                                   | 08:00-08:15  | 791             | 791                    |
|                                   | 08:15-08:30  | 646             | 646                    |
|                                   | 08:30-08:45  | 541             | 541                    |
| E - Sports And Social Club Access | 07:15-07:30  | 6               | 6                      |
|                                   | 07:30-07:45  | 7               | 7                      |
|                                   | 07:45-08:00  | 9               | 9                      |
|                                   | 08:00-08:15  | 9               | 9                      |
|                                   | 08:15-08:30  | 7               | 7                      |
|                                   | 08:30-08:45  | 6               | 6                      |



## 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) |
|-----------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                   | 0.34    | 3.45          | 0.5             | A       | 477                     | 715                           |
| B - New Road                      | 0.10    | 3.11          | 0.1             | A       | 133                     | 200                           |
| C - Main Road                     | 0.09    | 2.38          | 0.1             | A       | 125                     | 187                           |
| D - A645 (South)                  | 0.49    | 4.54          | 1.0             | A       | 659                     | 989                           |
| E - Sports And Social Club Access | 0.01    | 5.76          | 0.0             | A       | 7                       | 11                            |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 391                   | 98                      | 187                       | 1722              | 0.227 | 390                 | 480                             | 0.0               | 0.3             | 2.838     | A                             |
| B - New Road                      | 109                   | 27                      | 383                       | 1652              | 0.066 | 109                 | 194                             | 0.0               | 0.1             | 2.784     | A                             |
| C - Main Road                     | 102                   | 26                      | 362                       | 1827              | 0.056 | 102                 | 129                             | 0.0               | 0.1             | 2.164     | A                             |
| D - A645 (South)                  | 541                   | 135                     | 111                       | 1643              | 0.329 | 539                 | 354                             | 0.0               | 0.5             | 3.381     | A                             |
| E - Sports And Social Club Access | 6                     | 1                       | 642                       | 769               | 0.008 | 6                   | 8                               | 0.0               | 0.0             | 4.717     | A                             |

#### 07:30 - 07:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 467                   | 117                     | 224                       | 1700              | 0.275 | 467                 | 551                             | 0.3               | 0.4             | 3.069     | A                             |
| B - New Road                      | 131                   | 33                      | 458                       | 1606              | 0.081 | 130                 | 232                             | 0.1               | 0.1             | 2.912     | A                             |
| C - Main Road                     | 122                   | 31                      | 434                       | 1781              | 0.069 | 122                 | 155                             | 0.1               | 0.1             | 2.251     | A                             |
| D - A645 (South)                  | 646                   | 161                     | 132                       | 1631              | 0.396 | 645                 | 423                             | 0.5               | 0.7             | 3.792     | A                             |
| E - Sports And Social Club Access | 7                     | 2                       | 768                       | 712               | 0.010 | 7                   | 9                               | 0.0               | 0.0             | 5.106     | A                             |

#### 07:45 - 08:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 572                   | 143                     | 274                       | 1669              | 0.343 | 571                 | 675                             | 0.4               | 0.5             | 3.446     | A                             |
| B - New Road                      | 160                   | 40                      | 561                       | 1542              | 0.104 | 160                 | 285                             | 0.1               | 0.1             | 3.108     | A                             |
| C - Main Road                     | 150                   | 37                      | 531                       | 1717              | 0.087 | 149                 | 190                             | 0.1               | 0.1             | 2.381     | A                             |
| D - A645 (South)                  | 791                   | 198                     | 162                       | 1615              | 0.490 | 790                 | 518                             | 0.7               | 1.0             | 4.529     | A                             |
| E - Sports And Social Club Access | 9                     | 2                       | 940                       | 635               | 0.014 | 9                   | 11                              | 0.0               | 0.0             | 5.750     | A                             |

#### 08:00 - 08:15

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 572                   | 143                     | 275                       | 1669              | 0.343 | 572                 | 676                             | 0.5               | 0.5             | 3.449     | A                             |
| B - New Road                      | 160                   | 40                      | 561                       | 1542              | 0.104 | 160                 | 285                             | 0.1               | 0.1             | 3.108     | A                             |
| C - Main Road                     | 150                   | 37                      | 532                       | 1717              | 0.087 | 150                 | 190                             | 0.1               | 0.1             | 2.382     | A                             |
| D - A645 (South)                  | 791                   | 198                     | 162                       | 1614              | 0.490 | 791                 | 519                             | 1.0               | 1.0             | 4.542     | A                             |
| E - Sports And Social Club Access | 9                     | 2                       | 942                       | 634               | 0.014 | 9                   | 11                              | 0.0               | 0.0             | 5.756     | A                             |

**08:15 - 08:30**

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 467                   | 117                     | 225                       | 1700              | 0.275 | 468                 | 553                             | 0.5               | 0.4             | 3.073     | A                             |
| B - New Road                      | 131                   | 33                      | 459                       | 1605              | 0.081 | 131                 | 233                             | 0.1               | 0.1             | 2.914     | A                             |
| C - Main Road                     | 122                   | 31                      | 434                       | 1780              | 0.069 | 122                 | 155                             | 0.1               | 0.1             | 2.253     | A                             |
| D - A645 (South)                  | 646                   | 161                     | 132                       | 1631              | 0.396 | 647                 | 424                             | 1.0               | 0.7             | 3.804     | A                             |
| E - Sports And Social Club Access | 7                     | 2                       | 770                       | 711               | 0.010 | 7                   | 9                               | 0.0               | 0.0             | 5.115     | A                             |

**08:30 - 08:45**

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 391                   | 98                      | 188                       | 1722              | 0.227 | 391                 | 463                             | 0.4               | 0.3             | 2.845     | A                             |
| B - New Road                      | 109                   | 27                      | 384                       | 1651              | 0.066 | 109                 | 195                             | 0.1               | 0.1             | 2.788     | A                             |
| C - Main Road                     | 102                   | 26                      | 364                       | 1826              | 0.056 | 102                 | 130                             | 0.1               | 0.1             | 2.166     | A                             |
| D - A645 (South)                  | 541                   | 135                     | 111                       | 1643              | 0.329 | 542                 | 355                             | 0.7               | 0.5             | 3.399     | A                             |
| E - Sports And Social Club Access | 6                     | 1                       | 645                       | 767               | 0.008 | 6                   | 8                               | 0.0               | 0.0             | 4.726     | A                             |

# 2026 Do Something, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 4        | Site 4 | Standard Roundabout |                       | B, C, D, E, A | 3.77               | A            |

### Junction Network

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

## Traffic Demand

### Demand Set Details

| ID  | Scenario name     | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|-------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D10 | 2026 Do Something | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                               | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A645 (West)                   |            | ONE HOUR     | ✓            | 688                     | 100.000            |
| B - New Road                      |            | ONE HOUR     | ✓            | 324                     | 100.000            |
| C - Main Road                     |            | ONE HOUR     | ✓            | 107                     | 100.000            |
| D - A645 (South)                  |            | ONE HOUR     | ✓            | 518                     | 100.000            |
| E - Sports And Social Club Access |            | ONE HOUR     | ✓            | 13                      | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                   | To              |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 60              | 22           | 174           | 402              | 30                                |
|      | B - New Road                      | 119             | 0            | 2             | 203              | 0                                 |
|      | C - Main Road                     | 63              | 1            | 0             | 43               | 0                                 |
|      | D - A645 (South)                  | 333             | 128          | 50            | 1                | 6                                 |
|      | E - Sports And Social Club Access | 9               | 0            | 0             | 4                | 0                                 |

### Proportions

|      |                                   | To              |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
| From | A - A645 (West)                   | 0.09            | 0.03         | 0.00          |
|      | B - New Road                      | 0.37            | 0.00         | 0.00          |
|      | C - Main Road                     | 0.59            | 0.01         | 0.00          |
|      | D - A645 (South)                  | 0.64            | 0.25         | 0.00          |
|      | E - Sports And Social Club Access | 0.69            | 0.00         | 0.00          |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                                |                 |              |               |                  |                                   |
|------|-----------------------------------|-----------------|--------------|---------------|------------------|-----------------------------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road | D - A645 (South) | E - Sports And Social Club Access |
| From | A - A645 (West)                   | 2               | 0            | 2             | 3                | 0                                 |
|      | B - New Road                      | 2               | 0            | 0             | 4                | 0                                 |
|      | C - Main Road                     | 2               | 0            | 0             | 3                | 0                                 |
|      | D - A645 (South)                  | 3               | 17           | 0             | 0                | 0                                 |
|      | E - Sports And Social Club Access | 0               | 0            | 0             | 0                | 0                                 |

### Average PCU Per Veh

| From | To                                |                 |              |               |
|------|-----------------------------------|-----------------|--------------|---------------|
|      |                                   | A - A645 (West) | B - New Road | C - Main Road |
|      | A - A645 (West)                   | 1.018           | 1.000        | 1.000         |
|      | B - New Road                      | 1.023           | 1.000        | 1.000         |
|      | C - Main Road                     | 1.018           | 1.000        | 1.000         |
|      | D - A645 (South)                  | 1.033           | 1.174        | 1.000         |
|      | E - Sports And Social Club Access | 1.000           | 1.000        | 1.000         |

## Detailed Demand Data

### Demand for each time segment

| Arm                               | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-----------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                   | 16:30-16:45  | 518             | 518                    |
|                                   | 16:45-17:00  | 618             | 618                    |
|                                   | 17:00-17:15  | 758             | 758                    |
|                                   | 17:15-17:30  | 758             | 758                    |
|                                   | 17:30-17:45  | 618             | 618                    |
|                                   | 17:45-18:00  | 518             | 518                    |
| B - New Road                      | 16:30-16:45  | 244             | 244                    |
|                                   | 16:45-17:00  | 291             | 291                    |
|                                   | 17:00-17:15  | 357             | 357                    |
|                                   | 17:15-17:30  | 357             | 357                    |
|                                   | 17:30-17:45  | 291             | 291                    |
|                                   | 17:45-18:00  | 244             | 244                    |
| C - Main Road                     | 16:30-16:45  | 80              | 80                     |
|                                   | 16:45-17:00  | 96              | 96                     |
|                                   | 17:00-17:15  | 117             | 117                    |
|                                   | 17:15-17:30  | 117             | 117                    |
|                                   | 17:30-17:45  | 96              | 96                     |
|                                   | 17:45-18:00  | 80              | 80                     |
| D - A645 (South)                  | 16:30-16:45  | 390             | 390                    |
|                                   | 16:45-17:00  | 466             | 466                    |
|                                   | 17:00-17:15  | 570             | 570                    |
|                                   | 17:15-17:30  | 570             | 570                    |
|                                   | 17:30-17:45  | 466             | 466                    |
|                                   | 17:45-18:00  | 390             | 390                    |
| E - Sports And Social Club Access | 16:30-16:45  | 10              | 10                     |
|                                   | 16:45-17:00  | 11              | 11                     |
|                                   | 17:00-17:15  | 14              | 14                     |
|                                   | 17:15-17:30  | 14              | 14                     |
|                                   | 17:30-17:45  | 11              | 11                     |
|                                   | 17:45-18:00  | 10              | 10                     |

## Results

### Results Summary for whole modelled period

| Arm                               | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                   | 0.44    | 3.88          | 0.8             | A       | 631                     | 947                           |
| B - New Road                      | 0.28    | 3.58          | 0.4             | A       | 297                     | 448                           |
| C - Main Road                     | 0.08    | 2.71          | 0.1             | A       | 98                      | 147                           |
| D - A645 (South)                  | 0.37    | 3.95          | 0.6             | A       | 475                     | 713                           |
| E - Sports And Social Club Access | 0.02    | 5.38          | 0.0             | A       | 12                      | 18                            |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 518                   | 129                     | 138                       | 1752              | 0.298 | 516                 | 438                             | 0.0               | 0.4             | 2.978     | A                             |
| B - New Road                      | 244                   | 61                      | 541                       | 1554              | 0.157 | 243                 | 113                             | 0.0               | 0.2             | 2.843     | A                             |
| C - Main Road                     | 80                    | 20                      | 615                       | 1683              | 0.048 | 80                  | 170                             | 0.0               | 0.1             | 2.323     | A                             |
| E - Sports And Social Club Access | 10                    | 2                       | 587                       | 803               | 0.012 | 10                  | 27                              | 0.0               | 0.0             | 4.539     | A                             |

#### 16:45 - 17:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 618                   | 155                     | 165                       | 1736              | 0.356 | 618                 | 524                             | 0.4               | 0.6             | 3.294     | A                             |
| B - New Road                      | 291                   | 73                      | 648                       | 1489              | 0.196 | 291                 | 138                             | 0.2               | 0.3             | 3.114     | A                             |
| C - Main Road                     | 98                    | 24                      | 736                       | 1584              | 0.081 | 98                  | 203                             | 0.1               | 0.1             | 2.470     | A                             |
| D - A645 (South)                  | 468                   | 116                     | 245                       | 1588              | 0.297 | 465                 | 588                             | 0.3               | 0.4             | 3.464     | A                             |
| E - Sports And Social Club Access | 11                    | 3                       | 678                       | 752               | 0.015 | 11                  | 32                              | 0.0               | 0.0             | 4.858     | A                             |

#### 17:00 - 17:15

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 758                   | 189                     | 203                       | 1713              | 0.442 | 757                 | 642                             | 0.6               | 0.8             | 3.847     | A                             |
| B - New Road                      | 357                   | 89                      | 793                       | 1399              | 0.255 | 357                 | 166                             | 0.3               | 0.4             | 3.575     | A                             |
| C - Main Road                     | 117                   | 29                      | 901                       | 1477              | 0.080 | 117                 | 249                             | 0.1               | 0.1             | 2.704     | A                             |
| D - A645 (South)                  | 570                   | 143                     | 300                       | 1537              | 0.371 | 569                 | 718                             | 0.4               | 0.6             | 3.945     | A                             |
| E - Sports And Social Club Access | 14                    | 4                       | 831                       | 684               | 0.021 | 14                  | 39                              | 0.0               | 0.0             | 5.373     | A                             |

#### 17:15 - 17:30

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 758                   | 189                     | 203                       | 1713              | 0.442 | 757                 | 643                             | 0.8               | 0.8             | 3.855     | A                             |
| B - New Road                      | 357                   | 89                      | 794                       | 1398              | 0.255 | 357                 | 166                             | 0.4               | 0.4             | 3.580     | A                             |
| C - Main Road                     | 117                   | 29                      | 902                       | 1476              | 0.080 | 117                 | 249                             | 0.1               | 0.1             | 2.706     | A                             |
| D - A645 (South)                  | 570                   | 143                     | 301                       | 1537              | 0.371 | 570                 | 719                             | 0.6               | 0.6             | 3.951     | A                             |
| E - Sports And Social Club Access | 14                    | 4                       | 832                       | 683               | 0.021 | 14                  | 39                              | 0.0               | 0.0             | 5.377     | A                             |

17:30 - 17:45

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 618                   | 155                     | 166                       | 1735              | 0.356 | 619                 | 526                             | 0.8               | 0.6             | 3.305     | A                             |
| B - New Road                      | 291                   | 73                      | 649                       | 1488              | 0.196 | 292                 | 136                             | 0.4               | 0.3             | 3.119     | A                             |
| C - Main Road                     | 96                    | 24                      | 737                       | 1583              | 0.061 | 96                  | 204                             | 0.1               | 0.1             | 2.474     | A                             |
| D - A645 (South)                  | 466                   | 116                     | 246                       | 1567              | 0.297 | 466                 | 588                             | 0.6               | 0.5             | 3.472     | A                             |
| E - Sports And Social Club Access | 11                    | 3                       | 680                       | 752               | 0.015 | 11                  | 32                              | 0.0               | 0.0             | 4.865     | A                             |

17:45 - 18:00

| Arm                               | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                   | 518                   | 129                     | 139                       | 1752              | 0.296 | 519                 | 440                             | 0.6               | 0.4             | 2.989     | A                             |
| B - New Road                      | 244                   | 61                      | 543                       | 1553              | 0.157 | 244                 | 114                             | 0.3               | 0.2             | 2.849     | A                             |
| C - Main Road                     | 80                    | 20                      | 617                       | 1661              | 0.048 | 80                  | 170                             | 0.1               | 0.1             | 2.327     | A                             |
| D - A645 (South)                  | 390                   | 97                      | 206                       | 1590              | 0.245 | 390                 | 492                             | 0.5               | 0.3             | 3.186     | A                             |
| E - Sports And Social Club Access | 10                    | 2                       | 569                       | 801               | 0.012 | 10                  | 27                              | 0.0               | 0.0             | 4.547     | A                             |



| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| ARCADY 10 - Roundabout Module                                                                                                                                    |  |  |  |  |  |  |  |  |  |
| Version: 10.0.4.1693                                                                                                                                             |  |  |  |  |  |  |  |  |  |
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Filename: J2.j10

Path: \\uk.wspgroup.com\Central Data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\8 - Traffic Flow Analysis and Models\05 - Models and Outputs\Models

Report generation date: 18/03/2022 09:42:53

- »2018, AM
- »2018, PM
- »2022 Future Baseline , AM
- »2022 Future Baseline , PM
- »2026 Future Baseline, AM
- »2026 Future Baseline, PM
- »2026 Do Minimum, AM
- »2026 Do Minimum, PM
- »2026 Do Something, AM
- »2026 Do Something, PM

### Summary of junction performance

|                                 | AM                   |             |           |      |     | PM     |             |           |      |     |
|---------------------------------|----------------------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|
|                                 | Set ID               | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS |
|                                 | 2018                 |             |           |      |     |        |             |           |      |     |
| A - A645 (West)                 | D1                   | 1.0         | 9.91      | 0.49 | A   | D2     | 2.0         | 13.74     | 0.66 | B   |
| B - A614 Rawcliffe Road (East)  |                      | 0.9         | 3.94      | 0.47 | A   |        | 0.7         | 3.51      | 0.42 | A   |
| C - A614 Rawcliffe Road (South) |                      | 1.3         | 10.41     | 0.56 | B   |        | 0.7         | 6.90      | 0.41 | A   |
|                                 | 2022 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A645 (West)                 | D3                   | 1.1         | 10.47     | 0.51 | B   | D4     | 2.3         | 15.08     | 0.69 | C   |
| B - A614 Rawcliffe Road (East)  |                      | 1.0         | 4.08      | 0.49 | A   |        | 0.8         | 3.61      | 0.43 | A   |
| C - A614 Rawcliffe Road (South) |                      | 1.4         | 11.28     | 0.58 | B   |        | 0.8         | 7.15      | 0.43 | A   |
|                                 | 2026 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A645 (West)                 | D5                   | 1.2         | 11.05     | 0.54 | B   | D6     | 2.6         | 16.58     | 0.72 | C   |
| B - A614 Rawcliffe Road (East)  |                      | 1.1         | 4.20      | 0.51 | A   |        | 0.8         | 3.69      | 0.44 | A   |
| C - A614 Rawcliffe Road (South) |                      | 1.6         | 12.12     | 0.61 | B   |        | 0.8         | 7.40      | 0.44 | A   |
|                                 | 2026 Do Minimum      |             |           |      |     |        |             |           |      |     |
| A - A645 (West)                 | D7                   | 1.9         | 14.67     | 0.64 | B   | D8     | 4.3         | 25.46     | 0.82 | D   |
| B - A614 Rawcliffe Road (East)  |                      | 1.3         | 4.62      | 0.55 | A   |        | 1.1         | 4.19      | 0.51 | A   |
| C - A614 Rawcliffe Road (South) |                      | 2.3         | 16.18     | 0.69 | C   |        | 1.0         | 8.58      | 0.49 | A   |
|                                 | 2026 Do Something    |             |           |      |     |        |             |           |      |     |
| A - A645 (West)                 | D9                   | 2.2         | 16.42     | 0.68 | C   | D10    | 8.8         | 47.60     | 0.92 | E   |
| B - A614 Rawcliffe Road (East)  |                      | 1.5         | 4.99      | 0.58 | A   |        | 1.1         | 4.33      | 0.53 | A   |
| C - A614 Rawcliffe Road (South) |                      | 2.7         | 19.15     | 0.73 | C   |        | 1.0         | 8.92      | 0.50 | 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.

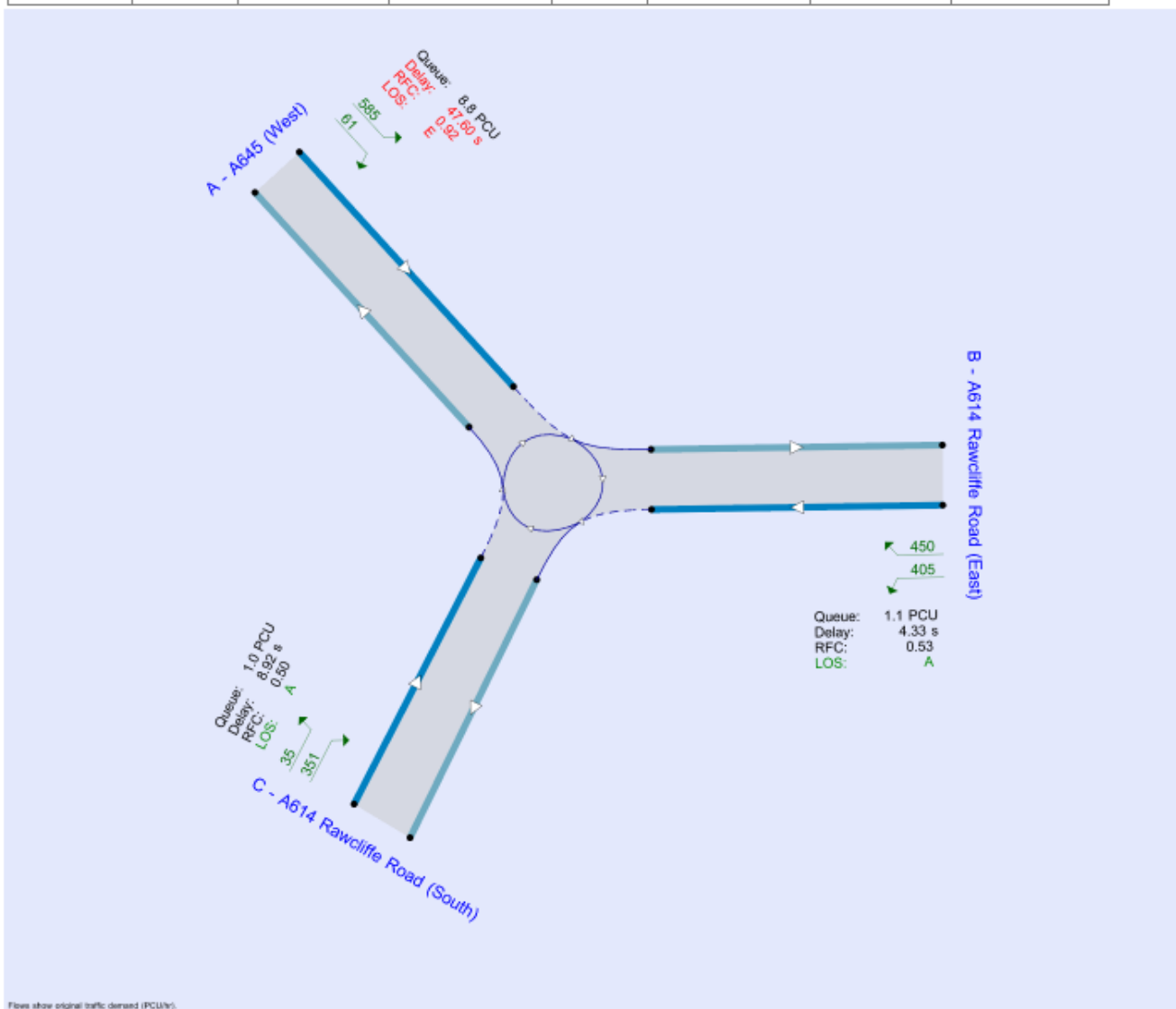
## File summary

### File Description

|             |                |
|-------------|----------------|
| Title       | Site 1         |
| Location    |                |
| Site number |                |
| Date        | 28/03/2018     |
| Version     |                |
| Status      |                |
| Identifier  |                |
| Client      |                |
| Jobnumber   |                |
| Enumerator  | CORP\INTW00749 |
| 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              |



The junction diagram reflects the last run of Junctions.



## Analysis Options

| Vehicle length (m) | Calculate Queue Percentiles | Calculate detailed queueing delay | Show lane queues in feet / metres | Show all PICADY stream intercepts | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) | Use iterations with HCM roundabouts | Max number of iterations for roundabouts |
|--------------------|-----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------|---------------|-----------------------------|-----------------------|-------------------------------------|------------------------------------------|
| 5.75               |                             |                                   |                                   |                                   |                             | 0.85          | 38.00                       | 20.00                 |                                     | 500                                      |

## Demand Set Summary

| ID  | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1  | 2018                 | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D2  | 2018                 | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D3  | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D4  | 2022 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D5  | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D6  | 2026 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D7  | 2026 Do Minimum      | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D8  | 2026 Do Minimum      | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D9  | 2026 Do Something    | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D10 | 2026 Do Something    | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

## Analysis Set Details

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

# 2018, AM

## Data Errors and Warnings

| Severity | Area     | Item                                                  | Description                                                                                                      |
|----------|----------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A614 Rawcliffe Road (South) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 1        | Site 1 | Standard Roundabout |                       | A, B, C   | 7.00               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 7.00              | A           |

## Arms

### Arms

| Arm | Name                        | Description | No give-way line |
|-----|-----------------------------|-------------|------------------|
| A   | A645 (West)                 |             |                  |
| B   | A614 Rawcliffe Road (East)  |             |                  |
| C   | A614 Rawcliffe Road (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) | Entry only | Exit only |
|---------------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|------------|-----------|
| A - A645 (West)                 | 4.29                             | 7.18                | 23.2                            | 18.6                 | 55.9                              | 34.0                               |            |           |
| B - A614 Rawcliffe Road (East)  | 3.30                             | 7.13                | 27.4                            | 34.2                 | 55.9                              | 31.0                               |            |           |
| C - A614 Rawcliffe Road (South) | 3.44                             | 6.40                | 36.6                            | 20.4                 | 55.9                              | 34.0                               |            |           |

### Slope / Intercept / Capacity

#### Arm Intercept Adjustments

| Arm                             | Type   | Reason | Direct intercept adjustment (PCU/hr) |
|---------------------------------|--------|--------|--------------------------------------|
| A - A645 (West)                 | Direct |        | -880                                 |
| B - A614 Rawcliffe Road (East)  | None   |        |                                      |
| C - A614 Rawcliffe Road (South) | Direct |        | -800                                 |

#### Roundabout Slope and Intercept used in model

| Arm                             | Final slope | Final intercept (PCU/hr) |
|---------------------------------|-------------|--------------------------|
| A - A645 (West)                 | 0.610       | 1012                     |
| B - A614 Rawcliffe Road (East)  | 0.608       | 1832                     |
| C - A614 Rawcliffe Road (South) | 0.582       | 1132                     |

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2018          | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A645 (West)                 |            | ONE HOUR     | ✓            | 346                     | 100.000            |
| B - A614 Rawcliffe Road (East)  |            | ONE HOUR     | ✓            | 780                     | 100.000            |
| C - A614 Rawcliffe Road (South) |            | ONE HOUR     | ✓            | 404                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

| From | To                              |                 |                                |                                 |
|------|---------------------------------|-----------------|--------------------------------|---------------------------------|
|      |                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
|      | A - A645 (West)                 | 0               | 317                            | 29                              |
|      | B - A614 Rawcliffe Road (East)  | 517             | 0                              | 263                             |
|      | C - A614 Rawcliffe Road (South) | 51              | 352                            | 1                               |

### Proportions

| From | To                              |                 |                                |                                 |
|------|---------------------------------|-----------------|--------------------------------|---------------------------------|
|      |                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
|      | A - A645 (West)                 | 0.00            | 0.92                           | 0.08                            |
|      | B - A614 Rawcliffe Road (East)  | 0.66            | 0.00                           | 0.34                            |
|      | C - A614 Rawcliffe Road (South) | 0.13            | 0.87                           | 0.00                            |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                              |                 |                                |                                 |
|------|---------------------------------|-----------------|--------------------------------|---------------------------------|
|      |                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
|      | A - A645 (West)                 | 0               | 9                              | 4                               |
|      | B - A614 Rawcliffe Road (East)  | 4               | 0                              | 5                               |
|      | C - A614 Rawcliffe Road (South) | 4               | 3                              | 0                               |

### Average PCU Per Veh

| From | To                              |                 |                                |                                 |
|------|---------------------------------|-----------------|--------------------------------|---------------------------------|
|      |                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
|      | A - A645 (West)                 | 1.000           | 1.088                          | 1.036                           |
|      | B - A614 Rawcliffe Road (East)  | 1.041           | 1.000                          | 1.053                           |
|      | C - A614 Rawcliffe Road (South) | 1.042           | 1.027                          | 1.000                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                             | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|---------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                 | 07:15-07:30  | 280             | 280                    |
|                                 | 07:30-07:45  | 311             | 311                    |
|                                 | 07:45-08:00  | 381             | 381                    |
|                                 | 08:00-08:15  | 381             | 381                    |
|                                 | 08:15-08:30  | 311             | 311                    |
|                                 | 08:30-08:45  | 280             | 280                    |
| B - A614 Rawcliffe Road (East)  | 07:15-07:30  | 587             | 587                    |
|                                 | 07:30-07:45  | 701             | 701                    |
|                                 | 07:45-08:00  | 859             | 859                    |
|                                 | 08:00-08:15  | 859             | 859                    |
|                                 | 08:15-08:30  | 701             | 701                    |
|                                 | 08:30-08:45  | 587             | 587                    |
| C - A614 Rawcliffe Road (South) | 07:15-07:30  | 304             | 304                    |
|                                 | 07:30-07:45  | 363             | 363                    |
|                                 | 07:45-08:00  | 445             | 445                    |
|                                 | 08:00-08:15  | 445             | 445                    |
|                                 | 08:15-08:30  | 363             | 363                    |
|                                 | 08:30-08:45  | 304             | 304                    |

## 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) |
|---------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                 | 0.49    | 9.91          | 1.0             | A       | 317                     | 476                           |
| B - A614 Rawcliffe Road (East)  | 0.47    | 3.94          | 0.9             | A       | 716                     | 1073                          |
| C - A614 Rawcliffe Road (South) | 0.56    | 10.41         | 1.3             | B       | 371                     | 556                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 280                   | 65                      | 284                       | 851               | 0.306 | 259                 | 426                             | 0.0               | 0.5             | 6.569     | A                             |
| B - A614 Rawcliffe Road (East)  | 587                   | 147                     | 22                        | 1819              | 0.323 | 585                 | 500                             | 0.0               | 0.5             | 3.043     | A                             |
| C - A614 Rawcliffe Road (South) | 304                   | 76                      | 388                       | 906               | 0.336 | 302                 | 219                             | 0.0               | 0.5             | 6.111     | A                             |

#### 07:30 - 07:45

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 311                   | 78                      | 317                       | 819               | 0.380 | 310                 | 510                             | 0.5               | 0.7             | 7.666     | A                             |
| B - A614 Rawcliffe Road (East)  | 701                   | 175                     | 27                        | 1816              | 0.386 | 700                 | 600                             | 0.5               | 0.7             | 3.370     | A                             |
| C - A614 Rawcliffe Road (South) | 363                   | 91                      | 465                       | 861               | 0.422 | 362                 | 263                             | 0.5               | 0.7             | 7.405     | A                             |

**07:45 - 08:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 381                   | 95                      | 387                       | 776               | 0.491 | 379                 | 625                             | 0.7               | 1.0             | 9.810     | A                             |
| B - A614 Rawcliffe Road (East)  | 859                   | 215                     | 33                        | 1812              | 0.474 | 857                 | 733                             | 0.7               | 0.9             | 3.934     | A                             |
| C - A614 Rawcliffe Road (South) | 445                   | 111                     | 569                       | 801               | 0.556 | 443                 | 322                             | 0.7               | 1.3             | 10.284    | B                             |

**08:00 - 08:15**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 381                   | 95                      | 389                       | 775               | 0.492 | 381                 | 626                             | 1.0               | 1.0             | 9.906     | A                             |
| B - A614 Rawcliffe Road (East)  | 859                   | 215                     | 33                        | 1812              | 0.474 | 859                 | 736                             | 0.9               | 0.9             | 3.943     | A                             |
| C - A614 Rawcliffe Road (South) | 445                   | 111                     | 569                       | 800               | 0.556 | 445                 | 322                             | 1.3               | 1.3             | 10.410    | B                             |

**08:15 - 08:30**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 311                   | 78                      | 319                       | 817               | 0.381 | 312                 | 512                             | 1.0               | 0.7             | 7.756     | A                             |
| B - A614 Rawcliffe Road (East)  | 701                   | 175                     | 27                        | 1816              | 0.386 | 702                 | 605                             | 0.9               | 0.7             | 3.382     | A                             |
| C - A614 Rawcliffe Road (South) | 363                   | 91                      | 466                       | 861               | 0.422 | 365                 | 264                             | 1.3               | 0.8             | 7.505     | A                             |

**08:30 - 08:45**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 260                   | 65                      | 267                       | 849               | 0.307 | 261                 | 428                             | 0.7               | 0.5             | 6.648     | A                             |
| B - A614 Rawcliffe Road (East)  | 587                   | 147                     | 23                        | 1819              | 0.323 | 588                 | 505                             | 0.7               | 0.5             | 3.059     | A                             |
| C - A614 Rawcliffe Road (South) | 304                   | 76                      | 390                       | 905               | 0.336 | 305                 | 221                             | 0.8               | 0.5             | 6.184     | A                             |

# 2018, PM

## Data Errors and Warnings

| Severity | Area     | Item                                                  | Description                                                                                                      |
|----------|----------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A614 Rawcliffe Road (South) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 1        | Site 1 | Standard Roundabout |                       | A, B, C   | 7.58               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 7.58              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2018          | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                             | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A645 (West)                 |            | ONE HOUR     | ✓            | 488                     | 100.000            |
| B - A614 Rawcliffe Road (East)  |            | ONE HOUR     | ✓            | 879                     | 100.000            |
| C - A614 Rawcliffe Road (South) |            | ONE HOUR     | ✓            | 340                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

| From                            | To              |                                |                                 |  |
|---------------------------------|-----------------|--------------------------------|---------------------------------|--|
|                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |  |
| A - A645 (West)                 | 0               | 429                            | 57                              |  |
| B - A614 Rawcliffe Road (East)  | 337             | 0                              | 341                             |  |
| C - A614 Rawcliffe Road (South) | 33              | 307                            | 0                               |  |

### Proportions

| From                            | To              |                                |                                 |  |
|---------------------------------|-----------------|--------------------------------|---------------------------------|--|
|                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |  |
| A - A645 (West)                 | 0.00            | 0.88                           | 0.12                            |  |
| B - A614 Rawcliffe Road (East)  | 0.50            | 0.00                           | 0.50                            |  |
| C - A614 Rawcliffe Road (South) | 0.10            | 0.90                           | 0.00                            |  |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 4                              | 0                               |
| B - A614 Rawcliffe Road (East)  |    | 3               | 0                              | 1                               |
| C - A614 Rawcliffe Road (South) |    | 3               | 4                              | 0                               |

### Average PCU Per Veh

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 1.000           | 1.039                          | 1.000                           |
| B - A614 Rawcliffe Road (East)  |    | 1.034           | 1.000                          | 1.012                           |
| C - A614 Rawcliffe Road (South) |    | 1.031           | 1.038                          | 1.000                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                             | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|---------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                 | 16:30-16:45  | 366             | 366                    |
|                                 | 16:45-17:00  | 437             | 437                    |
|                                 | 17:00-17:15  | 535             | 535                    |
|                                 | 17:15-17:30  | 535             | 535                    |
|                                 | 17:30-17:45  | 437             | 437                    |
|                                 | 17:45-18:00  | 366             | 366                    |
| B - A614 Rawcliffe Road (East)  | 16:30-16:45  | 511             | 511                    |
|                                 | 16:45-17:00  | 610             | 610                    |
|                                 | 17:00-17:15  | 747             | 747                    |
|                                 | 17:15-17:30  | 747             | 747                    |
|                                 | 17:30-17:45  | 610             | 610                    |
|                                 | 17:45-18:00  | 511             | 511                    |
| C - A614 Rawcliffe Road (South) | 16:30-16:45  | 256             | 256                    |
|                                 | 16:45-17:00  | 306             | 306                    |
|                                 | 17:00-17:15  | 375             | 375                    |
|                                 | 17:15-17:30  | 375             | 375                    |
|                                 | 17:30-17:45  | 306             | 306                    |
|                                 | 17:45-18:00  | 256             | 256                    |

## 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) |
|---------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                 | 0.66    | 13.74         | 2.0             | B       | 446                     | 669                           |
| B - A614 Rawcliffe Road (East)  | 0.42    | 3.51          | 0.7             | A       | 623                     | 934                           |
| C - A614 Rawcliffe Road (South) | 0.41    | 6.90          | 0.7             | A       | 312                     | 468                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 366                   | 91                      | 230                       | 871               | 0.420 | 363                 | 278                             | 0.0               | 0.7             | 7.280     | A                             |
| B - A614 Rawcliffe Road (East)  | 511                   | 128                     | 43                        | 1807              | 0.283 | 509                 | 550                             | 0.0               | 0.4             | 2.834     | A                             |
| C - A614 Rawcliffe Road (South) | 256                   | 64                      | 253                       | 984               | 0.260 | 255                 | 299                             | 0.0               | 0.4             | 5.105     | A                             |

**16:45 - 17:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 437                   | 109                     | 275                       | 844               | 0.518 | 436                 | 333                             | 0.7               | 1.1             | 9.093     | A                             |
| B - A614 Rawcliffe Road (East)  | 610                   | 152                     | 51                        | 1801              | 0.339 | 609                 | 660                             | 0.4               | 0.5             | 3.087     | A                             |
| C - A614 Rawcliffe Road (South) | 306                   | 76                      | 303                       | 955               | 0.320 | 305                 | 358                             | 0.4               | 0.5             | 5.739     | A                             |

**17:00 - 17:15**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 535                   | 134                     | 337                       | 806               | 0.664 | 532                 | 408                             | 1.1               | 2.0             | 13.397    | B                             |
| B - A614 Rawcliffe Road (East)  | 747                   | 187                     | 62                        | 1794              | 0.416 | 746                 | 806                             | 0.5               | 0.7             | 3.507     | A                             |
| C - A614 Rawcliffe Road (South) | 375                   | 94                      | 371                       | 916               | 0.409 | 374                 | 438                             | 0.5               | 0.7             | 6.874     | A                             |

**17:15 - 17:30**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 535                   | 134                     | 338                       | 806               | 0.664 | 535                 | 408                             | 2.0               | 2.0             | 13.736    | B                             |
| B - A614 Rawcliffe Road (East)  | 747                   | 187                     | 63                        | 1794              | 0.416 | 747                 | 810                             | 0.7               | 0.7             | 3.515     | A                             |
| C - A614 Rawcliffe Road (South) | 375                   | 94                      | 371                       | 916               | 0.409 | 375                 | 438                             | 0.7               | 0.7             | 6.898     | A                             |

**17:30 - 17:45**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 437                   | 109                     | 277                       | 843               | 0.518 | 440                 | 334                             | 2.0               | 1.1             | 9.329     | A                             |
| B - A614 Rawcliffe Road (East)  | 610                   | 152                     | 52                        | 1801              | 0.339 | 611                 | 665                             | 0.7               | 0.5             | 3.097     | A                             |
| C - A614 Rawcliffe Road (South) | 306                   | 76                      | 304                       | 955               | 0.320 | 307                 | 359                             | 0.7               | 0.5             | 5.767     | A                             |

**17:45 - 18:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 366                   | 91                      | 232                       | 870               | 0.420 | 367                 | 279                             | 1.1               | 0.8             | 7.424     | A                             |
| B - A614 Rawcliffe Road (East)  | 511                   | 128                     | 43                        | 1806              | 0.283 | 511                 | 556                             | 0.5               | 0.4             | 2.844     | A                             |
| C - A614 Rawcliffe Road (South) | 256                   | 64                      | 254                       | 984               | 0.260 | 257                 | 300                             | 0.5               | 0.4             | 5.138     | A                             |



# 2022 Future Baseline , AM

## Data Errors and Warnings

| Severity | Area     | Item                                                  | Description                                                                                                      |
|----------|----------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A614 Rawcliffe Road (South) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 1        | Site 1 | Standard Roundabout |                       | A, B, C   | 7.42               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 7.42              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D3 | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A645 (West)                 |            | ONE HOUR     | ✓            | 358                     | 100.000            |
| B - A614 Rawcliffe Road (East)  |            | ONE HOUR     | ✓            | 808                     | 100.000            |
| C - A614 Rawcliffe Road (South) |            | ONE HOUR     | ✓            | 418                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 328                            | 30                              |
| B - A614 Rawcliffe Road (East)  |    | 538             | 0                              | 272                             |
| C - A614 Rawcliffe Road (South) |    | 53              | 384                            | 1                               |

### Proportions

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0.00            | 0.92                           | 0.08                            |
| B - A614 Rawcliffe Road (East)  |    | 0.88            | 0.00                           | 0.34                            |
| C - A614 Rawcliffe Road (South) |    | 0.13            | 0.87                           | 0.00                            |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 9                              | 4                               |
| B - A614 Rawcliffe Road (East)  |    | 4               | 0                              | 5                               |
| C - A614 Rawcliffe Road (South) |    | 4               | 3                              | 0                               |

### Average PCU Per Veh

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 1.000           | 1.088                          | 1.036                           |
| B - A614 Rawcliffe Road (East)  |    | 1.041           | 1.000                          | 1.053                           |
| C - A614 Rawcliffe Road (South) |    | 1.042           | 1.027                          | 1.000                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                             | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|---------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                 | 07:15-07:30  | 270             | 270                    |
|                                 | 07:30-07:45  | 322             | 322                    |
|                                 | 07:45-08:00  | 394             | 394                    |
|                                 | 08:00-08:15  | 394             | 394                    |
|                                 | 08:15-08:30  | 322             | 322                    |
|                                 | 08:30-08:45  | 270             | 270                    |
| B - A614 Rawcliffe Road (East)  | 07:15-07:30  | 608             | 608                    |
|                                 | 07:30-07:45  | 726             | 726                    |
|                                 | 07:45-08:00  | 890             | 890                    |
|                                 | 08:00-08:15  | 890             | 890                    |
|                                 | 08:15-08:30  | 726             | 726                    |
|                                 | 08:30-08:45  | 608             | 608                    |
| C - A614 Rawcliffe Road (South) | 07:15-07:30  | 315             | 315                    |
|                                 | 07:30-07:45  | 376             | 376                    |
|                                 | 07:45-08:00  | 460             | 460                    |
|                                 | 08:00-08:15  | 460             | 460                    |
|                                 | 08:15-08:30  | 376             | 376                    |
|                                 | 08:30-08:45  | 315             | 315                    |

## 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) |
|---------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                 | 0.51    | 10.47         | 1.1             | B       | 329                     | 493                           |
| B - A614 Rawcliffe Road (East)  | 0.49    | 4.08          | 1.0             | A       | 741                     | 1112                          |
| C - A614 Rawcliffe Road (South) | 0.58    | 11.28         | 1.4             | B       | 384                     | 575                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 270                   | 67                      | 273                       | 845               | 0.319 | 268                 | 442                             | 0.0               | 0.5             | 6.732     | A                             |
| B - A614 Rawcliffe Road (East)  | 608                   | 152                     | 23                        | 1818              | 0.335 | 606                 | 517                             | 0.0               | 0.5             | 3.098     | A                             |
| C - A614 Rawcliffe Road (South) | 315                   | 79                      | 402                       | 898               | 0.351 | 313                 | 227                             | 0.0               | 0.5             | 6.305     | A                             |

**07:30 - 07:45**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 322                   | 80                      | 327                       | 812               | 0.398 | 321                 | 529                             | 0.5               | 0.7             | 7.934     | A                             |
| B - A614 Rawcliffe Road (East)  | 726                   | 182                     | 28                        | 1815              | 0.400 | 726                 | 620                             | 0.5               | 0.7             | 3.450     | A                             |
| C - A614 Rawcliffe Road (South) | 376                   | 94                      | 481                       | 852               | 0.441 | 375                 | 272                             | 0.5               | 0.8             | 7.750     | A                             |

**07:45 - 08:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 394                   | 99                      | 400                       | 788               | 0.513 | 393                 | 647                             | 0.7               | 1.1             | 10.351    | B                             |
| B - A614 Rawcliffe Road (East)  | 890                   | 222                     | 34                        | 1812              | 0.491 | 888                 | 758                             | 0.7               | 1.0             | 4.069     | A                             |
| C - A614 Rawcliffe Road (South) | 460                   | 115                     | 589                       | 789               | 0.584 | 458                 | 333                             | 0.8               | 1.4             | 11.109    | B                             |

**08:00 - 08:15**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 394                   | 99                      | 402                       | 788               | 0.514 | 394                 | 648                             | 1.1               | 1.1             | 10.471    | B                             |
| B - A614 Rawcliffe Road (East)  | 890                   | 222                     | 34                        | 1812              | 0.491 | 890                 | 762                             | 1.0               | 1.0             | 4.079     | A                             |
| C - A614 Rawcliffe Road (South) | 460                   | 115                     | 590                       | 788               | 0.584 | 460                 | 334                             | 1.4               | 1.4             | 11.279    | B                             |

**08:15 - 08:30**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 322                   | 80                      | 330                       | 810               | 0.397 | 323                 | 531                             | 1.1               | 0.7             | 8.042     | A                             |
| B - A614 Rawcliffe Road (East)  | 726                   | 182                     | 28                        | 1815              | 0.400 | 728                 | 626                             | 1.0               | 0.7             | 3.461     | A                             |
| C - A614 Rawcliffe Road (South) | 376                   | 94                      | 483                       | 851               | 0.442 | 378                 | 273                             | 1.4               | 0.8             | 7.874     | A                             |

**08:30 - 08:45**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 270                   | 67                      | 276                       | 843               | 0.320 | 270                 | 444                             | 0.7               | 0.5             | 6.820     | A                             |
| B - A614 Rawcliffe Road (East)  | 608                   | 152                     | 23                        | 1818              | 0.335 | 609                 | 523                             | 0.7               | 0.5             | 3.114     | A                             |
| C - A614 Rawcliffe Road (South) | 315                   | 79                      | 404                       | 897               | 0.351 | 316                 | 228                             | 0.8               | 0.6             | 6.387     | A                             |

# 2022 Future Baseline , PM

## Data Errors and Warnings

| Severity | Area     | Item                                                  | Description                                                                                                      |
|----------|----------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A614 Rawcliffe Road (South) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 1        | Site 1 | Standard Roundabout |                       | A, B, C   | 8.11               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 8.11              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D4 | 2022 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                             | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A645 (West)                 |            | ONE HOUR     | ✓            | 502                     | 100.000            |
| B - A614 Rawcliffe Road (East)  |            | ONE HOUR     | ✓            | 702                     | 100.000            |
| C - A614 Rawcliffe Road (South) |            | ONE HOUR     | ✓            | 351                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 443                            | 59                              |
| B - A614 Rawcliffe Road (East)  |    | 349             | 0                              | 353                             |
| C - A614 Rawcliffe Road (South) |    | 34              | 317                            | 0                               |

### Proportions

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0.00            | 0.88                           | 0.12                            |
| B - A614 Rawcliffe Road (East)  |    | 0.50            | 0.00                           | 0.50                            |
| C - A614 Rawcliffe Road (South) |    | 0.10            | 0.90                           | 0.00                            |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 4                              | 0                               |
| B - A614 Rawcliffe Road (East)  |    | 3               | 0                              | 1                               |
| C - A614 Rawcliffe Road (South) |    | 3               | 4                              | 0                               |

### Average PCU Per Veh

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 1.000           | 1.039                          | 1.000                           |
| B - A614 Rawcliffe Road (East)  |    | 1.034           | 1.000                          | 1.012                           |
| C - A614 Rawcliffe Road (South) |    | 1.031           | 1.038                          | 1.000                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                             | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|---------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                 | 16:30-16:45  | 378             | 378                    |
|                                 | 16:45-17:00  | 451             | 451                    |
|                                 | 17:00-17:15  | 553             | 553                    |
|                                 | 17:15-17:30  | 553             | 553                    |
|                                 | 17:30-17:45  | 451             | 451                    |
|                                 | 17:45-18:00  | 378             | 378                    |
| B - A614 Rawcliffe Road (East)  | 16:30-16:45  | 529             | 529                    |
|                                 | 16:45-17:00  | 631             | 631                    |
|                                 | 17:00-17:15  | 773             | 773                    |
|                                 | 17:15-17:30  | 773             | 773                    |
|                                 | 17:30-17:45  | 631             | 631                    |
|                                 | 17:45-18:00  | 529             | 529                    |
| C - A614 Rawcliffe Road (South) | 16:30-16:45  | 264             | 264                    |
|                                 | 16:45-17:00  | 316             | 316                    |
|                                 | 17:00-17:15  | 386             | 386                    |
|                                 | 17:15-17:30  | 386             | 386                    |
|                                 | 17:30-17:45  | 316             | 316                    |
|                                 | 17:45-18:00  | 264             | 264                    |

## 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) |
|---------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                 | 0.69    | 15.08         | 2.3             | C       | 461                     | 691                           |
| B - A614 Rawcliffe Road (East)  | 0.43    | 3.61          | 0.8             | A       | 644                     | 966                           |
| C - A614 Rawcliffe Road (South) | 0.43    | 7.15          | 0.8             | A       | 322                     | 483                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 378                   | 94                      | 237                       | 867               | 0.436 | 375                 | 287                             | 0.0               | 0.8             | 7.519     | A                             |
| B - A614 Rawcliffe Road (East)  | 529                   | 132                     | 44                        | 1806              | 0.293 | 527                 | 568                             | 0.0               | 0.4             | 2.875     | A                             |
| C - A614 Rawcliffe Road (South) | 264                   | 66                      | 262                       | 979               | 0.270 | 263                 | 309                             | 0.0               | 0.4             | 5.199     | A                             |

**16:45 - 17:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 451                   | 113                     | 285                       | 838               | 0.538 | 450                 | 344                             | 0.8               | 1.2             | 9.547     | A                             |
| B - A614 Rawcliffe Road (East)  | 831                   | 158                     | 53                        | 1800              | 0.351 | 831                 | 681                             | 0.4               | 0.5             | 3.146     | A                             |
| C - A614 Rawcliffe Road (South) | 316                   | 79                      | 313                       | 949               | 0.332 | 315                 | 370                             | 0.4               | 0.5             | 5.880     | A                             |

**17:00 - 17:15**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 553                   | 138                     | 348                       | 799               | 0.692 | 549                 | 421                             | 1.2               | 2.2             | 14.614    | B                             |
| B - A614 Rawcliffe Road (East)  | 773                   | 193                     | 64                        | 1793              | 0.431 | 772                 | 832                             | 0.5               | 0.8             | 3.602     | A                             |
| C - A614 Rawcliffe Road (South) | 386                   | 97                      | 384                       | 908               | 0.425 | 385                 | 453                             | 0.5               | 0.8             | 7.126     | A                             |

**17:15 - 17:30**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 553                   | 138                     | 349                       | 799               | 0.692 | 552                 | 422                             | 2.2               | 2.3             | 15.083    | C                             |
| B - A614 Rawcliffe Road (East)  | 773                   | 193                     | 65                        | 1793              | 0.431 | 773                 | 837                             | 0.8               | 0.8             | 3.609     | A                             |
| C - A614 Rawcliffe Road (South) | 386                   | 97                      | 384                       | 908               | 0.426 | 386                 | 454                             | 0.8               | 0.8             | 7.155     | A                             |

**17:30 - 17:45**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 451                   | 113                     | 286                       | 837               | 0.539 | 455                 | 345                             | 2.3               | 1.2             | 9.854     | A                             |
| B - A614 Rawcliffe Road (East)  | 831                   | 158                     | 54                        | 1800              | 0.351 | 832                 | 688                             | 0.8               | 0.6             | 3.154     | A                             |
| C - A614 Rawcliffe Road (South) | 316                   | 79                      | 314                       | 949               | 0.333 | 317                 | 371                             | 0.8               | 0.5             | 5.913     | A                             |

**17:45 - 18:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 378                   | 94                      | 239                       | 866               | 0.437 | 380                 | 289                             | 1.2               | 0.8             | 7.688     | A                             |
| B - A614 Rawcliffe Road (East)  | 529                   | 132                     | 45                        | 1805              | 0.293 | 529                 | 574                             | 0.6               | 0.4             | 2.885     | A                             |
| C - A614 Rawcliffe Road (South) | 264                   | 66                      | 263                       | 979               | 0.270 | 265                 | 311                             | 0.5               | 0.4             | 5.234     | A                             |

# 2026 Future Baseline, AM

## Data Errors and Warnings

| Severity | Area     | Item                                                  | Description                                                                                                      |
|----------|----------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A614 Rawcliffe Road (South) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 1        | Site 1 | Standard Roundabout |                       | A, B, C   | 7.84               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 7.84              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A645 (West)                 |            | ONE HOUR     | ✓            | 369                     | 100.000            |
| B - A614 Rawcliffe Road (East)  |            | ONE HOUR     | ✓            | 831                     | 100.000            |
| C - A614 Rawcliffe Road (South) |            | ONE HOUR     | ✓            | 430                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 338                            | 31                              |
| B - A614 Rawcliffe Road (East)  |    | 551             | 0                              | 280                             |
| C - A614 Rawcliffe Road (South) |    | 54              | 375                            | 1                               |

### Proportions

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0.00            | 0.92                           | 0.08                            |
| B - A614 Rawcliffe Road (East)  |    | 0.66            | 0.00                           | 0.34                            |
| C - A614 Rawcliffe Road (South) |    | 0.13            | 0.87                           | 0.00                            |

## Vehicle Mix



### Heavy Vehicle Percentages

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 9                              | 4                               |
| B - A614 Rawcliffe Road (East)  |    | 4               | 0                              | 5                               |
| C - A614 Rawcliffe Road (South) |    | 4               | 3                              | 0                               |

### Average PCU Per Veh

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 1.000           | 1.088                          | 1.036                           |
| B - A614 Rawcliffe Road (East)  |    | 1.041           | 1.000                          | 1.053                           |
| C - A614 Rawcliffe Road (South) |    | 1.042           | 1.027                          | 1.000                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                             | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|---------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                 | 07:15-07:30  | 278             | 278                    |
|                                 | 07:30-07:45  | 332             | 332                    |
|                                 | 07:45-08:00  | 406             | 406                    |
|                                 | 08:00-08:15  | 406             | 406                    |
|                                 | 08:15-08:30  | 332             | 332                    |
|                                 | 08:30-08:45  | 278             | 278                    |
| B - A614 Rawcliffe Road (East)  | 07:15-07:30  | 626             | 626                    |
|                                 | 07:30-07:45  | 747             | 747                    |
|                                 | 07:45-08:00  | 915             | 915                    |
|                                 | 08:00-08:15  | 915             | 915                    |
|                                 | 08:15-08:30  | 747             | 747                    |
|                                 | 08:30-08:45  | 626             | 626                    |
| C - A614 Rawcliffe Road (South) | 07:15-07:30  | 324             | 324                    |
|                                 | 07:30-07:45  | 387             | 387                    |
|                                 | 07:45-08:00  | 474             | 474                    |
|                                 | 08:00-08:15  | 474             | 474                    |
|                                 | 08:15-08:30  | 387             | 387                    |
|                                 | 08:30-08:45  | 324             | 324                    |

## 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) |
|---------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                 | 0.54    | 11.05         | 1.2             | B       | 339                     | 508                           |
| B - A614 Rawcliffe Road (East)  | 0.51    | 4.20          | 1.1             | A       | 763                     | 1144                          |
| C - A614 Rawcliffe Road (South) | 0.61    | 12.12         | 1.6             | B       | 395                     | 592                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 278                   | 69                      | 281                       | 840               | 0.331 | 276                 | 454                             | 0.0               | 0.5             | 6.888     | A                             |
| B - A614 Rawcliffe Road (East)  | 626                   | 156                     | 24                        | 1818              | 0.344 | 623                 | 533                             | 0.0               | 0.5             | 3.144     | A                             |
| C - A614 Rawcliffe Road (South) | 324                   | 81                      | 413                       | 891               | 0.363 | 321                 | 234                             | 0.0               | 0.6             | 6.473     | A                             |



**07:30 - 07:45**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 332                   | 83                      | 337                       | 806               | 0.412 | 331                 | 543                             | 0.5               | 0.7             | 8.195     | A                             |
| B - A614 Rawcliffe Road (East)  | 747                   | 187                     | 29                        | 1815              | 0.412 | 746                 | 639                             | 0.5               | 0.7             | 3.519     | A                             |
| C - A614 Rawcliffe Road (South) | 387                   | 97                      | 495                       | 844               | 0.458 | 386                 | 280                             | 0.6               | 0.9             | 8.061     | A                             |

**07:45 - 08:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 406                   | 102                     | 412                       | 761               | 0.534 | 404                 | 665                             | 0.7               | 1.2             | 10.898    | B                             |
| B - A614 Rawcliffe Road (East)  | 915                   | 229                     | 35                        | 1811              | 0.505 | 914                 | 781                             | 0.7               | 1.1             | 4.186     | A                             |
| C - A614 Rawcliffe Road (South) | 474                   | 118                     | 606                       | 779               | 0.608 | 471                 | 343                             | 0.9               | 1.5             | 11.900    | B                             |

**08:00 - 08:15**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 406                   | 102                     | 414                       | 759               | 0.535 | 406                 | 666                             | 1.2               | 1.2             | 11.049    | B                             |
| B - A614 Rawcliffe Road (East)  | 915                   | 229                     | 35                        | 1811              | 0.505 | 915                 | 785                             | 1.1               | 1.1             | 4.198     | A                             |
| C - A614 Rawcliffe Road (South) | 474                   | 118                     | 607                       | 779               | 0.608 | 473                 | 344                             | 1.5               | 1.6             | 12.118    | B                             |

**08:15 - 08:30**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 332                   | 83                      | 340                       | 804               | 0.413 | 334                 | 545                             | 1.2               | 0.8             | 8.325     | A                             |
| B - A614 Rawcliffe Road (East)  | 747                   | 187                     | 29                        | 1815              | 0.412 | 748                 | 645                             | 1.1               | 0.7             | 3.530     | A                             |
| C - A614 Rawcliffe Road (South) | 387                   | 97                      | 496                       | 843               | 0.459 | 389                 | 281                             | 1.6               | 0.9             | 8.211     | A                             |

**08:30 - 08:45**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 278                   | 69                      | 284                       | 838               | 0.331 | 279                 | 456                             | 0.8               | 0.5             | 6.982     | A                             |
| B - A614 Rawcliffe Road (East)  | 626                   | 156                     | 24                        | 1818              | 0.344 | 626                 | 539                             | 0.7               | 0.6             | 3.161     | A                             |
| C - A614 Rawcliffe Road (South) | 324                   | 81                      | 415                       | 890               | 0.364 | 325                 | 235                             | 0.9               | 0.6             | 6.564     | A                             |

# 2026 Future Baseline, PM

## Data Errors and Warnings

| Severity | Area     | Item                                                  | Description                                                                                                      |
|----------|----------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A614 Rawcliffe Road (South) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 1        | Site 1 | Standard Roundabout |                       | A, B, C   | 8.69               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 8.69              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2026 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                             | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A645 (West)                 |            | ONE HOUR     | ✓            | 517                     | 100.000            |
| B - A614 Rawcliffe Road (East)  |            | ONE HOUR     | ✓            | 722                     | 100.000            |
| C - A614 Rawcliffe Road (South) |            | ONE HOUR     | ✓            | 361                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

| From                            | To              |                                |                                 |  |
|---------------------------------|-----------------|--------------------------------|---------------------------------|--|
|                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |  |
| A - A645 (West)                 | 0               | 456                            | 61                              |  |
| B - A614 Rawcliffe Road (East)  | 359             | 0                              | 363                             |  |
| C - A614 Rawcliffe Road (South) | 35              | 326                            | 0                               |  |

### Proportions

| From                            | To              |                                |                                 |  |
|---------------------------------|-----------------|--------------------------------|---------------------------------|--|
|                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |  |
| A - A645 (West)                 | 0.00            | 0.88                           | 0.12                            |  |
| B - A614 Rawcliffe Road (East)  | 0.50            | 0.00                           | 0.50                            |  |
| C - A614 Rawcliffe Road (South) | 0.10            | 0.90                           | 0.00                            |  |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 4                              | 0                               |
| B - A614 Rawcliffe Road (East)  |    | 3               | 0                              | 1                               |
| C - A614 Rawcliffe Road (South) |    | 3               | 4                              | 0                               |

### Average PCU Per Veh

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 1.000           | 1.039                          | 1.000                           |
| B - A614 Rawcliffe Road (East)  |    | 1.034           | 1.000                          | 1.012                           |
| C - A614 Rawcliffe Road (South) |    | 1.031           | 1.038                          | 1.000                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                             | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|---------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                 | 16:30-16:45  | 389             | 389                    |
|                                 | 16:45-17:00  | 465             | 465                    |
|                                 | 17:00-17:15  | 569             | 569                    |
|                                 | 17:15-17:30  | 569             | 569                    |
|                                 | 17:30-17:45  | 465             | 465                    |
|                                 | 17:45-18:00  | 389             | 389                    |
| B - A614 Rawcliffe Road (East)  | 16:30-16:45  | 544             | 544                    |
|                                 | 16:45-17:00  | 649             | 649                    |
|                                 | 17:00-17:15  | 795             | 795                    |
|                                 | 17:15-17:30  | 795             | 795                    |
|                                 | 17:30-17:45  | 649             | 649                    |
|                                 | 17:45-18:00  | 544             | 544                    |
| C - A614 Rawcliffe Road (South) | 16:30-16:45  | 272             | 272                    |
|                                 | 16:45-17:00  | 325             | 325                    |
|                                 | 17:00-17:15  | 397             | 397                    |
|                                 | 17:15-17:30  | 397             | 397                    |
|                                 | 17:30-17:45  | 325             | 325                    |
|                                 | 17:45-18:00  | 272             | 272                    |

## 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) |
|---------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                 | 0.72    | 16.58         | 2.6             | C       | 474                     | 712                           |
| B - A614 Rawcliffe Road (East)  | 0.44    | 3.69          | 0.8             | A       | 663                     | 994                           |
| C - A614 Rawcliffe Road (South) | 0.44    | 7.40          | 0.8             | A       | 331                     | 497                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 389                   | 97                      | 244                       | 863               | 0.451 | 386                 | 296                             | 0.0               | 0.8             | 7.755     | A                             |
| B - A614 Rawcliffe Road (East)  | 544                   | 136                     | 46                        | 1805              | 0.301 | 542                 | 584                             | 0.0               | 0.4             | 2.912     | A                             |
| C - A614 Rawcliffe Road (South) | 272                   | 68                      | 269                       | 975               | 0.279 | 270                 | 318                             | 0.0               | 0.4             | 5.285     | A                             |

### 16:45 - 17:00

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 465                   | 116                     | 293                       | 833               | 0.558 | 463                 | 354                             | 0.8               | 1.3             | 10.010    | B                             |
| B - A614 Rawcliffe Road (East)  | 649                   | 162                     | 55                        | 1799              | 0.361 | 649                 | 701                             | 0.4               | 0.6             | 3.198     | A                             |
| C - A614 Rawcliffe Road (South) | 325                   | 81                      | 322                       | 944               | 0.344 | 324                 | 381                             | 0.4               | 0.5             | 6.015     | A                             |

### 17:00 - 17:15

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 569                   | 142                     | 358                       | 793               | 0.718 | 564                 | 433                             | 1.3               | 2.5             | 15.935    | C                             |
| B - A614 Rawcliffe Road (East)  | 795                   | 199                     | 67                        | 1792              | 0.444 | 794                 | 856                             | 0.6               | 0.8             | 3.688     | A                             |
| C - A614 Rawcliffe Road (South) | 397                   | 99                      | 395                       | 902               | 0.441 | 396                 | 466                             | 0.5               | 0.8             | 7.369     | A                             |

### 17:15 - 17:30

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 569                   | 142                     | 359                       | 793               | 0.718 | 569                 | 434                             | 2.5               | 2.6             | 16.580    | C                             |
| B - A614 Rawcliffe Road (East)  | 795                   | 199                     | 67                        | 1792              | 0.444 | 795                 | 861                             | 0.8               | 0.8             | 3.693     | A                             |
| C - A614 Rawcliffe Road (South) | 397                   | 99                      | 395                       | 902               | 0.441 | 397                 | 467                             | 0.8               | 0.8             | 7.402     | A                             |

### 17:30 - 17:45

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 465                   | 116                     | 294                       | 832               | 0.558 | 470                 | 355                             | 2.6               | 1.3             | 10.399    | B                             |
| B - A614 Rawcliffe Road (East)  | 649                   | 162                     | 55                        | 1799              | 0.361 | 650                 | 708                             | 0.8               | 0.6             | 3.209     | A                             |
| C - A614 Rawcliffe Road (South) | 325                   | 81                      | 323                       | 944               | 0.344 | 326                 | 382                             | 0.8               | 0.5             | 6.049     | A                             |

### 17:45 - 18:00

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 389                   | 97                      | 246                       | 862               | 0.452 | 391                 | 297                             | 1.3               | 0.9             | 7.946     | A                             |
| B - A614 Rawcliffe Road (East)  | 544                   | 136                     | 46                        | 1804              | 0.301 | 544                 | 591                             | 0.6               | 0.4             | 2.924     | A                             |
| C - A614 Rawcliffe Road (South) | 272                   | 68                      | 271                       | 974               | 0.279 | 272                 | 320                             | 0.5               | 0.4             | 5.324     | A                             |

# 2026 Do Minimum, AM

## Data Errors and Warnings

| Severity | Area     | Item                                                  | Description                                                                                                      |
|----------|----------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A614 Rawcliffe Road (South) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 1        | Site 1 | Standard Roundabout |                       | A, B, C   | 10.00              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 10.00             | B           |

## 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 | 2026 Do Minimum | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A645 (West)                 |            | ONE HOUR     | ✓            | 426                     | 100.000            |
| B - A614 Rawcliffe Road (East)  |            | ONE HOUR     | ✓            | 905                     | 100.000            |
| C - A614 Rawcliffe Road (South) |            | ONE HOUR     | ✓            | 467                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

| From | To                              |                 |                                |                                 |
|------|---------------------------------|-----------------|--------------------------------|---------------------------------|
|      |                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
|      | A - A645 (West)                 | 0               | 395                            | 31                              |
|      | B - A614 Rawcliffe Road (East)  | 608             | 0                              | 297                             |
|      | C - A614 Rawcliffe Road (South) | 54              | 412                            | 1                               |

### Proportions

| From | To                              |                 |                                |                                 |
|------|---------------------------------|-----------------|--------------------------------|---------------------------------|
|      |                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
|      | A - A645 (West)                 | 0.00            | 0.93                           | 0.07                            |
|      | B - A614 Rawcliffe Road (East)  | 0.67            | 0.00                           | 0.33                            |
|      | C - A614 Rawcliffe Road (South) | 0.12            | 0.88                           | 0.00                            |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 9                              | 4                               |
| B - A614 Rawcliffe Road (East)  |    | 4               | 0                              | 5                               |
| C - A614 Rawcliffe Road (South) |    | 4               | 3                              | 0                               |

### Average PCU Per Veh

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 1.000           | 1.088                          | 1.036                           |
| B - A614 Rawcliffe Road (East)  |    | 1.041           | 1.000                          | 1.053                           |
| C - A614 Rawcliffe Road (South) |    | 1.042           | 1.027                          | 1.000                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                             | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|---------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                 | 07:15-07:30  | 321             | 321                    |
|                                 | 07:30-07:45  | 383             | 383                    |
|                                 | 07:45-08:00  | 469             | 469                    |
|                                 | 08:00-08:15  | 469             | 469                    |
|                                 | 08:15-08:30  | 383             | 383                    |
|                                 | 08:30-08:45  | 321             | 321                    |
| B - A614 Rawcliffe Road (East)  | 07:15-07:30  | 681             | 681                    |
|                                 | 07:30-07:45  | 814             | 814                    |
|                                 | 07:45-08:00  | 996             | 996                    |
|                                 | 08:00-08:15  | 996             | 996                    |
|                                 | 08:15-08:30  | 814             | 814                    |
|                                 | 08:30-08:45  | 681             | 681                    |
| C - A614 Rawcliffe Road (South) | 07:15-07:30  | 352             | 352                    |
|                                 | 07:30-07:45  | 420             | 420                    |
|                                 | 07:45-08:00  | 514             | 514                    |
|                                 | 08:00-08:15  | 514             | 514                    |
|                                 | 08:15-08:30  | 420             | 420                    |
|                                 | 08:30-08:45  | 352             | 352                    |

## 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) |
|---------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                 | 0.64    | 14.67         | 1.9             | B       | 391                     | 586                           |
| B - A614 Rawcliffe Road (East)  | 0.55    | 4.82          | 1.3             | A       | 830                     | 1246                          |
| C - A614 Rawcliffe Road (South) | 0.69    | 16.18         | 2.3             | C       | 429                     | 643                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 321                   | 80                      | 309                       | 823               | 0.389 | 318                 | 496                             | 0.0               | 0.7             | 7.683     | A                             |
| B - A614 Rawcliffe Road (East)  | 681                   | 170                     | 24                        | 1818              | 0.375 | 679                 | 603                             | 0.0               | 0.6             | 3.295     | A                             |
| C - A614 Rawcliffe Road (South) | 352                   | 88                      | 456                       | 866               | 0.406 | 349                 | 247                             | 0.0               | 0.7             | 7.118     | A                             |

**07:30 - 07:45**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 383                   | 96                      | 370                       | 788               | 0.487 | 382                 | 594                             | 0.7               | 1.0             | 9.824     | A                             |
| B - A614 Rawcliffe Road (East)  | 814                   | 203                     | 29                        | 1815              | 0.448 | 813                 | 723                             | 0.6               | 0.8             | 3.749     | A                             |
| C - A614 Rawcliffe Road (South) | 420                   | 105                     | 546                       | 814               | 0.516 | 418                 | 295                             | 0.7               | 1.1             | 9.321     | A                             |

**07:45 - 08:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 469                   | 117                     | 451                       | 737               | 0.637 | 466                 | 727                             | 1.0               | 1.8             | 14.238    | B                             |
| B - A614 Rawcliffe Road (East)  | 996                   | 249                     | 35                        | 1811              | 0.550 | 995                 | 882                             | 0.8               | 1.3             | 4.598     | A                             |
| C - A614 Rawcliffe Road (South) | 514                   | 129                     | 668                       | 743               | 0.692 | 510                 | 362                             | 1.1               | 2.2             | 15.591    | C                             |

**08:00 - 08:15**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 469                   | 117                     | 455                       | 734               | 0.639 | 469                 | 729                             | 1.8               | 1.9             | 14.673    | B                             |
| B - A614 Rawcliffe Road (East)  | 996                   | 249                     | 35                        | 1811              | 0.550 | 996                 | 888                             | 1.3               | 1.3             | 4.617     | A                             |
| C - A614 Rawcliffe Road (South) | 514                   | 129                     | 669                       | 742               | 0.693 | 514                 | 362                             | 2.2               | 2.3             | 16.181    | C                             |

**08:15 - 08:30**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 383                   | 96                      | 375                       | 783               | 0.489 | 386                 | 597                             | 1.9               | 1.1             | 9.926     | A                             |
| B - A614 Rawcliffe Road (East)  | 814                   | 203                     | 29                        | 1815              | 0.448 | 815                 | 732                             | 1.3               | 0.9             | 3.768     | A                             |
| C - A614 Rawcliffe Road (South) | 420                   | 105                     | 548                       | 813               | 0.517 | 424                 | 297                             | 2.3               | 1.1             | 9.634     | A                             |

**08:30 - 08:45**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 321                   | 80                      | 312                       | 821               | 0.391 | 322                 | 499                             | 1.1               | 0.7             | 7.847     | A                             |
| B - A614 Rawcliffe Road (East)  | 681                   | 170                     | 24                        | 1818              | 0.375 | 682                 | 610                             | 0.9               | 0.6             | 3.317     | A                             |
| C - A614 Rawcliffe Road (South) | 352                   | 88                      | 458                       | 865               | 0.407 | 353                 | 248                             | 1.1               | 0.7             | 7.256     | A                             |



# 2026 Do Minimum, PM

## Data Errors and Warnings

| Severity | Area     | Item                                                  | Description                                                                                                      |
|----------|----------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A614 Rawcliffe Road (South) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 1        | Site 1 | Standard Roundabout |                       | A, B, C   | 11.97              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 11.97             | B           |

## 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 | 2026 Do Minimum | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                             | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A645 (West)                 |            | ONE HOUR     | ✓            | 575                     | 100.000            |
| B - A614 Rawcliffe Road (East)  |            | ONE HOUR     | ✓            | 829                     | 100.000            |
| C - A614 Rawcliffe Road (South) |            | ONE HOUR     | ✓            | 388                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 514                            | 61                              |
| B - A614 Rawcliffe Road (East)  |    | 424             | 0                              | 405                             |
| C - A614 Rawcliffe Road (South) |    | 35              | 351                            | 0                               |

### Proportions

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0.00            | 0.89                           | 0.11                            |
| B - A614 Rawcliffe Road (East)  |    | 0.51            | 0.00                           | 0.49                            |
| C - A614 Rawcliffe Road (South) |    | 0.09            | 0.91                           | 0.00                            |

## Vehicle Mix



### Heavy Vehicle Percentages

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 4                              | 0                               |
| B - A614 Rawcliffe Road (East)  |    | 3               | 0                              | 1                               |
| C - A614 Rawcliffe Road (South) |    | 3               | 4                              | 0                               |

### Average PCU Per Veh

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 1.000           | 1.039                          | 1.000                           |
| B - A614 Rawcliffe Road (East)  |    | 1.034           | 1.000                          | 1.012                           |
| C - A614 Rawcliffe Road (South) |    | 1.031           | 1.038                          | 1.000                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                             | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|---------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                 | 16:30-16:45  | 433             | 433                    |
|                                 | 16:45-17:00  | 517             | 517                    |
|                                 | 17:00-17:15  | 633             | 633                    |
|                                 | 17:15-17:30  | 633             | 633                    |
|                                 | 17:30-17:45  | 517             | 517                    |
|                                 | 17:45-18:00  | 433             | 433                    |
| B - A614 Rawcliffe Road (East)  | 16:30-16:45  | 624             | 624                    |
|                                 | 16:45-17:00  | 745             | 745                    |
|                                 | 17:00-17:15  | 913             | 913                    |
|                                 | 17:15-17:30  | 913             | 913                    |
|                                 | 17:30-17:45  | 745             | 745                    |
|                                 | 17:45-18:00  | 624             | 624                    |
| C - A614 Rawcliffe Road (South) | 16:30-16:45  | 291             | 291                    |
|                                 | 16:45-17:00  | 347             | 347                    |
|                                 | 17:00-17:15  | 425             | 425                    |
|                                 | 17:15-17:30  | 425             | 425                    |
|                                 | 17:30-17:45  | 347             | 347                    |
|                                 | 17:45-18:00  | 291             | 291                    |

## 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) |
|---------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                 | 0.82    | 25.46         | 4.3             | D       | 528                     | 791                           |
| B - A614 Rawcliffe Road (East)  | 0.51    | 4.19          | 1.1             | A       | 761                     | 1141                          |
| C - A614 Rawcliffe Road (South) | 0.49    | 8.58          | 1.0             | A       | 354                     | 531                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 433                   | 108                     | 263                       | 851               | 0.508 | 429                 | 344                             | 0.0               | 1.0             | 8.730     | A                             |
| B - A614 Rawcliffe Road (East)  | 624                   | 156                     | 45                        | 1805              | 0.346 | 622                 | 646                             | 0.0               | 0.5             | 3.109     | A                             |
| C - A614 Rawcliffe Road (South) | 291                   | 73                      | 318                       | 947               | 0.307 | 289                 | 349                             | 0.0               | 0.5             | 5.657     | A                             |

**16:45 - 17:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 517                   | 129                     | 315                       | 820               | 0.631 | 514                 | 412                             | 1.0               | 1.7             | 12.095    | B                             |
| B - A614 Rawcliffe Road (East)  | 745                   | 188                     | 55                        | 1799              | 0.414 | 745                 | 775                             | 0.5               | 0.7             | 3.491     | A                             |
| C - A614 Rawcliffe Road (South) | 347                   | 87                      | 381                       | 910               | 0.381 | 346                 | 418                             | 0.5               | 0.6             | 6.613     | A                             |

**17:00 - 17:15**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 633                   | 158                     | 385                       | 777               | 0.815 | 624                 | 505                             | 1.7               | 4.0             | 23.066    | C                             |
| B - A614 Rawcliffe Road (East)  | 913                   | 228                     | 66                        | 1792              | 0.509 | 911                 | 943                             | 0.7               | 1.1             | 4.176     | A                             |
| C - A614 Rawcliffe Road (South) | 425                   | 106                     | 466                       | 880               | 0.494 | 424                 | 511                             | 0.6               | 1.0             | 8.516     | A                             |

**17:15 - 17:30**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 633                   | 158                     | 386                       | 776               | 0.816 | 632                 | 505                             | 4.0               | 4.3             | 25.461    | D                             |
| B - A614 Rawcliffe Road (East)  | 913                   | 228                     | 67                        | 1792              | 0.509 | 913                 | 951                             | 1.1               | 1.1             | 4.190     | A                             |
| C - A614 Rawcliffe Road (South) | 425                   | 106                     | 467                       | 880               | 0.494 | 425                 | 513                             | 1.0               | 1.0             | 8.578     | A                             |

**17:30 - 17:45**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 517                   | 129                     | 317                       | 818               | 0.632 | 527                 | 413                             | 4.3               | 1.8             | 13.167    | B                             |
| B - A614 Rawcliffe Road (East)  | 745                   | 188                     | 56                        | 1798              | 0.414 | 747                 | 788                             | 1.1               | 0.7             | 3.505     | A                             |
| C - A614 Rawcliffe Road (South) | 347                   | 87                      | 382                       | 909               | 0.382 | 346                 | 421                             | 1.0               | 0.6             | 6.669     | A                             |

**17:45 - 18:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 433                   | 108                     | 265                       | 850               | 0.509 | 436                 | 346                             | 1.8               | 1.1             | 9.059     | A                             |
| B - A614 Rawcliffe Road (East)  | 624                   | 156                     | 46                        | 1804              | 0.346 | 625                 | 655                             | 0.7               | 0.5             | 3.126     | A                             |
| C - A614 Rawcliffe Road (South) | 291                   | 73                      | 320                       | 946               | 0.307 | 291                 | 352                             | 0.6               | 0.5             | 5.712     | A                             |

# 2026 Do Something, AM

## Data Errors and Warnings

| Severity | Area     | Item                                                  | Description                                                                                                      |
|----------|----------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A614 Rawcliffe Road (South) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 1        | Site 1 | Standard Roundabout |                       | A, B, C   | 11.26              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 11.26             | B           |

## 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 | 2026 Do Something | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A645 (West)                 |            | ONE HOUR     | ✓            | 452                     | 100.000            |
| B - A614 Rawcliffe Road (East)  |            | ONE HOUR     | ✓            | 961                     | 100.000            |
| C - A614 Rawcliffe Road (South) |            | ONE HOUR     | ✓            | 467                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 421                            | 31                              |
| B - A614 Rawcliffe Road (East)  |    | 664             | 0                              | 297                             |
| C - A614 Rawcliffe Road (South) |    | 54              | 412                            | 1                               |

### Proportions

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0.00            | 0.93                           | 0.07                            |
| B - A614 Rawcliffe Road (East)  |    | 0.69            | 0.00                           | 0.31                            |
| C - A614 Rawcliffe Road (South) |    | 0.12            | 0.88                           | 0.00                            |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 9                              | 4                               |
| B - A614 Rawcliffe Road (East)  |    | 4               | 0                              | 5                               |
| C - A614 Rawcliffe Road (South) |    | 4               | 3                              | 0                               |

### Average PCU Per Veh

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 1.000           | 1.088                          | 1.036                           |
| B - A614 Rawcliffe Road (East)  |    | 1.041           | 1.000                          | 1.053                           |
| C - A614 Rawcliffe Road (South) |    | 1.042           | 1.027                          | 1.000                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                             | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|---------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                 | 07:15-07:30  | 340             | 340                    |
|                                 | 07:30-07:45  | 406             | 406                    |
|                                 | 07:45-08:00  | 498             | 498                    |
|                                 | 08:00-08:15  | 498             | 498                    |
|                                 | 08:15-08:30  | 406             | 406                    |
|                                 | 08:30-08:45  | 340             | 340                    |
| B - A614 Rawcliffe Road (East)  | 07:15-07:30  | 723             | 723                    |
|                                 | 07:30-07:45  | 864             | 864                    |
|                                 | 07:45-08:00  | 1058            | 1058                   |
|                                 | 08:00-08:15  | 1058            | 1058                   |
|                                 | 08:15-08:30  | 864             | 864                    |
|                                 | 08:30-08:45  | 723             | 723                    |
| C - A614 Rawcliffe Road (South) | 07:15-07:30  | 352             | 352                    |
|                                 | 07:30-07:45  | 420             | 420                    |
|                                 | 07:45-08:00  | 514             | 514                    |
|                                 | 08:00-08:15  | 514             | 514                    |
|                                 | 08:15-08:30  | 420             | 420                    |
|                                 | 08:30-08:45  | 352             | 352                    |

## 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) |
|---------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                 | 0.68    | 16.42         | 2.2             | C       | 415                     | 622                           |
| B - A614 Rawcliffe Road (East)  | 0.58    | 4.99          | 1.5             | A       | 882                     | 1323                          |
| C - A614 Rawcliffe Road (South) | 0.73    | 19.15         | 2.7             | C       | 429                     | 643                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 340                   | 85                      | 308                       | 823               | 0.413 | 337                 | 538                             | 0.0               | 0.8             | 7.982     | A                             |
| B - A614 Rawcliffe Road (East)  | 723                   | 181                     | 24                        | 1818              | 0.398 | 721                 | 622                             | 0.0               | 0.7             | 3.419     | A                             |
| C - A614 Rawcliffe Road (South) | 352                   | 88                      | 498                       | 842               | 0.418 | 349                 | 247                             | 0.0               | 0.7             | 7.464     | A                             |

### 07:30 - 07:45

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 406                   | 102                     | 370                       | 786               | 0.517 | 405                 | 645                             | 0.8               | 1.1             | 10.199    | B                             |
| B - A614 Rawcliffe Road (East)  | 864                   | 216                     | 29                        | 1815              | 0.476 | 863                 | 746                             | 0.7               | 0.9             | 3.946     | A                             |
| C - A614 Rawcliffe Road (South) | 420                   | 105                     | 596                       | 785               | 0.535 | 418                 | 295                             | 0.7               | 1.2             | 10.050    | B                             |

### 07:45 - 08:00

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 498                   | 124                     | 450                       | 737               | 0.675 | 494                 | 788                             | 1.1               | 2.1             | 15.765    | C                             |
| B - A614 Rawcliffe Road (East)  | 1058                  | 265                     | 35                        | 1811              | 0.584 | 1056                | 908                             | 0.9               | 1.4             | 4.968     | A                             |
| C - A614 Rawcliffe Road (South) | 514                   | 129                     | 730                       | 707               | 0.727 | 509                 | 361                             | 1.2               | 2.6             | 18.160    | C                             |

### 08:00 - 08:15

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 498                   | 124                     | 455                       | 734               | 0.678 | 497                 | 790                             | 2.1               | 2.2             | 16.422    | C                             |
| B - A614 Rawcliffe Road (East)  | 1058                  | 265                     | 35                        | 1811              | 0.584 | 1058                | 917                             | 1.4               | 1.5             | 4.994     | A                             |
| C - A614 Rawcliffe Road (South) | 514                   | 129                     | 731                       | 706               | 0.728 | 514                 | 362                             | 2.6               | 2.7             | 19.148    | C                             |

### 08:15 - 08:30

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 406                   | 102                     | 376                       | 782               | 0.520 | 410                 | 648                             | 2.2               | 1.2             | 10.618    | B                             |
| B - A614 Rawcliffe Road (East)  | 864                   | 216                     | 29                        | 1815              | 0.476 | 866                 | 758                             | 1.5               | 1.0             | 3.971     | A                             |
| C - A614 Rawcliffe Road (South) | 420                   | 105                     | 598                       | 784               | 0.536 | 426                 | 297                             | 2.7               | 1.2             | 10.502    | B                             |

### 08:30 - 08:45

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 340                   | 85                      | 313                       | 821               | 0.415 | 342                 | 541                             | 1.2               | 0.8             | 8.181     | A                             |
| B - A614 Rawcliffe Road (East)  | 723                   | 181                     | 24                        | 1818              | 0.398 | 725                 | 630                             | 1.0               | 0.7             | 3.442     | A                             |
| C - A614 Rawcliffe Road (South) | 352                   | 88                      | 501                       | 840               | 0.418 | 354                 | 248                             | 1.2               | 0.8             | 7.633     | A                             |

# 2026 Do Something, PM

## Data Errors and Warnings

| Severity | Area     | Item                                                  | Description                                                                                                      |
|----------|----------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A614 Rawcliffe Road (South) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 1        | Site 1 | Standard Roundabout |                       | A, B, C   | 20.08              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 20.08             | C           |

## 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 | 2026 Do Something | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                             | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A645 (West)                 |            | ONE HOUR     | ✓            | 646                     | 100.000            |
| B - A614 Rawcliffe Road (East)  |            | ONE HOUR     | ✓            | 855                     | 100.000            |
| C - A614 Rawcliffe Road (South) |            | ONE HOUR     | ✓            | 386                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

| From                            | To              |                                |                                 |  |
|---------------------------------|-----------------|--------------------------------|---------------------------------|--|
|                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |  |
| A - A645 (West)                 | 0               | 585                            | 61                              |  |
| B - A614 Rawcliffe Road (East)  | 450             | 0                              | 405                             |  |
| C - A614 Rawcliffe Road (South) | 35              | 351                            | 0                               |  |

### Proportions

| From                            | To              |                                |                                 |  |
|---------------------------------|-----------------|--------------------------------|---------------------------------|--|
|                                 | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |  |
| A - A645 (West)                 | 0.00            | 0.91                           | 0.09                            |  |
| B - A614 Rawcliffe Road (East)  | 0.53            | 0.00                           | 0.47                            |  |
| C - A614 Rawcliffe Road (South) | 0.09            | 0.91                           | 0.00                            |  |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 0               | 4                              | 0                               |
| B - A614 Rawcliffe Road (East)  |    | 3               | 0                              | 1                               |
| C - A614 Rawcliffe Road (South) |    | 3               | 4                              | 0                               |

### Average PCU Per Veh

| From                            | To |                 |                                |                                 |
|---------------------------------|----|-----------------|--------------------------------|---------------------------------|
|                                 |    | A - A645 (West) | B - A614 Rawcliffe Road (East) | C - A614 Rawcliffe Road (South) |
| A - A645 (West)                 |    | 1.000           | 1.039                          | 1.000                           |
| B - A614 Rawcliffe Road (East)  |    | 1.034           | 1.000                          | 1.012                           |
| C - A614 Rawcliffe Road (South) |    | 1.031           | 1.038                          | 1.000                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                             | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|---------------------------------|--------------|-----------------|------------------------|
| A - A645 (West)                 | 16:30-16:45  | 488             | 488                    |
|                                 | 16:45-17:00  | 581             | 581                    |
|                                 | 17:00-17:15  | 711             | 711                    |
|                                 | 17:15-17:30  | 711             | 711                    |
|                                 | 17:30-17:45  | 581             | 581                    |
|                                 | 17:45-18:00  | 488             | 488                    |
| B - A614 Rawcliffe Road (East)  | 16:30-16:45  | 644             | 644                    |
|                                 | 16:45-17:00  | 769             | 769                    |
|                                 | 17:00-17:15  | 941             | 941                    |
|                                 | 17:15-17:30  | 941             | 941                    |
|                                 | 17:30-17:45  | 769             | 769                    |
|                                 | 17:45-18:00  | 644             | 644                    |
| C - A614 Rawcliffe Road (South) | 16:30-16:45  | 291             | 291                    |
|                                 | 16:45-17:00  | 347             | 347                    |
|                                 | 17:00-17:15  | 425             | 425                    |
|                                 | 17:15-17:30  | 425             | 425                    |
|                                 | 17:30-17:45  | 347             | 347                    |
|                                 | 17:45-18:00  | 291             | 291                    |

## 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) |
|---------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A645 (West)                 | 0.92    | 47.60         | 8.8             | E       | 593                     | 889                           |
| B - A614 Rawcliffe Road (East)  | 0.53    | 4.33          | 1.1             | A       | 785                     | 1177                          |
| C - A614 Rawcliffe Road (South) | 0.50    | 8.92          | 1.0             | A       | 354                     | 531                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 488                   | 122                     | 263                       | 851               | 0.571 | 481                 | 364                             | 0.0               | 1.3             | 9.922     | A                             |
| B - A614 Rawcliffe Road (East)  | 644                   | 161                     | 45                        | 1805              | 0.357 | 641                 | 698                             | 0.0               | 0.6             | 3.162     | A                             |
| C - A614 Rawcliffe Road (South) | 291                   | 73                      | 338                       | 935               | 0.311 | 289                 | 349                             | 0.0               | 0.5             | 5.758     | A                             |



**16:45 - 17:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 581                   | 145                     | 315                       | 820               | 0.709 | 577                 | 436                             | 1.3               | 2.4             | 15.075    | C                             |
| B - A614 Rawcliffe Road (East)  | 769                   | 192                     | 54                        | 1799              | 0.427 | 768                 | 837                             | 0.6               | 0.8             | 3.571     | A                             |
| C - A614 Rawcliffe Road (South) | 347                   | 87                      | 404                       | 897               | 0.387 | 346                 | 418                             | 0.5               | 0.6             | 6.776     | A                             |

**17:00 - 17:15**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 711                   | 178                     | 385                       | 777               | 0.916 | 691                 | 533                             | 2.4               | 7.5             | 38.717    | E                             |
| B - A614 Rawcliffe Road (East)  | 941                   | 235                     | 65                        | 1793              | 0.525 | 940                 | 1011                            | 0.8               | 1.1             | 4.313     | A                             |
| C - A614 Rawcliffe Road (South) | 425                   | 106                     | 495                       | 844               | 0.504 | 423                 | 510                             | 0.6               | 1.0             | 8.848     | A                             |

**17:15 - 17:30**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 711                   | 178                     | 386                       | 776               | 0.917 | 706                 | 534                             | 7.5               | 8.8             | 47.596    | E                             |
| B - A614 Rawcliffe Road (East)  | 941                   | 235                     | 67                        | 1792              | 0.525 | 941                 | 1026                            | 1.1               | 1.1             | 4.332     | A                             |
| C - A614 Rawcliffe Road (South) | 425                   | 106                     | 495                       | 843               | 0.504 | 425                 | 513                             | 1.0               | 1.0             | 8.921     | A                             |

**17:30 - 17:45**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 581                   | 145                     | 317                       | 818               | 0.710 | 605                 | 437                             | 8.8               | 2.7             | 19.203    | C                             |
| B - A614 Rawcliffe Road (East)  | 769                   | 192                     | 57                        | 1798              | 0.428 | 770                 | 865                             | 1.1               | 0.8             | 3.592     | A                             |
| C - A614 Rawcliffe Road (South) | 347                   | 87                      | 405                       | 896               | 0.387 | 349                 | 422                             | 1.0               | 0.7             | 6.841     | A                             |

**17:45 - 18:00**

| Arm                             | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A645 (West)                 | 486                   | 122                     | 265                       | 850               | 0.572 | 491                 | 366                             | 2.7               | 1.4             | 10.535    | B                             |
| B - A614 Rawcliffe Road (East)  | 644                   | 161                     | 46                        | 1804              | 0.357 | 644                 | 710                             | 0.8               | 0.6             | 3.181     | A                             |
| C - A614 Rawcliffe Road (South) | 291                   | 73                      | 339                       | 934               | 0.311 | 291                 | 352                             | 0.7               | 0.5             | 5.814     | A                             |



| <b>Junctions 10</b>                                                                                                                                              |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>ARCADY 10 - Roundabout Module</b>                                                                                                                             |  |
| Version: 10.0.4.1693                                                                                                                                             |  |
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**Filename:** J3 - No Mitigation.j10

**Path:** \\uk.wspgroup.com\Central Data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\8 - Traffic Flow Analysis and Models\05 - Models and Outputs\Models

**Report generation date:** 15/03/2022 16:47:35

- 
- »2018 Baseline, AM
  - »2018 Baseline, PM
  - »2022 Future Baseline, AM
  - »2022 Future Baseline, PM
  - »2026 Future Baseline, AM
  - »2026 Future Baseline, PM
  - »2026 Do Minimum, AM
  - »2026 Do Minimum, PM
  - »2026 Do Something, AM
  - »2026 Do Something, PM

## Summary of junction performance

|                                | AM                   |             |           |      |     | PM     |             |           |      |     |
|--------------------------------|----------------------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|
|                                | Set ID               | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS |
|                                | 2018 Baseline        |             |           |      |     |        |             |           |      |     |
| A - A614 Rawcliffe Road (West) | D1                   | 1.6         | 7.95      | 0.61 | A   | D2     | 2.3         | 10.33     | 0.70 | B   |
| B - Local Access               |                      | 0.0         | 5.53      | 0.01 | A   |        | 0.0         | 6.51      | 0.03 | A   |
| C - Airmyn Road                |                      | 0.6         | 9.65      | 0.38 | A   |        | 0.4         | 8.77      | 0.29 | A   |
| D - A614 Rawcliffe Road (East) |                      | 0.9         | 4.02      | 0.45 | A   |        | 0.9         | 3.99      | 0.45 | A   |
| E - Rawcliffe Road             |                      | 1.0         | 10.44     | 0.48 | B   |        | 1.1         | 10.59     | 0.50 | B   |
|                                | 2022 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A614 Rawcliffe Road (West) | D3                   | 1.8         | 8.52      | 0.63 | A   | D4     | 2.6         | 11.42     | 0.72 | B   |
| B - Local Access               |                      | 0.0         | 5.70      | 0.01 | A   |        | 0.0         | 6.78      | 0.03 | A   |
| C - Airmyn Road                |                      | 0.6         | 10.28     | 0.39 | B   |        | 0.4         | 9.23      | 0.30 | A   |
| D - A614 Rawcliffe Road (East) |                      | 0.9         | 4.16      | 0.47 | A   |        | 0.9         | 4.12      | 0.47 | A   |
| E - Rawcliffe Road             |                      | 1.1         | 11.31     | 0.51 | B   |        | 1.2         | 11.40     | 0.53 | B   |
|                                | 2026 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A614 Rawcliffe Road (West) | D5                   | 2.0         | 9.09      | 0.65 | A   | D6     | 3.0         | 12.63     | 0.75 | B   |
| B - Local Access               |                      | 0.0         | 5.85      | 0.01 | A   |        | 0.0         | 7.04      | 0.04 | A   |
| C - Airmyn Road                |                      | 0.7         | 10.89     | 0.41 | B   |        | 0.5         | 9.70      | 0.32 | A   |
| D - A614 Rawcliffe Road (East) |                      | 1.0         | 4.29      | 0.48 | A   |        | 1.0         | 4.24      | 0.48 | A   |
| E - Rawcliffe Road             |                      | 1.2         | 12.18     | 0.53 | B   |        | 1.4         | 12.23     | 0.55 | B   |
|                                | 2026 Do Minimum      |             |           |      |     |        |             |           |      |     |
| A - A614 Rawcliffe Road (West) | D7                   | 3.4         | 14.07     | 0.77 | B   | D8     | 6.1         | 23.91     | 0.87 | C   |
| B - Local Access               |                      | 0.0         | 6.97      | 0.02 | A   |        | 0.0         | 8.88      | 0.04 | A   |
| C - Airmyn Road                |                      | 1.0         | 15.39     | 0.51 | C   |        | 0.7         | 12.75     | 0.40 | B   |
| D - A614 Rawcliffe Road (East) |                      | 1.5         | 5.34      | 0.57 | A   |        | 1.5         | 5.32      | 0.58 | A   |
| E - Rawcliffe Road             |                      | 2.6         | 20.93     | 0.71 | C   |        | 3.2         | 23.87     | 0.75 | C   |
|                                | 2026 Do Something    |             |           |      |     |        |             |           |      |     |
| A - A614 Rawcliffe Road (West) | D9                   | 3.9         | 15.67     | 0.79 | C   | D10    | 11.2        | 41.13     | 0.94 | E   |
| B - Local Access               |                      | 0.0         | 7.18      | 0.02 | A   |        | 0.1         | 9.55      | 0.05 | A   |
| C - Airmyn Road                |                      | 1.1         | 16.29     | 0.52 | C   |        | 0.7         | 14.51     | 0.43 | B   |
| D - A614 Rawcliffe Road (East) |                      | 1.7         | 5.81      | 0.61 | A   |        | 1.6         | 5.52      | 0.59 | A   |
| E - Rawcliffe Road             |                      | 3.1         | 25.32     | 0.75 | D   |        | 3.5         | 26.20     | 0.77 | D   |

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

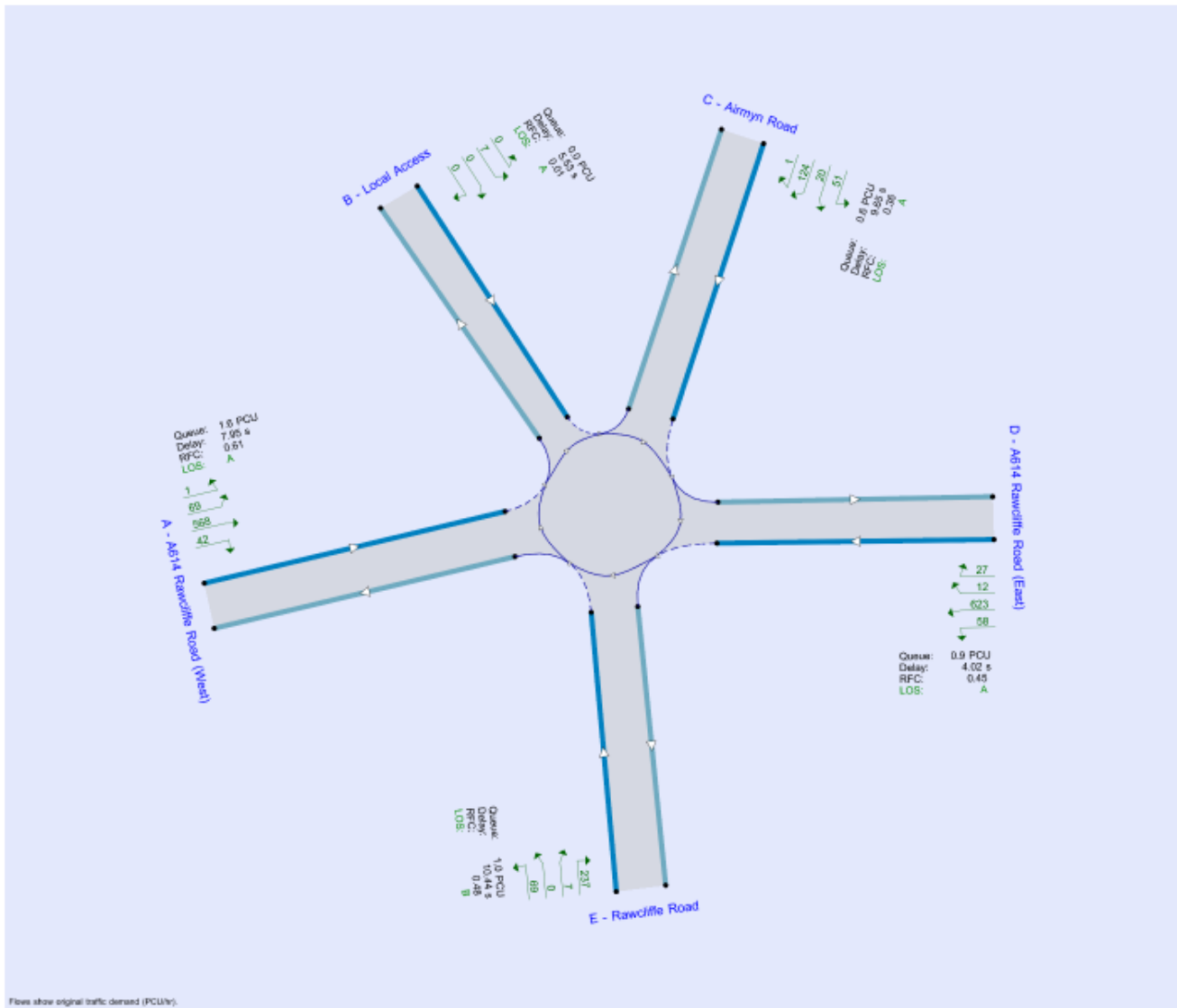
## File summary

### File Description

|             |                |
|-------------|----------------|
| Title       | Site 2         |
| Location    |                |
| Site number |                |
| Date        | 28/03/2018     |
| Version     |                |
| Status      |                |
| Identifier  |                |
| Client      |                |
| Jobnumber   |                |
| Enumerator  | CORP\INTW00749 |
| Description |                |

## Units

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



## Analysis Options

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

## Demand Set Summary

| ID  | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1  | 2018 Baseline        | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D2  | 2018 Baseline        | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D3  | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D4  | 2022 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D5  | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D6  | 2026 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D7  | 2026 Do Minimum      | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D8  | 2026 Do Minimum      | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D9  | 2026 Do Something    | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D10 | 2026 Do Something    | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

## Analysis Set Details

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

---

# 2018 Baseline, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 7.05               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 7.05              | A           |

## Arms

### Arms

| Arm | Name                       | Description | No give-way line |
|-----|----------------------------|-------------|------------------|
| A   | A614 Rawcliffe Road (West) |             |                  |
| B   | Local Access               |             |                  |
| C   | Airmyn Road                |             |                  |
| D   | A614 Rawcliffe Road (East) |             |                  |
| E   | Rawcliffe Road             |             |                  |

### Roundabout Geometry

| Arm                            | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Entry only | Exit only |
|--------------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|------------|-----------|
| A - A614 Rawcliffe Road (West) | 3.76                             | 5.50                | 4.5                             | 22.2                 | 51.6                              | 25.0                               |            |           |
| B - Local Access               | 3.70                             | 3.90                | 0.8                             | 16.1                 | 51.6                              | 13.5                               |            |           |
| C - Airmyn Road                | 3.10                             | 3.60                | 7.8                             | 9.4                  | 51.6                              | 20.5                               |            |           |
| D - A614 Rawcliffe Road (East) | 4.30                             | 7.30                | 17.2                            | 23.5                 | 51.6                              | 31.0                               |            |           |
| E - Rawcliffe Road             | 3.80                             | 5.10                | 4.1                             | 23.5                 | 51.6                              | 26.0                               |            |           |

## Slope / Intercept / Capacity

### Arm Intercept Adjustments

| Arm                            | Type   | Reason | Direct intercept adjustment (PCU/hr) |
|--------------------------------|--------|--------|--------------------------------------|
| A - A614 Rawcliffe Road (West) | None   |        |                                      |
| B - Local Access               | None   |        |                                      |
| C - Airmyn Road                | None   |        |                                      |
| D - A614 Rawcliffe Road (East) | None   |        |                                      |
| E - Rawcliffe Road             | Direct |        | -178                                 |

### Roundabout Slope and Intercept used in model

| Arm                            | Final slope | Final intercept (PCU/hr) |
|--------------------------------|-------------|--------------------------|
| A - A614 Rawcliffe Road (West) | 0.552       | 1404                     |
| B - Local Access               | 0.522       | 1206                     |
| C - Airmyn Road                | 0.472       | 1041                     |
| D - A614 Rawcliffe Road (East) | 0.639       | 1893                     |
| E - Rawcliffe Road             | 0.547       | 1198                     |

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2018 Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 680                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 7                       | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 197                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 720                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 314                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                | To                             |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 1                | 69              | 568                            | 42                 |
|      | B - Local Access               | 0                              | 0                | 0               | 7                              | 0                  |
|      | C - Airmyn Road                | 124                            | 1                | 1               | 51                             | 20                 |
|      | D - A614 Rawcliffe Road (East) | 623                            | 12               | 27              | 1                              | 58                 |
|      | E - Rawcliffe Road             | 69                             | 0                | 7               | 237                            | 1                  |

### Proportions

|      |                                | To                             |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.00                           | 0.00             |
|      | C - Airmyn Road                | 0.63                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.88                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

|      |                                | To                             |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 7                              | 11                 |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 2                              | 0                | 0               | 2                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 5                              | 9                | 0               | 0                              | 65                 |
|      | E - Rawcliffe Road             | 1                              | 0                | 13              | 13                             | 0                  |

### Average PCU Per Veh

|      |                                | To                             |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.025                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.052                          | 1.09             |
|      | E - Rawcliffe Road             | 1.015                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 07:15-07:30  | 512             | 512                    |
|                                | 07:30-07:45  | 611             | 611                    |
|                                | 07:45-08:00  | 749             | 749                    |
|                                | 08:00-08:15  | 749             | 749                    |
|                                | 08:15-08:30  | 611             | 611                    |
|                                | 08:30-08:45  | 512             | 512                    |
| B - Local Access               | 07:15-07:30  | 5               | 5                      |
|                                | 07:30-07:45  | 6               | 6                      |
|                                | 07:45-08:00  | 8               | 8                      |
|                                | 08:00-08:15  | 8               | 8                      |
|                                | 08:15-08:30  | 6               | 6                      |
|                                | 08:30-08:45  | 5               | 5                      |
| C - Airmyn Road                | 07:15-07:30  | 148             | 148                    |
|                                | 07:30-07:45  | 177             | 177                    |
|                                | 07:45-08:00  | 216             | 216                    |
|                                | 08:00-08:15  | 216             | 216                    |
|                                | 08:15-08:30  | 177             | 177                    |
|                                | 08:30-08:45  | 148             | 148                    |
| D - A614 Rawcliffe Road (East) | 07:15-07:30  | 542             | 542                    |
|                                | 07:30-07:45  | 647             | 647                    |
|                                | 07:45-08:00  | 793             | 793                    |
|                                | 08:00-08:15  | 793             | 793                    |
|                                | 08:15-08:30  | 647             | 647                    |
|                                | 08:30-08:45  | 542             | 542                    |
| E - Rawcliffe Road             | 07:15-07:30  | 236             | 236                    |
|                                | 07:30-07:45  | 282             | 282                    |
|                                | 07:45-08:00  | 345             | 345                    |
|                                | 08:00-08:15  | 345             | 345                    |
|                                | 08:15-08:30  | 282             | 282                    |
|                                | 08:30-08:45  | 236             | 236                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.61    | 7.95          | 1.6             | A       | 624                     | 936                           |
| B - Local Access               | 0.01    | 5.53          | 0.0             | A       | 6                       | 10                            |
| C - Airmyn Road                | 0.36    | 9.65          | 0.6             | A       | 180                     | 270                           |
| D - A614 Rawcliffe Road (East) | 0.45    | 4.02          | 0.9             | A       | 661                     | 991                           |
| E - Rawcliffe Road             | 0.48    | 10.44         | 1.0             | B       | 288                     | 432                           |

## Main Results for each time segment

### 07:15 - 07:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 512                   | 128                     | 214                       | 1286              | 0.398 | 509                 | 611                             | 0.0               | 0.7             | 4.913     | A                             |
| B - Local Access               | 5                     | 1                       | 713                       | 834               | 0.008 | 5                   | 10                              | 0.0               | 0.0             | 4.342     | A                             |
| C - Airmyn Road                | 148                   | 37                      | 640                       | 739               | 0.200 | 147                 | 78                              | 0.0               | 0.3             | 6.194     | A                             |
| D - A614 Rawcliffe Road (East) | 542                   | 135                     | 141                       | 1803              | 0.301 | 540                 | 646                             | 0.0               | 0.5             | 3.078     | A                             |
| E - Rawcliffe Road             | 236                   | 59                      | 591                       | 875               | 0.270 | 234                 | 90                              | 0.0               | 0.4             | 6.159     | A                             |

### 07:30 - 07:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 611                   | 153                     | 257                       | 1262              | 0.484 | 610                 | 732                             | 0.7               | 1.0             | 5.861     | A                             |
| B - Local Access               | 6                     | 2                       | 855                       | 760               | 0.008 | 6                   | 12                              | 0.0               | 0.0             | 4.774     | A                             |
| C - Airmyn Road                | 177                   | 44                      | 768                       | 679               | 0.260 | 176                 | 93                              | 0.3               | 0.4             | 7.299     | A                             |
| D - A614 Rawcliffe Road (East) | 647                   | 162                     | 169                       | 1785              | 0.362 | 647                 | 775                             | 0.5               | 0.6             | 3.416     | A                             |
| E - Rawcliffe Road             | 282                   | 70                      | 708                       | 811               | 0.347 | 281                 | 108                             | 0.4               | 0.6             | 7.452     | A                             |

### 07:45 - 08:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 749                   | 187                     | 314                       | 1231              | 0.608 | 746                 | 896                             | 1.0               | 1.6             | 7.859     | A                             |
| B - Local Access               | 8                     | 2                       | 1045                      | 661               | 0.012 | 8                   | 15                              | 0.0               | 0.0             | 5.510     | A                             |
| C - Airmyn Road                | 216                   | 54                      | 939                       | 599               | 0.361 | 215                 | 114                             | 0.4               | 0.6             | 9.571     | A                             |
| D - A614 Rawcliffe Road (East) | 793                   | 198                     | 207                       | 1761              | 0.450 | 792                 | 947                             | 0.6               | 0.9             | 4.010     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 866                       | 724               | 0.476 | 344                 | 132                             | 0.6               | 1.0             | 10.337    | B                             |

### 08:00 - 08:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 749                   | 187                     | 315                       | 1230              | 0.608 | 749                 | 898                             | 1.6               | 1.6             | 7.948     | A                             |
| B - Local Access               | 8                     | 2                       | 1049                      | 659               | 0.012 | 8                   | 15                              | 0.0               | 0.0             | 5.527     | A                             |
| C - Airmyn Road                | 216                   | 54                      | 942                       | 597               | 0.362 | 216                 | 114                             | 0.6               | 0.6             | 9.653     | A                             |
| D - A614 Rawcliffe Road (East) | 793                   | 198                     | 208                       | 1761              | 0.450 | 793                 | 951                             | 0.9               | 0.9             | 4.020     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 868                       | 724               | 0.477 | 345                 | 133                             | 1.0               | 1.0             | 10.443    | B                             |

### 08:15 - 08:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 611                   | 153                     | 259                       | 1261              | 0.485 | 614                 | 735                             | 1.6               | 1.0             | 5.936     | A                             |
| B - Local Access               | 6                     | 2                       | 860                       | 757               | 0.008 | 6                   | 12                              | 0.0               | 0.0             | 4.794     | A                             |
| C - Airmyn Road                | 177                   | 44                      | 773                       | 677               | 0.261 | 177                 | 94                              | 0.6               | 0.4             | 7.370     | A                             |
| D - A614 Rawcliffe Road (East) | 647                   | 162                     | 170                       | 1785              | 0.363 | 648                 | 780                             | 0.9               | 0.6             | 3.430     | A                             |
| E - Rawcliffe Road             | 282                   | 70                      | 710                       | 810               | 0.348 | 283                 | 109                             | 1.0               | 0.6             | 7.533     | A                             |

### 08:30 - 08:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 512                   | 128                     | 216                       | 1285              | 0.398 | 513                 | 615                             | 1.0               | 0.7             | 4.972     | A                             |
| B - Local Access               | 5                     | 1                       | 719                       | 831               | 0.008 | 5                   | 10                              | 0.0               | 0.0             | 4.361     | A                             |
| C - Airmyn Road                | 148                   | 37                      | 646                       | 737               | 0.201 | 148                 | 78                              | 0.4               | 0.3             | 6.252     | A                             |
| D - A614 Rawcliffe Road (East) | 542                   | 135                     | 142                       | 1803              | 0.301 | 543                 | 652                             | 0.6               | 0.5             | 3.090     | A                             |
| E - Rawcliffe Road             | 236                   | 59                      | 594                       | 873               | 0.270 | 237                 | 91                              | 0.6               | 0.4             | 6.222     | A                             |





# 2018 Baseline, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 7.90               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 7.90              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2018 Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 748                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 17                      | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 150                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 728                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 345                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                | To                             |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 112             | 588                            | 48                 |
|      | B - Local Access               | 2                              | 0                | 4               | 11                             | 0                  |
|      | C - Airmyn Road                | 90                             | 1                | 0               | 37                             | 22                 |
|      | D - A614 Rawcliffe Road (East) | 544                            | 3                | 83              | 5                              | 94                 |
|      | E - Rawcliffe Road             | 74                             | 0                | 32              | 237                            | 1                  |

### Proportions

|      |                                | To                             |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.12                           | 0.00             |
|      | C - Airmyn Road                | 0.60                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.75                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 4                              | 4                  |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 0                              | 0                | 0               | 3                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 2                              | 0                | 0               | 100                            | 76                 |
|      | E - Rawcliffe Road             | 4                              | 0                | 15              | 15                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.000                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.025                          | 1.00             |
|      | E - Rawcliffe Road             | 1.043                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 16:30-16:45  | 563             | 563                    |
|                                | 16:45-17:00  | 672             | 672                    |
|                                | 17:00-17:15  | 823             | 823                    |
|                                | 17:15-17:30  | 823             | 823                    |
|                                | 17:30-17:45  | 672             | 672                    |
|                                | 17:45-18:00  | 563             | 563                    |
| B - Local Access               | 16:30-16:45  | 12              | 12                     |
|                                | 16:45-17:00  | 15              | 15                     |
|                                | 17:00-17:15  | 18              | 18                     |
|                                | 17:15-17:30  | 18              | 18                     |
|                                | 17:30-17:45  | 15              | 15                     |
|                                | 17:45-18:00  | 12              | 12                     |
| C - Airmyn Road                | 16:30-16:45  | 113             | 113                    |
|                                | 16:45-17:00  | 135             | 135                    |
|                                | 17:00-17:15  | 165             | 165                    |
|                                | 17:15-17:30  | 165             | 165                    |
|                                | 17:30-17:45  | 135             | 135                    |
|                                | 17:45-18:00  | 113             | 113                    |
| D - A614 Rawcliffe Road (East) | 16:30-16:45  | 548             | 548                    |
|                                | 16:45-17:00  | 655             | 655                    |
|                                | 17:00-17:15  | 802             | 802                    |
|                                | 17:15-17:30  | 802             | 802                    |
|                                | 17:30-17:45  | 655             | 655                    |
|                                | 17:45-18:00  | 548             | 548                    |
| E - Rawcliffe Road             | 16:30-16:45  | 259             | 259                    |
|                                | 16:45-17:00  | 310             | 310                    |
|                                | 17:00-17:15  | 379             | 379                    |
|                                | 17:15-17:30  | 379             | 379                    |
|                                | 17:30-17:45  | 310             | 310                    |
|                                | 17:45-18:00  | 259             | 259                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.70    | 10.33         | 2.3             | B       | 686                     | 1029                          |
| B - Local Access               | 0.03    | 6.51          | 0.0             | A       | 15                      | 23                            |
| C - Airmyn Road                | 0.29    | 8.77          | 0.4             | A       | 138                     | 207                           |
| D - A614 Rawcliffe Road (East) | 0.45    | 3.99          | 0.9             | A       | 688                     | 1002                          |
| E - Rawcliffe Road             | 0.50    | 10.59         | 1.1             | B       | 316                     | 474                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 563                   | 141                     | 271                       | 1255              | 0.449 | 560                 | 532                             | 0.0               | 0.8             | 5.350     | A                             |
| B - Local Access               | 12                    | 3                       | 827                       | 774               | 0.016 | 12                  | 3                               | 0.0               | 0.0             | 4.724     | A                             |
| C - Airmyn Road                | 113                   | 28                      | 667                       | 727               | 0.155 | 112                 | 173                             | 0.0               | 0.2             | 5.889     | A                             |
| D - A614 Rawcliffe Road (East) | 548                   | 137                     | 122                       | 1815              | 0.302 | 546                 | 657                             | 0.0               | 0.5             | 3.069     | A                             |
| E - Rawcliffe Road             | 259                   | 65                      | 545                       | 900               | 0.288 | 258                 | 123                             | 0.0               | 0.4             | 6.265     | A                             |

#### 16:45 - 17:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 672                   | 168                     | 325                       | 1225              | 0.549 | 671                 | 637                             | 0.8               | 1.2             | 6.719     | A                             |
| B - Local Access               | 15                    | 4                       | 992                       | 689               | 0.022 | 15                  | 4                               | 0.0               | 0.0             | 5.342     | A                             |
| C - Airmyn Road                | 135                   | 34                      | 799                       | 664               | 0.203 | 135                 | 207                             | 0.2               | 0.3             | 6.839     | A                             |
| D - A614 Rawcliffe Road (East) | 655                   | 164                     | 147                       | 1800              | 0.364 | 654                 | 787                             | 0.5               | 0.6             | 3.401     | A                             |
| E - Rawcliffe Road             | 310                   | 77                      | 653                       | 841               | 0.368 | 309                 | 148                             | 0.4               | 0.6             | 7.573     | A                             |

#### 17:00 - 17:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 823                   | 206                     | 397                       | 1185              | 0.695 | 819                 | 780                             | 1.2               | 2.3             | 10.097    | B                             |
| B - Local Access               | 18                    | 5                       | 1212                      | 574               | 0.032 | 18                  | 4                               | 0.0               | 0.0             | 6.478     | A                             |
| C - Airmyn Road                | 165                   | 41                      | 977                       | 581               | 0.285 | 165                 | 253                             | 0.3               | 0.4             | 8.698     | A                             |
| D - A614 Rawcliffe Road (East) | 802                   | 200                     | 179                       | 1779              | 0.451 | 801                 | 962                             | 0.6               | 0.9             | 3.982     | A                             |
| E - Rawcliffe Road             | 379                   | 95                      | 799                       | 761               | 0.499 | 378                 | 181                             | 0.6               | 1.1             | 10.475    | B                             |

#### 17:15 - 17:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 823                   | 206                     | 398                       | 1184              | 0.695 | 823                 | 781                             | 2.3               | 2.3             | 10.335    | B                             |
| B - Local Access               | 18                    | 5                       | 1217                      | 571               | 0.032 | 18                  | 4                               | 0.0               | 0.0             | 6.511     | A                             |
| C - Airmyn Road                | 165                   | 41                      | 981                       | 578               | 0.286 | 165                 | 254                             | 0.4               | 0.4             | 8.769     | A                             |
| D - A614 Rawcliffe Road (East) | 802                   | 200                     | 180                       | 1779              | 0.451 | 802                 | 966                             | 0.9               | 0.9             | 3.992     | A                             |
| E - Rawcliffe Road             | 379                   | 95                      | 800                       | 760               | 0.499 | 379                 | 181                             | 1.1               | 1.1             | 10.587    | B                             |

**17:30 - 17:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 672                   | 168                     | 327                       | 1224              | 0.549 | 677                 | 640                             | 2.3               | 1.3             | 6.876     | A                             |
| B - Local Access               | 15                    | 4                       | 1000                      | 685               | 0.022 | 15                  | 4                               | 0.0               | 0.0             | 5.376     | A                             |
| C - Airmyn Road                | 135                   | 34                      | 806                       | 661               | 0.204 | 135                 | 209                             | 0.4               | 0.3             | 6.900     | A                             |
| D - A614 Rawcliffe Road (East) | 655                   | 164                     | 148                       | 1799              | 0.364 | 656                 | 794                             | 0.9               | 0.6             | 3.412     | A                             |
| E - Rawcliffe Road             | 310                   | 77                      | 655                       | 840               | 0.369 | 312                 | 148                             | 1.1               | 0.7             | 7.660     | A                             |

**17:45 - 18:00**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 563                   | 141                     | 273                       | 1253              | 0.449 | 565                 | 535                             | 1.3               | 0.9             | 5.438     | A                             |
| B - Local Access               | 12                    | 3                       | 835                       | 771               | 0.016 | 13                  | 3                               | 0.0               | 0.0             | 4.750     | A                             |
| C - Airmyn Road                | 113                   | 28                      | 673                       | 724               | 0.156 | 113                 | 174                             | 0.3               | 0.2             | 5.939     | A                             |
| D - A614 Rawcliffe Road (East) | 548                   | 137                     | 123                       | 1815              | 0.302 | 549                 | 663                             | 0.6               | 0.5             | 3.081     | A                             |
| E - Rawcliffe Road             | 259                   | 65                      | 548                       | 898               | 0.289 | 260                 | 124                             | 0.7               | 0.5             | 6.333     | A                             |

# 2022 Future Baseline, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 7.51               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 7.51              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D3 | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 704                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 7                       | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 203                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 745                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 325                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 1                | 71              | 588                            | 43                 |
|      | B - Local Access               | 0                              | 0                | 0               | 7                              | 0                  |
|      | C - Airmyn Road                | 128                            | 1                | 1               | 52                             | 21                 |
|      | D - A614 Rawcliffe Road (East) | 645                            | 12               | 28              | 1                              | 60                 |
|      | E - Rawcliffe Road             | 71                             | 0                | 7               | 245                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.00                           | 0.00             |
|      | C - Airmyn Road                | 0.63                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.88                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 7                              | 11                 |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 2                              | 0                | 0               | 2                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 5                              | 9                | 0               | 0                              | 65                 |
|      | E - Rawcliffe Road             | 1                              | 0                | 13              | 13                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.025                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.052                          | 1.09             |
|      | E - Rawcliffe Road             | 1.015                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 07:15-07:30  | 530             | 530                    |
|                                | 07:30-07:45  | 633             | 633                    |
|                                | 07:45-08:00  | 775             | 775                    |
|                                | 08:00-08:15  | 775             | 775                    |
|                                | 08:15-08:30  | 633             | 633                    |
|                                | 08:30-08:45  | 530             | 530                    |
| B - Local Access               | 07:15-07:30  | 5               | 5                      |
|                                | 07:30-07:45  | 7               | 7                      |
|                                | 07:45-08:00  | 8               | 8                      |
|                                | 08:00-08:15  | 8               | 8                      |
|                                | 08:15-08:30  | 7               | 7                      |
|                                | 08:30-08:45  | 5               | 5                      |
| C - Airmyn Road                | 07:15-07:30  | 153             | 153                    |
|                                | 07:30-07:45  | 183             | 183                    |
|                                | 07:45-08:00  | 224             | 224                    |
|                                | 08:00-08:15  | 224             | 224                    |
|                                | 08:15-08:30  | 183             | 183                    |
|                                | 08:30-08:45  | 153             | 153                    |
| D - A614 Rawcliffe Road (East) | 07:15-07:30  | 561             | 561                    |
|                                | 07:30-07:45  | 670             | 670                    |
|                                | 07:45-08:00  | 821             | 821                    |
|                                | 08:00-08:15  | 821             | 821                    |
|                                | 08:15-08:30  | 670             | 670                    |
|                                | 08:30-08:45  | 561             | 561                    |
| E - Rawcliffe Road             | 07:15-07:30  | 244             | 244                    |
|                                | 07:30-07:45  | 292             | 292                    |
|                                | 07:45-08:00  | 357             | 357                    |
|                                | 08:00-08:15  | 357             | 357                    |
|                                | 08:15-08:30  | 292             | 292                    |
|                                | 08:30-08:45  | 244             | 244                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.63    | 8.52          | 1.8             | A       | 646                     | 969                           |
| B - Local Access               | 0.01    | 5.70          | 0.0             | A       | 7                       | 10                            |
| C - Airmyn Road                | 0.39    | 10.28         | 0.6             | B       | 187                     | 280                           |
| D - A614 Rawcliffe Road (East) | 0.47    | 4.16          | 0.9             | A       | 684                     | 1026                          |
| E - Rawcliffe Road             | 0.51    | 11.31         | 1.1             | B       | 298                     | 447                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 530                   | 132                     | 222                       | 1282              | 0.413 | 527                 | 633                             | 0.0               | 0.7             | 5.056     | A                             |
| B - Local Access               | 5                     | 1                       | 738                       | 821               | 0.007 | 5                   | 10                              | 0.0               | 0.0             | 4.413     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 663                       | 729               | 0.210 | 152                 | 81                              | 0.0               | 0.3             | 6.362     | A                             |
| D - A614 Rawcliffe Road (East) | 561                   | 140                     | 146                       | 1800              | 0.312 | 559                 | 669                             | 0.0               | 0.5             | 3.137     | A                             |
| E - Rawcliffe Road             | 244                   | 61                      | 612                       | 863               | 0.283 | 243                 | 93                              | 0.0               | 0.4             | 6.355     | A                             |

#### 07:30 - 07:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 633                   | 158                     | 266                       | 1257              | 0.503 | 631                 | 758                             | 0.7               | 1.1             | 6.106     | A                             |
| B - Local Access               | 7                     | 2                       | 885                       | 745               | 0.009 | 7                   | 13                              | 0.0               | 0.0             | 4.876     | A                             |
| C - Airmyn Road                | 183                   | 46                      | 795                       | 666               | 0.274 | 182                 | 97                              | 0.3               | 0.4             | 7.585     | A                             |
| D - A614 Rawcliffe Road (East) | 670                   | 168                     | 175                       | 1782              | 0.376 | 669                 | 802                             | 0.5               | 0.6             | 3.498     | A                             |
| E - Rawcliffe Road             | 292                   | 73                      | 733                       | 797               | 0.366 | 291                 | 112                             | 0.4               | 0.6             | 7.795     | A                             |

#### 07:45 - 08:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 775                   | 194                     | 325                       | 1225              | 0.633 | 772                 | 927                             | 1.1               | 1.8             | 8.404     | A                             |
| B - Local Access               | 8                     | 2                       | 1081                      | 642               | 0.012 | 8                   | 15                              | 0.0               | 0.0             | 5.677     | A                             |
| C - Airmyn Road                | 224                   | 56                      | 971                       | 583               | 0.384 | 223                 | 118                             | 0.4               | 0.6             | 10.177    | B                             |
| D - A614 Rawcliffe Road (East) | 821                   | 205                     | 214                       | 1757              | 0.467 | 820                 | 980                             | 0.6               | 0.9             | 4.148     | A                             |
| E - Rawcliffe Road             | 357                   | 89                      | 897                       | 708               | 0.505 | 356                 | 137                             | 0.6               | 1.1             | 11.165    | B                             |

#### 08:00 - 08:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 775                   | 194                     | 326                       | 1224              | 0.633 | 775                 | 929                             | 1.8               | 1.8             | 8.521     | A                             |
| B - Local Access               | 8                     | 2                       | 1086                      | 640               | 0.012 | 8                   | 15                              | 0.0               | 0.0             | 5.697     | A                             |
| C - Airmyn Road                | 224                   | 56                      | 975                       | 581               | 0.385 | 224                 | 118                             | 0.6               | 0.6             | 10.282    | B                             |
| D - A614 Rawcliffe Road (East) | 821                   | 205                     | 215                       | 1756              | 0.467 | 821                 | 984                             | 0.9               | 0.9             | 4.160     | A                             |
| E - Rawcliffe Road             | 357                   | 89                      | 898                       | 707               | 0.506 | 357                 | 137                             | 1.1               | 1.1             | 11.307    | B                             |



**08:15 - 08:30**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 633                   | 158                     | 268                       | 1256              | 0.504 | 636                 | 761                             | 1.8               | 1.1             | 6.199     | A                             |
| B - Local Access               | 7                     | 2                       | 891                       | 741               | 0.009 | 7                   | 13                              | 0.0               | 0.0             | 4.898     | A                             |
| C - Airmyn Road                | 183                   | 46                      | 800                       | 664               | 0.276 | 184                 | 97                              | 0.6               | 0.4             | 7.671     | A                             |
| D - A614 Rawcliffe Road (East) | 670                   | 168                     | 176                       | 1781              | 0.376 | 671                 | 808                             | 0.9               | 0.7             | 3.513     | A                             |
| E - Rawcliffe Road             | 292                   | 73                      | 735                       | 796               | 0.367 | 294                 | 112                             | 1.1               | 0.6             | 7.901     | A                             |

**08:30 - 08:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 530                   | 132                     | 224                       | 1281              | 0.414 | 531                 | 637                             | 1.1               | 0.8             | 5.122     | A                             |
| B - Local Access               | 5                     | 1                       | 744                       | 818               | 0.007 | 5                   | 11                              | 0.0               | 0.0             | 4.433     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 669                       | 726               | 0.211 | 154                 | 81                              | 0.4               | 0.3             | 6.426     | A                             |
| D - A614 Rawcliffe Road (East) | 561                   | 140                     | 147                       | 1799              | 0.312 | 562                 | 675                             | 0.7               | 0.5             | 3.146     | A                             |
| E - Rawcliffe Road             | 244                   | 61                      | 615                       | 862               | 0.284 | 245                 | 94                              | 0.6               | 0.4             | 6.422     | A                             |

# 2022 Future Baseline, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 8.54               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 8.54              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D4 | 2022 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 773                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 17                      | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 155                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 752                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 356                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 116             | 608                            | 49                 |
|      | B - Local Access               | 2                              | 0                | 4               | 11                             | 0                  |
|      | C - Airmyn Road                | 93                             | 1                | 0               | 38                             | 23                 |
|      | D - A614 Rawcliffe Road (East) | 562                            | 3                | 86              | 5                              | 97                 |
|      | E - Rawcliffe Road             | 77                             | 0                | 33              | 245                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.12                           | 0.00             |
|      | C - Airmyn Road                | 0.60                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.75                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 4                              | 4                  |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 0                              | 0                | 0               | 3                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 2                              | 0                | 0               | 100                            | 78                 |
|      | E - Rawcliffe Road             | 4                              | 0                | 15              | 15                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.000                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.025                          | 1.00             |
|      | E - Rawcliffe Road             | 1.043                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 16:30-16:45  | 582             | 582                    |
|                                | 16:45-17:00  | 695             | 695                    |
|                                | 17:00-17:15  | 851             | 851                    |
|                                | 17:15-17:30  | 851             | 851                    |
|                                | 17:30-17:45  | 695             | 695                    |
|                                | 17:45-18:00  | 582             | 582                    |
| B - Local Access               | 16:30-16:45  | 13              | 13                     |
|                                | 16:45-17:00  | 15              | 15                     |
|                                | 17:00-17:15  | 19              | 19                     |
|                                | 17:15-17:30  | 19              | 19                     |
|                                | 17:30-17:45  | 15              | 15                     |
|                                | 17:45-18:00  | 13              | 13                     |
| C - Airmyn Road                | 16:30-16:45  | 117             | 117                    |
|                                | 16:45-17:00  | 139             | 139                    |
|                                | 17:00-17:15  | 171             | 171                    |
|                                | 17:15-17:30  | 171             | 171                    |
|                                | 17:30-17:45  | 139             | 139                    |
|                                | 17:45-18:00  | 117             | 117                    |
| D - A614 Rawcliffe Road (East) | 16:30-16:45  | 568             | 568                    |
|                                | 16:45-17:00  | 678             | 678                    |
|                                | 17:00-17:15  | 828             | 828                    |
|                                | 17:15-17:30  | 828             | 828                    |
|                                | 17:30-17:45  | 678             | 678                    |
|                                | 17:45-18:00  | 568             | 568                    |
| E - Rawcliffe Road             | 16:30-16:45  | 268             | 268                    |
|                                | 16:45-17:00  | 320             | 320                    |
|                                | 17:00-17:15  | 392             | 392                    |
|                                | 17:15-17:30  | 392             | 392                    |
|                                | 17:30-17:45  | 320             | 320                    |
|                                | 17:45-18:00  | 268             | 268                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.72    | 11.42         | 2.6             | B       | 709                     | 1064                          |
| B - Local Access               | 0.03    | 6.78          | 0.0             | A       | 16                      | 24                            |
| C - Airmyn Road                | 0.30    | 9.23          | 0.4             | A       | 142                     | 214                           |
| D - A614 Rawcliffe Road (East) | 0.47    | 4.12          | 0.9             | A       | 690                     | 1036                          |
| E - Rawcliffe Road             | 0.53    | 11.40         | 1.2             | B       | 327                     | 490                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 582                   | 145                     | 280                       | 1250              | 0.465 | 578                 | 550                             | 0.0               | 0.9             | 5.535     | A                             |
| B - Local Access               | 13                    | 3                       | 855                       | 760               | 0.017 | 13                  | 3                               | 0.0               | 0.0             | 4.817     | A                             |
| C - Airmyn Road                | 117                   | 29                      | 689                       | 716               | 0.163 | 116                 | 179                             | 0.0               | 0.2             | 6.028     | A                             |
| D - A614 Rawcliffe Road (East) | 566                   | 142                     | 126                       | 1813              | 0.312 | 565                 | 679                             | 0.0               | 0.5             | 3.124     | A                             |
| E - Rawcliffe Road             | 268                   | 67                      | 563                       | 890               | 0.301 | 266                 | 127                             | 0.0               | 0.5             | 6.450     | A                             |

#### 16:45 - 17:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 695                   | 174                     | 335                       | 1219              | 0.570 | 693                 | 659                             | 0.9               | 1.4             | 7.071     | A                             |
| B - Local Access               | 15                    | 4                       | 1024                      | 672               | 0.023 | 15                  | 4                               | 0.0               | 0.0             | 5.485     | A                             |
| C - Airmyn Road                | 139                   | 35                      | 826                       | 652               | 0.214 | 139                 | 214                             | 0.2               | 0.3             | 7.062     | A                             |
| D - A614 Rawcliffe Road (East) | 676                   | 169                     | 151                       | 1797              | 0.376 | 676                 | 813                             | 0.5               | 0.7             | 3.477     | A                             |
| E - Rawcliffe Road             | 320                   | 80                      | 675                       | 829               | 0.386 | 319                 | 152                             | 0.5               | 0.7             | 7.900     | A                             |

#### 17:00 - 17:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 851                   | 213                     | 410                       | 1178              | 0.722 | 846                 | 806                             | 1.4               | 2.6             | 11.085    | B                             |
| B - Local Access               | 19                    | 5                       | 1251                      | 553               | 0.034 | 19                  | 5                               | 0.0               | 0.0             | 6.734     | A                             |
| C - Airmyn Road                | 171                   | 43                      | 1008                      | 566               | 0.302 | 170                 | 262                             | 0.3               | 0.4             | 9.146     | A                             |
| D - A614 Rawcliffe Road (East) | 828                   | 207                     | 185                       | 1775              | 0.467 | 827                 | 993                             | 0.7               | 0.9             | 4.108     | A                             |
| E - Rawcliffe Road             | 392                   | 98                      | 826                       | 747               | 0.525 | 390                 | 187                             | 0.7               | 1.2             | 11.253    | B                             |

#### 17:15 - 17:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 851                   | 213                     | 412                       | 1177              | 0.723 | 851                 | 808                             | 2.6               | 2.6             | 11.423    | B                             |
| B - Local Access               | 19                    | 5                       | 1258                      | 550               | 0.034 | 19                  | 5                               | 0.0               | 0.0             | 6.777     | A                             |
| C - Airmyn Road                | 171                   | 43                      | 1014                      | 563               | 0.303 | 171                 | 263                             | 0.4               | 0.4             | 9.235     | A                             |
| D - A614 Rawcliffe Road (East) | 828                   | 207                     | 186                       | 1775              | 0.467 | 828                 | 999                             | 0.9               | 0.9             | 4.120     | A                             |
| E - Rawcliffe Road             | 392                   | 98                      | 827                       | 746               | 0.526 | 392                 | 187                             | 1.2               | 1.2             | 11.401    | B                             |

**17:30 - 17:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 695                   | 174                     | 338                       | 1218              | 0.570 | 700                 | 661                             | 2.6               | 1.4             | 7.280     | A                             |
| B - Local Access               | 15                    | 4                       | 1034                      | 667               | 0.023 | 15                  | 4                               | 0.0               | 0.0             | 5.529     | A                             |
| C - Airmyn Road                | 139                   | 35                      | 834                       | 648               | 0.215 | 140                 | 216                             | 0.4               | 0.3             | 7.143     | A                             |
| D - A614 Rawcliffe Road (East) | 676                   | 169                     | 153                       | 1796              | 0.377 | 678                 | 821                             | 0.9               | 0.7             | 3.492     | A                             |
| E - Rawcliffe Road             | 320                   | 80                      | 677                       | 828               | 0.387 | 322                 | 153                             | 1.2               | 0.7             | 8.009     | A                             |

**17:45 - 18:00**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 582                   | 145                     | 282                       | 1248              | 0.466 | 584                 | 553                             | 1.4               | 0.9             | 5.636     | A                             |
| B - Local Access               | 13                    | 3                       | 863                       | 756               | 0.017 | 13                  | 3                               | 0.0               | 0.0             | 4.844     | A                             |
| C - Airmyn Road                | 117                   | 29                      | 696                       | 713               | 0.164 | 117                 | 180                             | 0.3               | 0.2             | 6.081     | A                             |
| D - A614 Rawcliffe Road (East) | 566                   | 142                     | 127                       | 1812              | 0.313 | 567                 | 685                             | 0.7               | 0.5             | 3.133     | A                             |
| E - Rawcliffe Road             | 268                   | 67                      | 566                       | 888               | 0.302 | 269                 | 128                             | 0.7               | 0.5             | 6.524     | A                             |

# 2026 Future Baseline, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 7.96               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 7.96              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 724                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 7                       | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 209                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 768                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 334                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 1                | 73              | 606                            | 44                 |
|      | B - Local Access               | 0                              | 0                | 0               | 7                              | 0                  |
|      | C - Airmyn Road                | 132                            | 1                | 1               | 54                             | 21                 |
|      | D - A614 Rawcliffe Road (East) | 664                            | 12               | 29              | 1                              | 62                 |
|      | E - Rawcliffe Road             | 73                             | 0                | 7               | 252                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.00                           | 0.00             |
|      | C - Airmyn Road                | 0.63                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.86                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 7                              | 11                 |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 2                              | 0                | 0               | 2                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 5                              | 9                | 0               | 0                              | 65                 |
|      | E - Rawcliffe Road             | 1                              | 0                | 13              | 13                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.025                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.052                          | 1.09             |
|      | E - Rawcliffe Road             | 1.015                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 07:15-07:30  | 545             | 545                    |
|                                | 07:30-07:45  | 651             | 651                    |
|                                | 07:45-08:00  | 798             | 798                    |
|                                | 08:00-08:15  | 798             | 798                    |
|                                | 08:15-08:30  | 651             | 651                    |
|                                | 08:30-08:45  | 545             | 545                    |
| B - Local Access               | 07:15-07:30  | 6               | 6                      |
|                                | 07:30-07:45  | 7               | 7                      |
|                                | 07:45-08:00  | 8               | 8                      |
|                                | 08:00-08:15  | 8               | 8                      |
|                                | 08:15-08:30  | 7               | 7                      |
|                                | 08:30-08:45  | 6               | 6                      |
| C - Airmyn Road                | 07:15-07:30  | 158             | 158                    |
|                                | 07:30-07:45  | 188             | 188                    |
|                                | 07:45-08:00  | 231             | 231                    |
|                                | 08:00-08:15  | 231             | 231                    |
|                                | 08:15-08:30  | 188             | 188                    |
|                                | 08:30-08:45  | 158             | 158                    |
| D - A614 Rawcliffe Road (East) | 07:15-07:30  | 578             | 578                    |
|                                | 07:30-07:45  | 690             | 690                    |
|                                | 07:45-08:00  | 845             | 845                    |
|                                | 08:00-08:15  | 845             | 845                    |
|                                | 08:15-08:30  | 690             | 690                    |
|                                | 08:30-08:45  | 578             | 578                    |
| E - Rawcliffe Road             | 07:15-07:30  | 252             | 252                    |
|                                | 07:30-07:45  | 300             | 300                    |
|                                | 07:45-08:00  | 368             | 368                    |
|                                | 08:00-08:15  | 368             | 368                    |
|                                | 08:15-08:30  | 300             | 300                    |
|                                | 08:30-08:45  | 252             | 252                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.65    | 9.09          | 2.0             | A       | 685                     | 997                           |
| B - Local Access               | 0.01    | 5.85          | 0.0             | A       | 7                       | 10                            |
| C - Airmyn Road                | 0.41    | 10.89         | 0.7             | B       | 192                     | 288                           |
| D - A614 Rawcliffe Road (East) | 0.48    | 4.29          | 1.0             | A       | 704                     | 1058                          |
| E - Rawcliffe Road             | 0.53    | 12.18         | 1.2             | B       | 307                     | 480                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 545                   | 136                     | 228                       | 1278              | 0.427 | 542                 | 652                             | 0.0               | 0.8             | 5.183     | A                             |
| B - Local Access               | 6                     | 1                       | 760                       | 810               | 0.007 | 6                   | 11                              | 0.0               | 0.0             | 4.476     | A                             |
| C - Airmyn Road                | 158                   | 39                      | 682                       | 719               | 0.219 | 157                 | 83                              | 0.0               | 0.3             | 6.514     | A                             |
| D - A614 Rawcliffe Road (East) | 578                   | 144                     | 150                       | 1798              | 0.321 | 576                 | 689                             | 0.0               | 0.5             | 3.180     | A                             |
| E - Rawcliffe Road             | 252                   | 63                      | 630                       | 854               | 0.295 | 250                 | 96                              | 0.0               | 0.5             | 6.529     | A                             |

#### 07:30 - 07:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 651                   | 163                     | 274                       | 1253              | 0.520 | 650                 | 780                             | 0.8               | 1.1             | 6.333     | A                             |
| B - Local Access               | 7                     | 2                       | 910                       | 731               | 0.009 | 7                   | 13                              | 0.0               | 0.0             | 4.969     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 818                       | 656               | 0.287 | 188                 | 99                              | 0.3               | 0.4             | 7.849     | A                             |
| D - A614 Rawcliffe Road (East) | 690                   | 172                     | 180                       | 1779              | 0.388 | 689                 | 826                             | 0.5               | 0.7             | 3.572     | A                             |
| E - Rawcliffe Road             | 300                   | 75                      | 754                       | 788               | 0.382 | 300                 | 115                             | 0.5               | 0.7             | 8.122     | A                             |

#### 07:45 - 08:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 798                   | 199                     | 334                       | 1220              | 0.654 | 794                 | 955                             | 1.1               | 2.0             | 8.935     | A                             |
| B - Local Access               | 8                     | 2                       | 1113                      | 626               | 0.013 | 8                   | 16                              | 0.0               | 0.0             | 5.830     | A                             |
| C - Airmyn Road                | 231                   | 58                      | 999                       | 570               | 0.405 | 230                 | 122                             | 0.4               | 0.7             | 10.762    | B                             |
| D - A614 Rawcliffe Road (East) | 845                   | 211                     | 220                       | 1753              | 0.482 | 844                 | 1009                            | 0.7               | 1.0             | 4.275     | A                             |
| E - Rawcliffe Road             | 368                   | 92                      | 923                       | 693               | 0.531 | 366                 | 141                             | 0.7               | 1.2             | 11.996    | B                             |

#### 08:00 - 08:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 798                   | 199                     | 336                       | 1219              | 0.654 | 797                 | 957                             | 2.0               | 2.0             | 9.088     | A                             |
| B - Local Access               | 8                     | 2                       | 1118                      | 623               | 0.013 | 8                   | 16                              | 0.0               | 0.0             | 5.854     | A                             |
| C - Airmyn Road                | 231                   | 58                      | 1004                      | 568               | 0.406 | 231                 | 122                             | 0.7               | 0.7             | 10.894    | B                             |
| D - A614 Rawcliffe Road (East) | 845                   | 211                     | 221                       | 1752              | 0.482 | 845                 | 1013                            | 1.0               | 1.0             | 4.290     | A                             |
| E - Rawcliffe Road             | 368                   | 92                      | 925                       | 692               | 0.532 | 368                 | 141                             | 1.2               | 1.2             | 12.183    | B                             |



**08:15 - 08:30**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 651                   | 163                     | 276                       | 1252              | 0.520 | 654                 | 784                             | 2.0               | 1.2             | 6.447     | A                             |
| B - Local Access               | 7                     | 2                       | 918                       | 727               | 0.009 | 7                   | 13                              | 0.0               | 0.0             | 4.996     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 824                       | 652               | 0.289 | 189                 | 100                             | 0.7               | 0.4             | 7.953     | A                             |
| D - A614 Rawcliffe Road (East) | 690                   | 172                     | 181                       | 1778              | 0.388 | 691                 | 832                             | 1.0               | 0.7             | 3.589     | A                             |
| E - Rawcliffe Road             | 300                   | 75                      | 757                       | 784               | 0.383 | 303                 | 116                             | 1.2               | 0.7             | 8.250     | A                             |

**08:30 - 08:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 545                   | 136                     | 230                       | 1277              | 0.427 | 547                 | 656                             | 1.2               | 0.8             | 5.257     | A                             |
| B - Local Access               | 6                     | 1                       | 766                       | 806               | 0.007 | 6                   | 11                              | 0.0               | 0.0             | 4.497     | A                             |
| C - Airmyn Road                | 158                   | 39                      | 689                       | 717               | 0.220 | 158                 | 84                              | 0.4               | 0.3             | 6.587     | A                             |
| D - A614 Rawcliffe Road (East) | 578                   | 144                     | 152                       | 1797              | 0.322 | 579                 | 695                             | 0.7               | 0.5             | 3.196     | A                             |
| E - Rawcliffe Road             | 252                   | 63                      | 633                       | 852               | 0.295 | 253                 | 97                              | 0.7               | 0.5             | 6.612     | A                             |

# 2026 Future Baseline, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 9.22               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 9.22              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2026 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 795                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 18                      | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 160                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 774                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 366                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 119             | 625                            | 51                 |
|      | B - Local Access               | 2                              | 0                | 4               | 11                             | 0                  |
|      | C - Airmyn Road                | 96                             | 1                | 0               | 40                             | 23                 |
|      | D - A614 Rawcliffe Road (East) | 578                            | 3                | 88              | 5                              | 100                |
|      | E - Rawcliffe Road             | 79                             | 0                | 34              | 252                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.12                           | 0.00             |
|      | C - Airmyn Road                | 0.60                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.75                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 4                              | 4                  |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 0                              | 0                | 0               | 3                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 2                              | 0                | 0               | 100                            | 76                 |
|      | E - Rawcliffe Road             | 4                              | 0                | 15              | 15                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.000                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.025                          | 1.00             |
|      | E - Rawcliffe Road             | 1.043                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 16:30-16:45  | 599             | 599                    |
|                                | 16:45-17:00  | 715             | 715                    |
|                                | 17:00-17:15  | 876             | 876                    |
|                                | 17:15-17:30  | 876             | 876                    |
|                                | 17:30-17:45  | 715             | 715                    |
|                                | 17:45-18:00  | 599             | 599                    |
| B - Local Access               | 16:30-16:45  | 13              | 13                     |
|                                | 16:45-17:00  | 16              | 16                     |
|                                | 17:00-17:15  | 19              | 19                     |
|                                | 17:15-17:30  | 19              | 19                     |
|                                | 17:30-17:45  | 16              | 16                     |
|                                | 17:45-18:00  | 13              | 13                     |
| C - Airmyn Road                | 16:30-16:45  | 120             | 120                    |
|                                | 16:45-17:00  | 143             | 143                    |
|                                | 17:00-17:15  | 176             | 176                    |
|                                | 17:15-17:30  | 176             | 176                    |
|                                | 17:30-17:45  | 143             | 143                    |
|                                | 17:45-18:00  | 120             | 120                    |
| D - A614 Rawcliffe Road (East) | 16:30-16:45  | 583             | 583                    |
|                                | 16:45-17:00  | 696             | 696                    |
|                                | 17:00-17:15  | 852             | 852                    |
|                                | 17:15-17:30  | 852             | 852                    |
|                                | 17:30-17:45  | 696             | 696                    |
|                                | 17:45-18:00  | 583             | 583                    |
| E - Rawcliffe Road             | 16:30-16:45  | 276             | 276                    |
|                                | 16:45-17:00  | 329             | 329                    |
|                                | 17:00-17:15  | 403             | 403                    |
|                                | 17:15-17:30  | 403             | 403                    |
|                                | 17:30-17:45  | 329             | 329                    |
|                                | 17:45-18:00  | 276             | 276                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.75    | 12.83         | 3.0             | B       | 730                     | 1095                          |
| B - Local Access               | 0.04    | 7.04          | 0.0             | A       | 16                      | 24                            |
| C - Airmyn Road                | 0.32    | 9.70          | 0.5             | A       | 146                     | 220                           |
| D - A614 Rawcliffe Road (East) | 0.48    | 4.24          | 1.0             | A       | 710                     | 1085                          |
| E - Rawcliffe Road             | 0.55    | 12.23         | 1.4             | B       | 338                     | 504                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 599                   | 150                     | 288                       | 1245              | 0.481 | 595                 | 588                             | 0.0               | 0.9             | 5.712     | A                             |
| B - Local Access               | 13                    | 3                       | 880                       | 747               | 0.018 | 13                  | 3                               | 0.0               | 0.0             | 4.904     | A                             |
| C - Airmyn Road                | 120                   | 30                      | 709                       | 707               | 0.170 | 119                 | 184                             | 0.0               | 0.2             | 6.157     | A                             |
| D - A614 Rawcliffe Road (East) | 583                   | 146                     | 130                       | 1810              | 0.322 | 581                 | 698                             | 0.0               | 0.5             | 3.166     | A                             |
| E - Rawcliffe Road             | 276                   | 69                      | 579                       | 881               | 0.313 | 274                 | 131                             | 0.0               | 0.5             | 6.622     | A                             |

#### 16:45 - 17:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 715                   | 179                     | 345                       | 1214              | 0.589 | 713                 | 677                             | 0.9               | 1.5             | 7.428     | A                             |
| B - Local Access               | 16                    | 4                       | 1054                      | 656               | 0.024 | 16                  | 4                               | 0.0               | 0.0             | 5.621     | A                             |
| C - Airmyn Road                | 143                   | 36                      | 850                       | 641               | 0.224 | 143                 | 220                             | 0.2               | 0.3             | 7.280     | A                             |
| D - A614 Rawcliffe Road (East) | 696                   | 174                     | 156                       | 1794              | 0.388 | 695                 | 837                             | 0.5               | 0.7             | 3.548     | A                             |
| E - Rawcliffe Road             | 329                   | 82                      | 694                       | 819               | 0.402 | 328                 | 157                             | 0.5               | 0.7             | 8.213     | A                             |

#### 17:00 - 17:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 876                   | 219                     | 421                       | 1172              | 0.748 | 870                 | 829                             | 1.5               | 2.9             | 12.151    | B                             |
| B - Local Access               | 19                    | 5                       | 1287                      | 535               | 0.036 | 19                  | 5                               | 0.0               | 0.0             | 6.983     | A                             |
| C - Airmyn Road                | 176                   | 44                      | 1037                      | 552               | 0.318 | 175                 | 269                             | 0.3               | 0.5             | 9.588     | A                             |
| D - A614 Rawcliffe Road (East) | 852                   | 213                     | 191                       | 1772              | 0.481 | 851                 | 1021                            | 0.7               | 1.0             | 4.229     | A                             |
| E - Rawcliffe Road             | 403                   | 101                     | 849                       | 734               | 0.550 | 401                 | 192                             | 0.7               | 1.3             | 12.042    | B                             |

#### 17:15 - 17:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 876                   | 219                     | 423                       | 1170              | 0.748 | 875                 | 831                             | 2.9               | 3.0             | 12.626    | B                             |
| B - Local Access               | 19                    | 5                       | 1294                      | 531               | 0.037 | 19                  | 5                               | 0.0               | 0.0             | 7.037     | A                             |
| C - Airmyn Road                | 176                   | 44                      | 1043                      | 549               | 0.320 | 176                 | 270                             | 0.5               | 0.5             | 9.699     | A                             |
| D - A614 Rawcliffe Road (East) | 852                   | 213                     | 192                       | 1771              | 0.481 | 852                 | 1027                            | 1.0               | 1.0             | 4.243     | A                             |
| E - Rawcliffe Road             | 403                   | 101                     | 851                       | 733               | 0.550 | 403                 | 193                             | 1.3               | 1.4             | 12.234    | B                             |

**17:30 - 17:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 715                   | 179                     | 348                       | 1212              | 0.590 | 721                 | 680                             | 3.0               | 1.5             | 7.693     | A                             |
| B - Local Access               | 16                    | 4                       | 1065                      | 651               | 0.024 | 16                  | 4                               | 0.0               | 0.0             | 5.672     | A                             |
| C - Airmyn Road                | 143                   | 36                      | 859                       | 636               | 0.225 | 144                 | 222                             | 0.5               | 0.3             | 7.373     | A                             |
| D - A614 Rawcliffe Road (East) | 696                   | 174                     | 158                       | 1793              | 0.388 | 697                 | 845                             | 1.0               | 0.7             | 3.561     | A                             |
| E - Rawcliffe Road             | 329                   | 82                      | 696                       | 817               | 0.403 | 332                 | 158                             | 1.4               | 0.8             | 8.347     | A                             |

**17:45 - 18:00**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 599                   | 150                     | 290                       | 1244              | 0.481 | 601                 | 569                             | 1.5               | 1.0             | 5.830     | A                             |
| B - Local Access               | 13                    | 3                       | 888                       | 743               | 0.018 | 13                  | 3                               | 0.0               | 0.0             | 4.937     | A                             |
| C - Airmyn Road                | 120                   | 30                      | 716                       | 704               | 0.171 | 120                 | 185                             | 0.3               | 0.2             | 6.218     | A                             |
| D - A614 Rawcliffe Road (East) | 583                   | 146                     | 132                       | 1809              | 0.322 | 583                 | 705                             | 0.7               | 0.5             | 3.184     | A                             |
| E - Rawcliffe Road             | 276                   | 69                      | 583                       | 879               | 0.314 | 277                 | 132                             | 0.8               | 0.5             | 6.705     | A                             |

# 2026 Do Minimum, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 12.07              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 12.07             | B           |

## 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 | 2026 Do Minimum | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 818                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 8                       | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 223                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 899                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 420                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                | To                             |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 1                | 73              | 685                            | 59                 |
|      | B - Local Access               | 0                              | 0                | 0               | 8                              | 0                  |
|      | C - Airmyn Road                | 136                            | 1                | 1               | 58                             | 26                 |
|      | D - A614 Rawcliffe Road (East) | 727                            | 12               | 31              | 1                              | 128                |
|      | E - Rawcliffe Road             | 84                             | 0                | 14              | 320                            | 1                  |

### Proportions

|      |                                | To                             |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.00                           | 0.00             |
|      | C - Airmyn Road                | 0.61                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.81                           | 0.00             |
|      | E - Rawcliffe Road             | 0.20                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 7                              | 11                 |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 2                              | 0                | 0               | 2                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 5                              | 9                | 0               | 0                              | 65                 |
|      | E - Rawcliffe Road             | 1                              | 0                | 13              | 13                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.025                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.052                          | 1.09             |
|      | E - Rawcliffe Road             | 1.015                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 07:15-07:30  | 616             | 616                    |
|                                | 07:30-07:45  | 736             | 736                    |
|                                | 07:45-08:00  | 901             | 901                    |
|                                | 08:00-08:15  | 901             | 901                    |
|                                | 08:15-08:30  | 736             | 736                    |
|                                | 08:30-08:45  | 616             | 616                    |
| B - Local Access               | 07:15-07:30  | 6               | 6                      |
|                                | 07:30-07:45  | 7               | 7                      |
|                                | 07:45-08:00  | 9               | 9                      |
|                                | 08:00-08:15  | 9               | 9                      |
|                                | 08:15-08:30  | 7               | 7                      |
|                                | 08:30-08:45  | 6               | 6                      |
| C - Airmyn Road                | 07:15-07:30  | 168             | 168                    |
|                                | 07:30-07:45  | 200             | 200                    |
|                                | 07:45-08:00  | 245             | 245                    |
|                                | 08:00-08:15  | 245             | 245                    |
|                                | 08:15-08:30  | 200             | 200                    |
|                                | 08:30-08:45  | 168             | 168                    |
| D - A614 Rawcliffe Road (East) | 07:15-07:30  | 677             | 677                    |
|                                | 07:30-07:45  | 808             | 808                    |
|                                | 07:45-08:00  | 990             | 990                    |
|                                | 08:00-08:15  | 990             | 990                    |
|                                | 08:15-08:30  | 808             | 808                    |
|                                | 08:30-08:45  | 677             | 677                    |
| E - Rawcliffe Road             | 07:15-07:30  | 316             | 316                    |
|                                | 07:30-07:45  | 378             | 378                    |
|                                | 07:45-08:00  | 463             | 463                    |
|                                | 08:00-08:15  | 463             | 463                    |
|                                | 08:15-08:30  | 378             | 378                    |
|                                | 08:30-08:45  | 316             | 316                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.77    | 14.07         | 3.4             | B       | 751                     | 1128                          |
| B - Local Access               | 0.02    | 6.97          | 0.0             | A       | 7                       | 11                            |
| C - Airmyn Road                | 0.51    | 15.39         | 1.0             | C       | 205                     | 307                           |
| D - A614 Rawcliffe Road (East) | 0.57    | 5.34          | 1.5             | A       | 825                     | 1238                          |
| E - Rawcliffe Road             | 0.71    | 20.93         | 2.8             | C       | 388                     | 578                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 618                   | 154                     | 288                       | 1248              | 0.494 | 612                 | 709                             | 0.0               | 1.0             | 6.006     | A                             |
| B - Local Access               | 6                     | 2                       | 887                       | 743               | 0.008 | 6                   | 11                              | 0.0               | 0.0             | 4.881     | A                             |
| C - Airmyn Road                | 168                   | 42                      | 803                       | 663               | 0.253 | 166                 | 90                              | 0.0               | 0.3             | 7.385     | A                             |
| D - A614 Rawcliffe Road (East) | 677                   | 169                     | 168                       | 1786              | 0.379 | 674                 | 801                             | 0.0               | 0.7             | 3.573     | A                             |
| E - Rawcliffe Road             | 316                   | 79                      | 682                       | 825               | 0.383 | 314                 | 160                             | 0.0               | 0.7             | 7.704     | A                             |

#### 07:30 - 07:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 738                   | 184                     | 343                       | 1215              | 0.605 | 733                 | 850                             | 1.0               | 1.6             | 7.921     | A                             |
| B - Local Access               | 7                     | 2                       | 1083                      | 652               | 0.011 | 7                   | 13                              | 0.0               | 0.0             | 5.588     | A                             |
| C - Airmyn Road                | 200                   | 50                      | 962                       | 587               | 0.341 | 200                 | 108                             | 0.3               | 0.5             | 9.458     | A                             |
| D - A614 Rawcliffe Road (East) | 808                   | 202                     | 201                       | 1765              | 0.458 | 807                 | 961                             | 0.7               | 0.9             | 4.158     | A                             |
| E - Rawcliffe Road             | 378                   | 94                      | 816                       | 752               | 0.503 | 376                 | 192                             | 0.7               | 1.1             | 10.504    | B                             |

#### 07:45 - 08:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 901                   | 225                     | 417                       | 1174              | 0.767 | 894                 | 1039                            | 1.6               | 3.3             | 13.369    | B                             |
| B - Local Access               | 9                     | 2                       | 1295                      | 531               | 0.017 | 9                   | 16                              | 0.0               | 0.0             | 6.899     | A                             |
| C - Airmyn Road                | 245                   | 61                      | 1172                      | 488               | 0.503 | 244                 | 132                             | 0.5               | 1.0             | 14.887    | B                             |
| D - A614 Rawcliffe Road (East) | 990                   | 247                     | 246                       | 1737              | 0.570 | 988                 | 1170                            | 0.9               | 1.4             | 5.306     | A                             |
| E - Rawcliffe Road             | 463                   | 116                     | 999                       | 652               | 0.709 | 457                 | 235                             | 1.1               | 2.5             | 19.757    | C                             |

#### 08:00 - 08:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 901                   | 225                     | 421                       | 1172              | 0.769 | 900                 | 1043                            | 3.3               | 3.4             | 14.071    | B                             |
| B - Local Access               | 9                     | 2                       | 1305                      | 525               | 0.017 | 9                   | 16                              | 0.0               | 0.0             | 6.973     | A                             |
| C - Airmyn Road                | 245                   | 61                      | 1182                      | 484               | 0.507 | 245                 | 132                             | 1.0               | 1.0             | 15.391    | C                             |
| D - A614 Rawcliffe Road (East) | 990                   | 247                     | 247                       | 1736              | 0.570 | 990                 | 1180                            | 1.4               | 1.5             | 5.343     | A                             |
| E - Rawcliffe Road             | 463                   | 116                     | 1002                      | 650               | 0.711 | 462                 | 236                             | 2.5               | 2.6             | 20.930    | C                             |



**08:15 - 08:30**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 736                   | 184                     | 349                       | 1212              | 0.607 | 743                 | 855                             | 3.4               | 1.7             | 8.293     | A                             |
| B - Local Access               | 7                     | 2                       | 1078                      | 644               | 0.011 | 7                   | 13                              | 0.0               | 0.0             | 5.657     | A                             |
| C - Airmyn Road                | 200                   | 50                      | 976                       | 581               | 0.345 | 202                 | 109                             | 1.0               | 0.5             | 9.758     | A                             |
| D - A614 Rawcliffe Road (East) | 808                   | 202                     | 204                       | 1763              | 0.458 | 810                 | 975                             | 1.5               | 0.9             | 4.190     | A                             |
| E - Rawcliffe Road             | 378                   | 94                      | 821                       | 749               | 0.504 | 384                 | 194                             | 2.6               | 1.1             | 11.001    | B                             |

**08:30 - 08:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 616                   | 154                     | 290                       | 1244              | 0.495 | 618                 | 715                             | 1.7               | 1.1             | 6.153     | A                             |
| B - Local Access               | 6                     | 2                       | 897                       | 738               | 0.008 | 6                   | 11                              | 0.0               | 0.0             | 4.917     | A                             |
| C - Airmyn Road                | 168                   | 42                      | 812                       | 658               | 0.255 | 169                 | 91                              | 0.5               | 0.4             | 7.517     | A                             |
| D - A614 Rawcliffe Road (East) | 677                   | 169                     | 170                       | 1785              | 0.379 | 678                 | 811                             | 0.9               | 0.7             | 3.604     | A                             |
| E - Rawcliffe Road             | 316                   | 79                      | 686                       | 823               | 0.384 | 318                 | 162                             | 1.1               | 0.7             | 7.878     | A                             |

# 2026 Do Minimum, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 16.00              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 16.00             | C           |

## 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 | 2026 Do Minimum | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 879                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 18                      | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 171                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 924                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 458                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                | To                             |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 119             | 699                            | 61                 |
|      | B - Local Access               | 2                              | 0                | 4               | 11                             | 0                  |
|      | C - Airmyn Road                | 96                             | 1                | 0               | 44                             | 30                 |
|      | D - A614 Rawcliffe Road (East) | 670                            | 3                | 98              | 5                              | 147                |
|      | E - Rawcliffe Road             | 94                             | 0                | 44              | 319                            | 1                  |

### Proportions

|      |                                | To                             |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.12                           | 0.00             |
|      | C - Airmyn Road                | 0.56                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.73                           | 0.00             |
|      | E - Rawcliffe Road             | 0.21                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 4                              | 4                  |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 0                              | 0                | 0               | 3                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 2                              | 0                | 0               | 100                            | 76                 |
|      | E - Rawcliffe Road             | 4                              | 0                | 15              | 15                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.000                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.025                          | 1.00             |
|      | E - Rawcliffe Road             | 1.043                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 16:30-16:45  | 662             | 662                    |
|                                | 16:45-17:00  | 790             | 790                    |
|                                | 17:00-17:15  | 968             | 968                    |
|                                | 17:15-17:30  | 968             | 968                    |
|                                | 17:30-17:45  | 790             | 790                    |
|                                | 17:45-18:00  | 662             | 662                    |
| B - Local Access               | 16:30-16:45  | 13              | 13                     |
|                                | 16:45-17:00  | 16              | 16                     |
|                                | 17:00-17:15  | 19              | 19                     |
|                                | 17:15-17:30  | 19              | 19                     |
|                                | 17:30-17:45  | 16              | 16                     |
|                                | 17:45-18:00  | 13              | 13                     |
| C - Airmyn Road                | 16:30-16:45  | 128             | 128                    |
|                                | 16:45-17:00  | 153             | 153                    |
|                                | 17:00-17:15  | 188             | 188                    |
|                                | 17:15-17:30  | 188             | 188                    |
|                                | 17:30-17:45  | 153             | 153                    |
|                                | 17:45-18:00  | 128             | 128                    |
| D - A614 Rawcliffe Road (East) | 16:30-16:45  | 695             | 695                    |
|                                | 16:45-17:00  | 830             | 830                    |
|                                | 17:00-17:15  | 1017            | 1017                   |
|                                | 17:15-17:30  | 1017            | 1017                   |
|                                | 17:30-17:45  | 830             | 830                    |
|                                | 17:45-18:00  | 695             | 695                    |
| E - Rawcliffe Road             | 16:30-16:45  | 345             | 345                    |
|                                | 16:45-17:00  | 412             | 412                    |
|                                | 17:00-17:15  | 504             | 504                    |
|                                | 17:15-17:30  | 504             | 504                    |
|                                | 17:30-17:45  | 412             | 412                    |
|                                | 17:45-18:00  | 345             | 345                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.87    | 23.91         | 6.1             | C       | 807                     | 1210                          |
| B - Local Access               | 0.04    | 8.68          | 0.0             | A       | 16                      | 24                            |
| C - Airmyn Road                | 0.40    | 12.75         | 0.7             | B       | 157                     | 235                           |
| D - A614 Rawcliffe Road (East) | 0.58    | 5.32          | 1.5             | A       | 847                     | 1271                          |
| E - Rawcliffe Road             | 0.75    | 23.87         | 3.2             | C       | 420                     | 630                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 662                   | 165                     | 352                       | 1210              | 0.547 | 657                 | 646                             | 0.0               | 1.2             | 6.701     | A                             |
| B - Local Access               | 13                    | 3                       | 1006                      | 681               | 0.020 | 13                  | 3                               | 0.0               | 0.0             | 5.387     | A                             |
| C - Airmyn Road                | 128                   | 32                      | 820                       | 654               | 0.196 | 127                 | 199                             | 0.0               | 0.2             | 6.865     | A                             |
| D - A614 Rawcliffe Road (East) | 695                   | 174                     | 143                       | 1802              | 0.386 | 693                 | 805                             | 0.0               | 0.7             | 3.551     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 656                       | 839               | 0.411 | 342                 | 179                             | 0.0               | 0.8             | 8.067     | A                             |

#### 16:45 - 17:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 790                   | 198                     | 422                       | 1171              | 0.675 | 787                 | 774                             | 1.2               | 2.1             | 9.635     | A                             |
| B - Local Access               | 16                    | 4                       | 1205                      | 578               | 0.027 | 16                  | 4                               | 0.0               | 0.0             | 6.408     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 983                       | 578               | 0.266 | 153                 | 238                             | 0.2               | 0.4             | 8.523     | A                             |
| D - A614 Rawcliffe Road (East) | 830                   | 208                     | 171                       | 1784              | 0.465 | 829                 | 964                             | 0.7               | 0.9             | 4.134     | A                             |
| E - Rawcliffe Road             | 412                   | 103                     | 786                       | 768               | 0.536 | 410                 | 215                             | 0.8               | 1.3             | 11.195    | B                             |

#### 17:00 - 17:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 968                   | 242                     | 513                       | 1121              | 0.863 | 954                 | 946                             | 2.1               | 5.6             | 20.769    | C                             |
| B - Local Access               | 19                    | 5                       | 1462                      | 443               | 0.044 | 19                  | 5                               | 0.0               | 0.0             | 8.488     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 1192                      | 479               | 0.392 | 187                 | 290                             | 0.4               | 0.6             | 12.349    | B                             |
| D - A614 Rawcliffe Road (East) | 1017                  | 254                     | 209                       | 1760              | 0.578 | 1015                | 1170                            | 0.9               | 1.5             | 5.285     | A                             |
| E - Rawcliffe Road             | 504                   | 126                     | 961                       | 672               | 0.750 | 497                 | 262                             | 1.3               | 3.1             | 22.146    | C                             |

#### 17:15 - 17:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 968                   | 242                     | 518                       | 1118              | 0.866 | 966                 | 949                             | 5.6               | 6.1             | 23.909    | C                             |
| B - Local Access               | 19                    | 5                       | 1479                      | 434               | 0.045 | 19                  | 5                               | 0.0               | 0.0             | 8.679     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 1207                      | 472               | 0.398 | 188                 | 292                             | 0.6               | 0.7             | 12.747    | B                             |
| D - A614 Rawcliffe Road (East) | 1017                  | 254                     | 210                       | 1759              | 0.578 | 1017                | 1184                            | 1.5               | 1.5             | 5.322     | A                             |
| E - Rawcliffe Road             | 504                   | 126                     | 964                       | 671               | 0.751 | 503                 | 263                             | 3.1               | 3.2             | 23.874    | C                             |

**17:30 - 17:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 790                   | 198                     | 430                       | 1167              | 0.677 | 806                 | 779                             | 6.1               | 2.3             | 10.755    | B                             |
| B - Local Access               | 16                    | 4                       | 1231                      | 564               | 0.028 | 16                  | 4                               | 0.0               | 0.0             | 6.573     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 1006                      | 567               | 0.271 | 155                 | 242                             | 0.7               | 0.4             | 8.813     | A                             |
| D - A614 Rawcliffe Road (East) | 830                   | 208                     | 174                       | 1783              | 0.466 | 832                 | 986                             | 1.5               | 1.0             | 4.169     | A                             |
| E - Rawcliffe Road             | 412                   | 103                     | 789                       | 766               | 0.537 | 419                 | 217                             | 3.2               | 1.3             | 11.865    | B                             |

**17:45 - 18:00**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 662                   | 165                     | 356                       | 1207              | 0.548 | 666                 | 651                             | 2.3               | 1.3             | 6.951     | A                             |
| B - Local Access               | 13                    | 3                       | 1019                      | 675               | 0.020 | 13                  | 3                               | 0.0               | 0.0             | 5.444     | A                             |
| C - Airmyn Road                | 128                   | 32                      | 832                       | 649               | 0.198 | 129                 | 201                             | 0.4               | 0.3             | 6.974     | A                             |
| D - A614 Rawcliffe Road (East) | 695                   | 174                     | 145                       | 1801              | 0.386 | 696                 | 816                             | 1.0               | 0.7             | 3.579     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 660                       | 837               | 0.412 | 347                 | 181                             | 1.3               | 0.8             | 8.276     | A                             |

# 2026 Do Something, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 13.51              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 13.51             | B           |

## 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 | 2026 Do Something | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 844                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 8                       | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 223                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 955                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 420                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 1                | 73              | 711                            | 59                 |
|      | B - Local Access               | 0                              | 0                | 0               | 8                              | 0                  |
|      | C - Airmyn Road                | 136                            | 1                | 1               | 58                             | 26                 |
|      | D - A614 Rawcliffe Road (East) | 782                            | 12               | 31              | 1                              | 128                |
|      | E - Rawcliffe Road             | 84                             | 0                | 14              | 320                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.00                           | 0.00             |
|      | C - Airmyn Road                | 0.61                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.82                           | 0.00             |
|      | E - Rawcliffe Road             | 0.20                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 7                              | 11                 |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 2                              | 0                | 0               | 2                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 5                              | 9                | 0               | 0                              | 65                 |
|      | E - Rawcliffe Road             | 1                              | 0                | 13              | 13                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.025                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.052                          | 1.09             |
|      | E - Rawcliffe Road             | 1.015                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 07:15-07:30  | 635             | 635                    |
|                                | 07:30-07:45  | 759             | 759                    |
|                                | 07:45-08:00  | 929             | 929                    |
|                                | 08:00-08:15  | 929             | 929                    |
|                                | 08:15-08:30  | 759             | 759                    |
|                                | 08:30-08:45  | 635             | 635                    |
| B - Local Access               | 07:15-07:30  | 6               | 6                      |
|                                | 07:30-07:45  | 7               | 7                      |
|                                | 07:45-08:00  | 9               | 9                      |
|                                | 08:00-08:15  | 9               | 9                      |
|                                | 08:15-08:30  | 7               | 7                      |
|                                | 08:30-08:45  | 6               | 6                      |
| C - Airmyn Road                | 07:15-07:30  | 168             | 168                    |
|                                | 07:30-07:45  | 200             | 200                    |
|                                | 07:45-08:00  | 245             | 245                    |
|                                | 08:00-08:15  | 245             | 245                    |
|                                | 08:15-08:30  | 200             | 200                    |
|                                | 08:30-08:45  | 168             | 168                    |
| D - A614 Rawcliffe Road (East) | 07:15-07:30  | 719             | 719                    |
|                                | 07:30-07:45  | 859             | 859                    |
|                                | 07:45-08:00  | 1052            | 1052                   |
|                                | 08:00-08:15  | 1052            | 1052                   |
|                                | 08:15-08:30  | 859             | 859                    |
|                                | 08:30-08:45  | 719             | 719                    |
| E - Rawcliffe Road             | 07:15-07:30  | 316             | 316                    |
|                                | 07:30-07:45  | 378             | 378                    |
|                                | 07:45-08:00  | 463             | 463                    |
|                                | 08:00-08:15  | 463             | 463                    |
|                                | 08:15-08:30  | 378             | 378                    |
|                                | 08:30-08:45  | 316             | 316                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.79    | 15.67         | 3.9             | C       | 775                     | 1162                          |
| B - Local Access               | 0.02    | 7.18          | 0.0             | A       | 7                       | 11                            |
| C - Airmyn Road                | 0.52    | 16.29         | 1.1             | C       | 205                     | 307                           |
| D - A614 Rawcliffe Road (East) | 0.61    | 5.81          | 1.7             | A       | 876                     | 1315                          |
| E - Rawcliffe Road             | 0.75    | 25.32         | 3.1             | D       | 388                     | 578                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 635                   | 159                     | 286                       | 1246              | 0.510 | 631                 | 751                             | 0.0               | 1.1             | 6.190     | A                             |
| B - Local Access               | 6                     | 2                       | 906                       | 734               | 0.008 | 6                   | 11                              | 0.0               | 0.0             | 4.948     | A                             |
| C - Airmyn Road                | 168                   | 42                      | 822                       | 654               | 0.257 | 166                 | 90                              | 0.0               | 0.3             | 7.519     | A                             |
| D - A614 Rawcliffe Road (East) | 719                   | 180                     | 168                       | 1786              | 0.403 | 716                 | 821                             | 0.0               | 0.7             | 3.703     | A                             |
| E - Rawcliffe Road             | 316                   | 79                      | 724                       | 802               | 0.394 | 313                 | 160                             | 0.0               | 0.7             | 8.061     | A                             |

#### 07:30 - 07:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 759                   | 190                     | 343                       | 1215              | 0.624 | 756                 | 900                             | 1.1               | 1.7             | 8.311     | A                             |
| B - Local Access               | 7                     | 2                       | 1086                      | 640               | 0.011 | 7                   | 13                              | 0.0               | 0.0             | 5.691     | A                             |
| C - Airmyn Road                | 200                   | 50                      | 985                       | 577               | 0.348 | 200                 | 108                             | 0.3               | 0.5             | 9.726     | A                             |
| D - A614 Rawcliffe Road (East) | 859                   | 215                     | 201                       | 1765              | 0.486 | 857                 | 984                             | 0.7               | 1.0             | 4.371     | A                             |
| E - Rawcliffe Road             | 378                   | 94                      | 867                       | 724               | 0.522 | 376                 | 192                             | 0.7               | 1.2             | 11.313    | B                             |

#### 07:45 - 08:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 929                   | 232                     | 416                       | 1175              | 0.791 | 921                 | 1100                            | 1.7               | 3.7             | 14.672    | B                             |
| B - Local Access               | 9                     | 2                       | 1321                      | 517               | 0.017 | 9                   | 16                              | 0.0               | 0.0             | 7.083     | A                             |
| C - Airmyn Road                | 245                   | 61                      | 1198                      | 476               | 0.516 | 243                 | 131                             | 0.5               | 1.0             | 15.652    | C                             |
| D - A614 Rawcliffe Road (East) | 1052                  | 263                     | 245                       | 1737              | 0.605 | 1049                | 1196                            | 1.0               | 1.7             | 5.754     | A                             |
| E - Rawcliffe Road             | 463                   | 116                     | 1060                      | 619               | 0.748 | 455                 | 235                             | 1.2               | 3.0             | 23.313    | C                             |

#### 08:00 - 08:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 929                   | 232                     | 421                       | 1172              | 0.793 | 929                 | 1104                            | 3.7               | 3.9             | 15.668    | C                             |
| B - Local Access               | 9                     | 2                       | 1333                      | 510               | 0.017 | 9                   | 16                              | 0.0               | 0.0             | 7.177     | A                             |
| C - Airmyn Road                | 245                   | 61                      | 1210                      | 470               | 0.522 | 245                 | 132                             | 1.0               | 1.1             | 16.291    | C                             |
| D - A614 Rawcliffe Road (East) | 1052                  | 263                     | 247                       | 1736              | 0.606 | 1051                | 1208                            | 1.7               | 1.7             | 5.806     | A                             |
| E - Rawcliffe Road             | 463                   | 116                     | 1063                      | 617               | 0.750 | 462                 | 236                             | 3.0               | 3.1             | 25.322    | D                             |



### 08:15 - 08:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 759                   | 190                     | 350                       | 1211              | 0.627 | 767                 | 907                             | 3.9               | 1.8             | 8.798     | A                             |
| B - Local Access               | 7                     | 2                       | 1104                      | 630               | 0.012 | 7                   | 13                              | 0.0               | 0.0             | 5.780     | A                             |
| C - Airmyn Road                | 200                   | 50                      | 1002                      | 569               | 0.353 | 203                 | 109                             | 1.1               | 0.6             | 10.091    | B                             |
| D - A614 Rawcliffe Road (East) | 859                   | 215                     | 204                       | 1763              | 0.487 | 861                 | 1001                            | 1.7               | 1.1             | 4.417     | A                             |
| E - Rawcliffe Road             | 378                   | 94                      | 872                       | 722               | 0.523 | 385                 | 194                             | 3.1               | 1.2             | 12.033    | B                             |

### 08:30 - 08:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 635                   | 159                     | 290                       | 1244              | 0.511 | 638                 | 757                             | 1.8               | 1.1             | 6.360     | A                             |
| B - Local Access               | 6                     | 2                       | 917                       | 728               | 0.008 | 6                   | 11                              | 0.0               | 0.0             | 4.988     | A                             |
| C - Airmyn Road                | 168                   | 42                      | 832                       | 649               | 0.259 | 169                 | 91                              | 0.6               | 0.4             | 7.666     | A                             |
| D - A614 Rawcliffe Road (East) | 719                   | 180                     | 170                       | 1785              | 0.403 | 720                 | 831                             | 1.1               | 0.7             | 3.737     | A                             |
| E - Rawcliffe Road             | 316                   | 79                      | 729                       | 800               | 0.396 | 318                 | 162                             | 1.2               | 0.7             | 8.266     | A                             |

# 2026 Do Something, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 23.16              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 23.16             | C           |

## 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 | 2026 Do Something | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 950                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 18                      | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 171                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 949                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 458                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                | To                             |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 119             | 770                            | 61                 |
|      | B - Local Access               | 2                              | 0                | 4               | 11                             | 0                  |
|      | C - Airmyn Road                | 96                             | 1                | 0               | 44                             | 30                 |
|      | D - A614 Rawcliffe Road (East) | 696                            | 3                | 98              | 5                              | 147                |
|      | E - Rawcliffe Road             | 94                             | 0                | 44              | 319                            | 1                  |

### Proportions

|      |                                | To                             |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.12                           | 0.00             |
|      | C - Airmyn Road                | 0.56                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.73                           | 0.00             |
|      | E - Rawcliffe Road             | 0.21                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 4                              | 4                  |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 0                              | 0                | 0               | 3                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 2                              | 0                | 0               | 100                            | 78                 |
|      | E - Rawcliffe Road             | 4                              | 0                | 15              | 15                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.000                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.025                          | 1.00             |
|      | E - Rawcliffe Road             | 1.043                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 16:30-16:45  | 715             | 715                    |
|                                | 16:45-17:00  | 854             | 854                    |
|                                | 17:00-17:15  | 1046            | 1046                   |
|                                | 17:15-17:30  | 1046            | 1046                   |
|                                | 17:30-17:45  | 854             | 854                    |
|                                | 17:45-18:00  | 715             | 715                    |
| B - Local Access               | 16:30-16:45  | 13              | 13                     |
|                                | 16:45-17:00  | 16              | 16                     |
|                                | 17:00-17:15  | 19              | 19                     |
|                                | 17:15-17:30  | 19              | 19                     |
|                                | 17:30-17:45  | 16              | 16                     |
|                                | 17:45-18:00  | 13              | 13                     |
| C - Airmyn Road                | 16:30-16:45  | 128             | 128                    |
|                                | 16:45-17:00  | 153             | 153                    |
|                                | 17:00-17:15  | 188             | 188                    |
|                                | 17:15-17:30  | 188             | 188                    |
|                                | 17:30-17:45  | 153             | 153                    |
|                                | 17:45-18:00  | 128             | 128                    |
| D - A614 Rawcliffe Road (East) | 16:30-16:45  | 715             | 715                    |
|                                | 16:45-17:00  | 854             | 854                    |
|                                | 17:00-17:15  | 1045            | 1045                   |
|                                | 17:15-17:30  | 1045            | 1045                   |
|                                | 17:30-17:45  | 854             | 854                    |
|                                | 17:45-18:00  | 715             | 715                    |
| E - Rawcliffe Road             | 16:30-16:45  | 345             | 345                    |
|                                | 16:45-17:00  | 412             | 412                    |
|                                | 17:00-17:15  | 504             | 504                    |
|                                | 17:15-17:30  | 504             | 504                    |
|                                | 17:30-17:45  | 412             | 412                    |
|                                | 17:45-18:00  | 345             | 345                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.94    | 41.13         | 11.2            | E       | 872                     | 1308                          |
| B - Local Access               | 0.05    | 9.55          | 0.1             | A       | 16                      | 24                            |
| C - Airmyn Road                | 0.43    | 14.51         | 0.7             | B       | 157                     | 235                           |
| D - A614 Rawcliffe Road (East) | 0.59    | 5.52          | 1.6             | A       | 871                     | 1307                          |
| E - Rawcliffe Road             | 0.77    | 28.20         | 3.5             | D       | 420                     | 630                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 715                   | 179                     | 352                       | 1210              | 0.591 | 709                 | 665                             | 0.0               | 1.5             | 7.385     | A                             |
| B - Local Access               | 13                    | 3                       | 1058                      | 654               | 0.020 | 13                  | 3                               | 0.0               | 0.0             | 5.616     | A                             |
| C - Airmyn Road                | 128                   | 32                      | 873                       | 630               | 0.204 | 127                 | 199                             | 0.0               | 0.3             | 7.201     | A                             |
| D - A614 Rawcliffe Road (East) | 715                   | 179                     | 143                       | 1802              | 0.397 | 712                 | 857                             | 0.0               | 0.7             | 3.608     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 676                       | 829               | 0.416 | 341                 | 179                             | 0.0               | 0.8             | 8.240     | A                             |

#### 16:45 - 17:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 854                   | 214                     | 422                       | 1171              | 0.729 | 849                 | 797                             | 1.5               | 2.7             | 11.433    | B                             |
| B - Local Access               | 16                    | 4                       | 1267                      | 545               | 0.029 | 16                  | 4                               | 0.0               | 0.0             | 6.802     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 1045                      | 548               | 0.280 | 153                 | 238                             | 0.3               | 0.4             | 9.154     | A                             |
| D - A614 Rawcliffe Road (East) | 854                   | 213                     | 171                       | 1784              | 0.478 | 852                 | 1027                            | 0.7               | 1.0             | 4.227     | A                             |
| E - Rawcliffe Road             | 412                   | 103                     | 809                       | 756               | 0.545 | 409                 | 215                             | 0.8               | 1.3             | 11.595    | B                             |

#### 17:00 - 17:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 1046                  | 261                     | 512                       | 1122              | 0.933 | 1019                | 974                             | 2.7               | 9.4             | 30.609    | D                             |
| B - Local Access               | 19                    | 5                       | 1526                      | 410               | 0.047 | 19                  | 5                               | 0.0               | 0.0             | 9.217     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 1280                      | 437               | 0.430 | 188                 | 291                             | 0.7               | 0.7             | 14.506    | B                             |
| D - A614 Rawcliffe Road (East) | 1045                  | 261                     | 208                       | 1761              | 0.594 | 1043                | 1237                            | 1.0               | 1.6             | 5.477     | A                             |
| E - Rawcliffe Road             | 504                   | 126                     | 990                       | 657               | 0.767 | 496                 | 261                             | 1.3               | 3.3             | 23.968    | C                             |

#### 17:15 - 17:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 1046                  | 261                     | 518                       | 1118              | 0.935 | 1039                | 977                             | 9.4               | 11.2            | 41.132    | E                             |
| B - Local Access               | 19                    | 5                       | 1552                      | 396               | 0.049 | 19                  | 5                               | 0.0               | 0.1             | 9.552     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 1280                      | 437               | 0.430 | 188                 | 291                             | 0.7               | 0.7             | 14.506    | B                             |
| D - A614 Rawcliffe Road (East) | 1045                  | 261                     | 210                       | 1759              | 0.594 | 1045                | 1258                            | 1.6               | 1.6             | 5.522     | A                             |
| E - Rawcliffe Road             | 504                   | 126                     | 992                       | 656               | 0.769 | 503                 | 263                             | 3.3               | 3.5             | 26.204    | D                             |

**17:30 - 17:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 854                   | 214                     | 430                       | 1167              | 0.732 | 887                 | 802                             | 11.2              | 3.0             | 14.779    | B                             |
| B - Local Access               | 16                    | 4                       | 1313                      | 521               | 0.030 | 16                  | 4                               | 0.1               | 0.0             | 7.133     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 1086                      | 529               | 0.290 | 155                 | 244                             | 0.7               | 0.4             | 9.710     | A                             |
| D - A614 Rawcliffe Road (East) | 854                   | 213                     | 175                       | 1782              | 0.479 | 856                 | 1085                            | 1.6               | 1.0             | 4.271     | A                             |
| E - Rawcliffe Road             | 412                   | 103                     | 813                       | 754               | 0.546 | 420                 | 218                             | 3.5               | 1.4             | 12.403    | B                             |

**17:45 - 18:00**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 715                   | 179                     | 357                       | 1207              | 0.592 | 721                 | 670                             | 3.0               | 1.5             | 7.776     | A                             |
| B - Local Access               | 13                    | 3                       | 1074                      | 646               | 0.021 | 13                  | 3                               | 0.0               | 0.0             | 5.693     | A                             |
| C - Airmyn Road                | 128                   | 32                      | 887                       | 623               | 0.206 | 129                 | 201                             | 0.4               | 0.3             | 7.348     | A                             |
| D - A614 Rawcliffe Road (East) | 715                   | 179                     | 145                       | 1801              | 0.397 | 716                 | 871                             | 1.0               | 0.7             | 3.640     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 680                       | 826               | 0.417 | 347                 | 181                             | 1.4               | 0.8             | 8.467     | A                             |



| <b>Junctions 10</b>                                                                                                                                              |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
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**Filename:** J3\_Mitigation.j10

**Path:** \\uk.wspgroup.com\Central Data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\8 - Traffic Flow Analysis and Models\05 - Models and Outputs\Models

**Report generation date:** 15/03/2022 16:50:06

- 
- »2018 Baseline, AM
  - »2018 Baseline, PM
  - »2022 Future Baseline , AM
  - »2022 Future Baseline , PM
  - »2026 Future Baseline, AM
  - »2026 Future Baseline, PM
  - »2026 Do Minimum, AM
  - »2026 Do Minimum, PM
  - »2026 Do Something, AM
  - »2026 Do Something, PM

## Summary of junction performance

|                                | AM                   |             |           |      |     | PM     |             |           |      |     |
|--------------------------------|----------------------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|
|                                | Set ID               | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS |
|                                | 2018 Baseline        |             |           |      |     |        |             |           |      |     |
| A - A614 Rawcliffe Road (West) | D1                   | 1.0         | 4.74      | 0.48 | A   | D2     | 1.2         | 5.48      | 0.55 | A   |
| B - Local Access               |                      | 0.0         | 5.53      | 0.01 | A   |        | 0.0         | 6.51      | 0.03 | A   |
| C - Airmyn Road                |                      | 0.6         | 9.65      | 0.38 | A   |        | 0.4         | 8.77      | 0.29 | A   |
| D - A614 Rawcliffe Road (East) |                      | 0.9         | 4.01      | 0.45 | A   |        | 0.9         | 3.99      | 0.45 | A   |
| E - Rawcliffe Road             |                      | 1.0         | 10.44     | 0.48 | B   |        | 1.1         | 10.59     | 0.50 | B   |
|                                | 2022 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A614 Rawcliffe Road (West) | D3                   | 1.1         | 4.94      | 0.50 | A   | D4     | 1.4         | 5.78      | 0.57 | A   |
| B - Local Access               |                      | 0.0         | 5.70      | 0.01 | A   |        | 0.0         | 6.78      | 0.03 | A   |
| C - Airmyn Road                |                      | 0.6         | 10.28     | 0.39 | B   |        | 0.4         | 9.24      | 0.30 | A   |
| D - A614 Rawcliffe Road (East) |                      | 0.9         | 4.15      | 0.47 | A   |        | 0.9         | 4.11      | 0.47 | A   |
| E - Rawcliffe Road             |                      | 1.1         | 11.31     | 0.51 | B   |        | 1.2         | 11.40     | 0.53 | B   |
|                                | 2026 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A614 Rawcliffe Road (West) | D5                   | 1.1         | 5.13      | 0.52 | A   | D6     | 1.5         | 6.08      | 0.59 | A   |
| B - Local Access               |                      | 0.0         | 5.85      | 0.01 | A   |        | 0.0         | 7.04      | 0.04 | A   |
| C - Airmyn Road                |                      | 0.7         | 10.90     | 0.41 | B   |        | 0.5         | 9.70      | 0.32 | A   |
| D - A614 Rawcliffe Road (East) |                      | 1.0         | 4.28      | 0.48 | A   |        | 1.0         | 4.24      | 0.48 | A   |
| E - Rawcliffe Road             |                      | 1.2         | 12.18     | 0.53 | B   |        | 1.4         | 12.23     | 0.55 | B   |
|                                | 2026 Do Minimum      |             |           |      |     |        |             |           |      |     |
| A - A614 Rawcliffe Road (West) | D7                   | 1.6         | 6.49      | 0.60 | A   | D8     | 2.1         | 8.06      | 0.68 | A   |
| B - Local Access               |                      | 0.0         | 6.98      | 0.02 | A   |        | 0.0         | 8.70      | 0.04 | A   |
| C - Airmyn Road                |                      | 1.0         | 15.40     | 0.51 | C   |        | 0.7         | 12.78     | 0.40 | B   |
| D - A614 Rawcliffe Road (East) |                      | 1.5         | 5.33      | 0.57 | A   |        | 1.5         | 5.31      | 0.58 | A   |
| E - Rawcliffe Road             |                      | 2.6         | 20.93     | 0.71 | C   |        | 3.2         | 23.72     | 0.75 | C   |
|                                | 2026 Do Something    |             |           |      |     |        |             |           |      |     |
| A - A614 Rawcliffe Road (West) | D9                   | 1.7         | 6.82      | 0.62 | A   | D10    | 2.8         | 9.68      | 0.73 | A   |
| B - Local Access               |                      | 0.0         | 7.18      | 0.02 | A   |        | 0.1         | 9.64      | 0.05 | A   |
| C - Airmyn Road                |                      | 1.1         | 16.31     | 0.52 | C   |        | 0.8         | 14.68     | 0.43 | B   |
| D - A614 Rawcliffe Road (East) |                      | 1.7         | 5.79      | 0.61 | A   |        | 1.6         | 5.51      | 0.59 | A   |
| E - Rawcliffe Road             |                      | 3.1         | 25.32     | 0.75 | D   |        | 3.5         | 26.21     | 0.77 | D   |

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

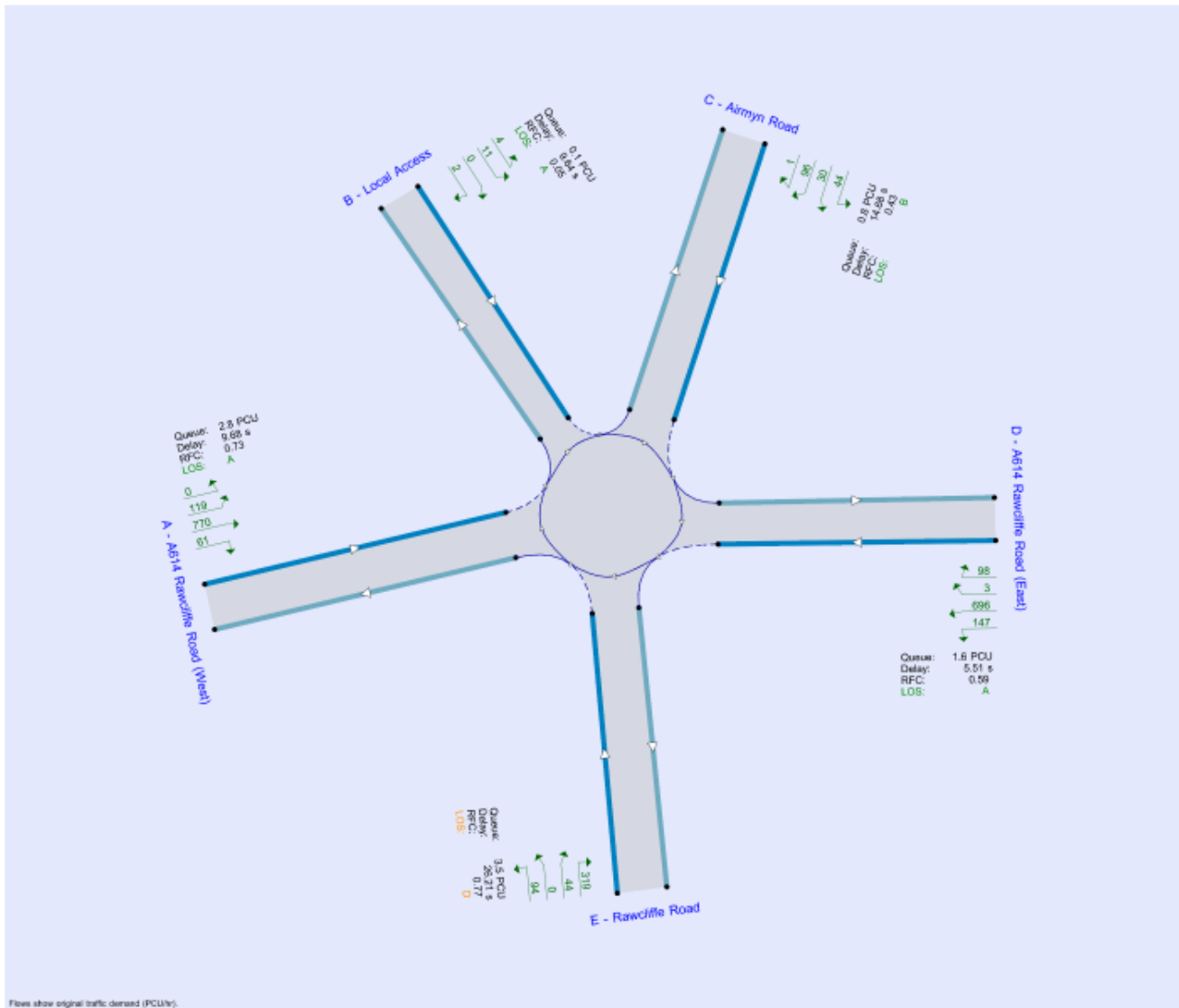
## File summary

### File Description

|             |                |
|-------------|----------------|
| Title       | Site 2         |
| Location    |                |
| Site number |                |
| Date        | 28/03/2018     |
| Version     |                |
| Status      |                |
| Identifier  |                |
| Client      |                |
| Jobnumber   |                |
| Enumerator  | CORP\INTW00749 |
| Description |                |

## Units

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



## Analysis Options

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

## Demand Set Summary

| ID  | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1  | 2018 Baseline        | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D2  | 2018 Baseline        | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D3  | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D4  | 2022 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D5  | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D6  | 2026 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D7  | 2026 Do Minimum      | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D8  | 2026 Do Minimum      | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D9  | 2026 Do Something    | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D10 | 2026 Do Something    | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |



## Analysis Set Details

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

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# 2018 Baseline, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 5.91               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.91              | A           |

## Arms

### Arms

| Arm | Name                       | Description | No give-way line |
|-----|----------------------------|-------------|------------------|
| A   | A614 Rawcliffe Road (West) |             |                  |
| B   | Local Access               |             |                  |
| C   | Airmyn Road                |             |                  |
| D   | A614 Rawcliffe Road (East) |             |                  |
| E   | Rawcliffe Road             |             |                  |

### Roundabout Geometry

| Arm                            | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Entry only | Exit only |
|--------------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|------------|-----------|
| A - A614 Rawcliffe Road (West) | 3.58                             | 7.00                | 17.5                            | 21.8                 | 51.6                              | 25.8                               |            |           |
| B - Local Access               | 3.70                             | 3.90                | 0.8                             | 16.1                 | 51.6                              | 13.5                               |            |           |
| C - Airmyn Road                | 3.10                             | 3.60                | 7.8                             | 9.4                  | 51.6                              | 20.5                               |            |           |
| D - A614 Rawcliffe Road (East) | 4.30                             | 7.30                | 17.2                            | 23.5                 | 52.9                              | 31.0                               |            |           |
| E - Rawcliffe Road             | 3.80                             | 5.10                | 4.1                             | 23.5                 | 51.6                              | 26.0                               |            |           |

## Slope / Intercept / Capacity

### Arm Intercept Adjustments

| Arm                            | Type   | Reason | Direct intercept adjustment (PCU/hr) |
|--------------------------------|--------|--------|--------------------------------------|
| A - A614 Rawcliffe Road (West) | None   |        |                                      |
| B - Local Access               | None   |        |                                      |
| C - Airmyn Road                | None   |        |                                      |
| D - A614 Rawcliffe Road (East) | None   |        |                                      |
| E - Rawcliffe Road             | Direct |        | -178                                 |

### Roundabout Slope and Intercept used in model

| Arm                            | Final slope | Final intercept (PCU/hr) |
|--------------------------------|-------------|--------------------------|
| A - A614 Rawcliffe Road (West) | 0.616       | 1751                     |
| B - Local Access               | 0.522       | 1206                     |
| C - Airmyn Road                | 0.472       | 1041                     |
| D - A614 Rawcliffe Road (East) | 0.632       | 1893                     |
| E - Rawcliffe Road             | 0.547       | 1198                     |

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2018 Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 680                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 7                       | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 197                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 720                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 314                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                | To                             |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 1                | 69              | 568                            | 42                 |
|      | B - Local Access               | 0                              | 0                | 0               | 7                              | 0                  |
|      | C - Airmyn Road                | 124                            | 1                | 1               | 51                             | 20                 |
|      | D - A614 Rawcliffe Road (East) | 623                            | 12               | 27              | 1                              | 58                 |
|      | E - Rawcliffe Road             | 69                             | 0                | 7               | 237                            | 1                  |

### Proportions

|      |                                | To                             |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.00                           | 0.00             |
|      | C - Airmyn Road                | 0.63                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.88                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

|      |                                | To                             |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 7                              | 11                 |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 2                              | 0                | 0               | 2                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 5                              | 9                | 0               | 0                              | 65                 |
|      | E - Rawcliffe Road             | 1                              | 0                | 13              | 13                             | 0                  |

### Average PCU Per Veh

|      |                                | To                             |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.025                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.052                          | 1.09             |
|      | E - Rawcliffe Road             | 1.015                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 07:15-07:30  | 512             | 512                    |
|                                | 07:30-07:45  | 611             | 611                    |
|                                | 07:45-08:00  | 749             | 749                    |
|                                | 08:00-08:15  | 749             | 749                    |
|                                | 08:15-08:30  | 611             | 611                    |
|                                | 08:30-08:45  | 512             | 512                    |
| B - Local Access               | 07:15-07:30  | 5               | 5                      |
|                                | 07:30-07:45  | 6               | 6                      |
|                                | 07:45-08:00  | 8               | 8                      |
|                                | 08:00-08:15  | 8               | 8                      |
|                                | 08:15-08:30  | 6               | 6                      |
|                                | 08:30-08:45  | 5               | 5                      |
| C - Airmyn Road                | 07:15-07:30  | 148             | 148                    |
|                                | 07:30-07:45  | 177             | 177                    |
|                                | 07:45-08:00  | 216             | 216                    |
|                                | 08:00-08:15  | 216             | 216                    |
|                                | 08:15-08:30  | 177             | 177                    |
|                                | 08:30-08:45  | 148             | 148                    |
| D - A614 Rawcliffe Road (East) | 07:15-07:30  | 542             | 542                    |
|                                | 07:30-07:45  | 647             | 647                    |
|                                | 07:45-08:00  | 793             | 793                    |
|                                | 08:00-08:15  | 793             | 793                    |
|                                | 08:15-08:30  | 647             | 647                    |
|                                | 08:30-08:45  | 542             | 542                    |
| E - Rawcliffe Road             | 07:15-07:30  | 236             | 236                    |
|                                | 07:30-07:45  | 282             | 282                    |
|                                | 07:45-08:00  | 345             | 345                    |
|                                | 08:00-08:15  | 345             | 345                    |
|                                | 08:15-08:30  | 282             | 282                    |
|                                | 08:30-08:45  | 236             | 236                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.48    | 4.74          | 1.0             | A       | 624                     | 936                           |
| B - Local Access               | 0.01    | 5.53          | 0.0             | A       | 6                       | 10                            |
| C - Airmyn Road                | 0.36    | 9.65          | 0.6             | A       | 180                     | 270                           |
| D - A614 Rawcliffe Road (East) | 0.45    | 4.01          | 0.9             | A       | 661                     | 991                           |
| E - Rawcliffe Road             | 0.48    | 10.44         | 1.0             | B       | 288                     | 432                           |

## Main Results for each time segment

### 07:15 - 07:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 512                   | 128                     | 214                       | 1619              | 0.316 | 510                 | 611                             | 0.0               | 0.5             | 3.449     | A                             |
| B - Local Access               | 5                     | 1                       | 714                       | 834               | 0.008 | 5                   | 10                              | 0.0               | 0.0             | 4.345     | A                             |
| C - Airmyn Road                | 148                   | 37                      | 641                       | 739               | 0.200 | 147                 | 78                              | 0.0               | 0.3             | 6.198     | A                             |
| D - A614 Rawcliffe Road (East) | 542                   | 135                     | 141                       | 1804              | 0.300 | 540                 | 647                             | 0.0               | 0.5             | 3.076     | A                             |
| E - Rawcliffe Road             | 236                   | 59                      | 591                       | 875               | 0.270 | 234                 | 90                              | 0.0               | 0.4             | 6.159     | A                             |

### 07:30 - 07:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 611                   | 153                     | 257                       | 1592              | 0.384 | 611                 | 732                             | 0.5               | 0.7             | 3.899     | A                             |
| B - Local Access               | 6                     | 2                       | 855                       | 760               | 0.008 | 6                   | 12                              | 0.0               | 0.0             | 4.775     | A                             |
| C - Airmyn Road                | 177                   | 44                      | 768                       | 679               | 0.260 | 176                 | 93                              | 0.3               | 0.4             | 7.302     | A                             |
| D - A614 Rawcliffe Road (East) | 647                   | 162                     | 169                       | 1787              | 0.362 | 647                 | 775                             | 0.5               | 0.6             | 3.413     | A                             |
| E - Rawcliffe Road             | 282                   | 70                      | 708                       | 811               | 0.347 | 281                 | 108                             | 0.4               | 0.6             | 7.452     | A                             |

### 07:45 - 08:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 749                   | 187                     | 314                       | 1557              | 0.481 | 747                 | 896                             | 0.7               | 1.0             | 4.722     | A                             |
| B - Local Access               | 8                     | 2                       | 1046                      | 660               | 0.012 | 8                   | 15                              | 0.0               | 0.0             | 5.516     | A                             |
| C - Airmyn Road                | 216                   | 54                      | 940                       | 598               | 0.362 | 215                 | 114                             | 0.4               | 0.6             | 9.584     | A                             |
| D - A614 Rawcliffe Road (East) | 793                   | 198                     | 207                       | 1763              | 0.450 | 792                 | 948                             | 0.6               | 0.9             | 4.005     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 866                       | 724               | 0.476 | 344                 | 133                             | 0.6               | 1.0             | 10.337    | B                             |

### 08:00 - 08:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 749                   | 187                     | 315                       | 1556              | 0.481 | 749                 | 898                             | 1.0               | 1.0             | 4.741     | A                             |
| B - Local Access               | 8                     | 2                       | 1049                      | 659               | 0.012 | 8                   | 15                              | 0.0               | 0.0             | 5.527     | A                             |
| C - Airmyn Road                | 216                   | 54                      | 942                       | 597               | 0.362 | 216                 | 114                             | 0.6               | 0.6             | 9.653     | A                             |
| D - A614 Rawcliffe Road (East) | 793                   | 198                     | 208                       | 1762              | 0.450 | 793                 | 951                             | 0.9               | 0.9             | 4.014     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 868                       | 724               | 0.477 | 345                 | 133                             | 1.0               | 1.0             | 10.443    | B                             |

### 08:15 - 08:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 611                   | 153                     | 259                       | 1591              | 0.384 | 612                 | 735                             | 1.0               | 0.7             | 3.919     | A                             |
| B - Local Access               | 6                     | 2                       | 859                       | 758               | 0.008 | 6                   | 12                              | 0.0               | 0.0             | 4.790     | A                             |
| C - Airmyn Road                | 177                   | 44                      | 772                       | 677               | 0.261 | 177                 | 94                              | 0.6               | 0.4             | 7.362     | A                             |
| D - A614 Rawcliffe Road (East) | 647                   | 162                     | 170                       | 1786              | 0.362 | 648                 | 779                             | 0.9               | 0.6             | 3.427     | A                             |
| E - Rawcliffe Road             | 282                   | 70                      | 710                       | 810               | 0.348 | 283                 | 109                             | 1.0               | 0.6             | 7.535     | A                             |

### 08:30 - 08:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 512                   | 128                     | 216                       | 1617              | 0.316 | 513                 | 615                             | 0.7               | 0.5             | 3.468     | A                             |
| B - Local Access               | 5                     | 1                       | 718                       | 831               | 0.008 | 5                   | 10                              | 0.0               | 0.0             | 4.359     | A                             |
| C - Airmyn Road                | 148                   | 37                      | 645                       | 737               | 0.201 | 148                 | 78                              | 0.4               | 0.3             | 6.247     | A                             |
| D - A614 Rawcliffe Road (East) | 542                   | 135                     | 142                       | 1803              | 0.301 | 543                 | 651                             | 0.6               | 0.5             | 3.088     | A                             |
| E - Rawcliffe Road             | 236                   | 59                      | 594                       | 873               | 0.270 | 237                 | 91                              | 0.6               | 0.4             | 6.222     | A                             |



# 2018 Baseline, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 6.08               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 6.08              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2018 Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 748                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 17                      | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 150                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 728                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 345                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                | To                             |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 112             | 588                            | 48                 |
|      | B - Local Access               | 2                              | 0                | 4               | 11                             | 0                  |
|      | C - Airmyn Road                | 90                             | 1                | 0               | 37                             | 22                 |
|      | D - A614 Rawcliffe Road (East) | 544                            | 3                | 83              | 5                              | 94                 |
|      | E - Rawcliffe Road             | 74                             | 0                | 32              | 237                            | 1                  |

### Proportions

|      |                                | To                             |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.12                           | 0.00             |
|      | C - Airmyn Road                | 0.60                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.75                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 4                              | 4                  |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 0                              | 0                | 0               | 3                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 2                              | 0                | 0               | 100                            | 76                 |
|      | E - Rawcliffe Road             | 4                              | 0                | 15              | 15                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.000                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.025                          | 1.00             |
|      | E - Rawcliffe Road             | 1.043                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 16:30-16:45  | 563             | 563                    |
|                                | 16:45-17:00  | 672             | 672                    |
|                                | 17:00-17:15  | 823             | 823                    |
|                                | 17:15-17:30  | 823             | 823                    |
|                                | 17:30-17:45  | 672             | 672                    |
|                                | 17:45-18:00  | 563             | 563                    |
| B - Local Access               | 16:30-16:45  | 12              | 12                     |
|                                | 16:45-17:00  | 15              | 15                     |
|                                | 17:00-17:15  | 18              | 18                     |
|                                | 17:15-17:30  | 18              | 18                     |
|                                | 17:30-17:45  | 15              | 15                     |
|                                | 17:45-18:00  | 12              | 12                     |
| C - Airmyn Road                | 16:30-16:45  | 113             | 113                    |
|                                | 16:45-17:00  | 135             | 135                    |
|                                | 17:00-17:15  | 165             | 165                    |
|                                | 17:15-17:30  | 165             | 165                    |
|                                | 17:30-17:45  | 135             | 135                    |
|                                | 17:45-18:00  | 113             | 113                    |
| D - A614 Rawcliffe Road (East) | 16:30-16:45  | 548             | 548                    |
|                                | 16:45-17:00  | 655             | 655                    |
|                                | 17:00-17:15  | 802             | 802                    |
|                                | 17:15-17:30  | 802             | 802                    |
|                                | 17:30-17:45  | 655             | 655                    |
|                                | 17:45-18:00  | 548             | 548                    |
| E - Rawcliffe Road             | 16:30-16:45  | 259             | 259                    |
|                                | 16:45-17:00  | 310             | 310                    |
|                                | 17:00-17:15  | 379             | 379                    |
|                                | 17:15-17:30  | 379             | 379                    |
|                                | 17:30-17:45  | 310             | 310                    |
|                                | 17:45-18:00  | 259             | 259                    |



## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.55    | 5.48          | 1.2             | A       | 686                     | 1029                          |
| B - Local Access               | 0.03    | 6.51          | 0.0             | A       | 15                      | 23                            |
| C - Airmyn Road                | 0.29    | 8.77          | 0.4             | A       | 138                     | 207                           |
| D - A614 Rawcliffe Road (East) | 0.45    | 3.99          | 0.9             | A       | 688                     | 1002                          |
| E - Rawcliffe Road             | 0.50    | 10.59         | 1.1             | B       | 316                     | 474                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 563                   | 141                     | 271                       | 1584              | 0.356 | 561                 | 532                             | 0.0               | 0.6             | 3.645     | A                             |
| B - Local Access               | 12                    | 3                       | 829                       | 774               | 0.016 | 12                  | 3                               | 0.0               | 0.0             | 4.727     | A                             |
| C - Airmyn Road                | 113                   | 28                      | 668                       | 726               | 0.156 | 112                 | 173                             | 0.0               | 0.2             | 5.893     | A                             |
| D - A614 Rawcliffe Road (East) | 548                   | 137                     | 122                       | 1816              | 0.302 | 546                 | 658                             | 0.0               | 0.5             | 3.067     | A                             |
| E - Rawcliffe Road             | 259                   | 65                      | 545                       | 900               | 0.288 | 258                 | 123                             | 0.0               | 0.4             | 6.265     | A                             |

#### 16:45 - 17:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 672                   | 168                     | 325                       | 1551              | 0.434 | 671                 | 637                             | 0.6               | 0.8             | 4.245     | A                             |
| B - Local Access               | 15                    | 4                       | 992                       | 688               | 0.022 | 15                  | 4                               | 0.0               | 0.0             | 5.345     | A                             |
| C - Airmyn Road                | 135                   | 34                      | 800                       | 664               | 0.203 | 135                 | 207                             | 0.2               | 0.3             | 6.843     | A                             |
| D - A614 Rawcliffe Road (East) | 655                   | 164                     | 147                       | 1801              | 0.363 | 654                 | 788                             | 0.5               | 0.6             | 3.399     | A                             |
| E - Rawcliffe Road             | 310                   | 77                      | 653                       | 841               | 0.368 | 309                 | 148                             | 0.4               | 0.6             | 7.573     | A                             |

#### 17:00 - 17:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 823                   | 206                     | 397                       | 1506              | 0.547 | 822                 | 780                             | 0.8               | 1.2             | 5.444     | A                             |
| B - Local Access               | 18                    | 5                       | 1214                      | 573               | 0.032 | 18                  | 4                               | 0.0               | 0.0             | 6.492     | A                             |
| C - Airmyn Road                | 165                   | 41                      | 979                       | 580               | 0.285 | 165                 | 254                             | 0.3               | 0.4             | 8.719     | A                             |
| D - A614 Rawcliffe Road (East) | 802                   | 200                     | 179                       | 1780              | 0.450 | 801                 | 984                             | 0.6               | 0.9             | 3.978     | A                             |
| E - Rawcliffe Road             | 379                   | 95                      | 799                       | 761               | 0.499 | 378                 | 181                             | 0.6               | 1.1             | 10.475    | B                             |

#### 17:15 - 17:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 823                   | 206                     | 398                       | 1505              | 0.547 | 823                 | 781                             | 1.2               | 1.2             | 5.480     | A                             |
| B - Local Access               | 18                    | 5                       | 1217                      | 571               | 0.032 | 18                  | 4                               | 0.0               | 0.0             | 6.512     | A                             |
| C - Airmyn Road                | 165                   | 41                      | 981                       | 578               | 0.286 | 165                 | 254                             | 0.4               | 0.4             | 8.770     | A                             |
| D - A614 Rawcliffe Road (East) | 802                   | 200                     | 180                       | 1780              | 0.450 | 802                 | 987                             | 0.9               | 0.9             | 3.987     | A                             |
| E - Rawcliffe Road             | 379                   | 95                      | 800                       | 760               | 0.499 | 379                 | 181                             | 1.1               | 1.1             | 10.587    | B                             |

**17:30 - 17:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 672                   | 188                     | 327                       | 1549              | 0.434 | 674                 | 640                             | 1.2               | 0.8             | 4.277     | A                             |
| B - Local Access               | 15                    | 4                       | 997                       | 888               | 0.022 | 15                  | 4                               | 0.0               | 0.0             | 5.368     | A                             |
| C - Airmyn Road                | 135                   | 34                      | 804                       | 862               | 0.204 | 135                 | 208                             | 0.4               | 0.3             | 6.888     | A                             |
| D - A614 Rawcliffe Road (East) | 655                   | 164                     | 148                       | 1800              | 0.364 | 656                 | 792                             | 0.9               | 0.6             | 3.412     | A                             |
| E - Rawcliffe Road             | 310                   | 77                      | 655                       | 840               | 0.369 | 312                 | 148                             | 1.1               | 0.7             | 7.660     | A                             |

**17:45 - 18:00**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 563                   | 141                     | 273                       | 1582              | 0.356 | 564                 | 535                             | 0.8               | 0.6             | 3.671     | A                             |
| B - Local Access               | 12                    | 3                       | 834                       | 771               | 0.016 | 13                  | 3                               | 0.0               | 0.0             | 4.747     | A                             |
| C - Airmyn Road                | 113                   | 28                      | 672                       | 724               | 0.156 | 113                 | 174                             | 0.3               | 0.2             | 5.934     | A                             |
| D - A614 Rawcliffe Road (East) | 548                   | 137                     | 123                       | 1816              | 0.302 | 549                 | 662                             | 0.6               | 0.5             | 3.079     | A                             |
| E - Rawcliffe Road             | 259                   | 65                      | 548                       | 898               | 0.289 | 260                 | 124                             | 0.7               | 0.5             | 6.331     | A                             |

# 2022 Future Baseline , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 6.24               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 6.24              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D3 | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 704                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 7                       | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 203                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 745                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 325                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 1                | 71              | 588                            | 43                 |
|      | B - Local Access               | 0                              | 0                | 0               | 7                              | 0                  |
|      | C - Airmyn Road                | 128                            | 1                | 1               | 52                             | 21                 |
|      | D - A614 Rawcliffe Road (East) | 645                            | 12               | 28              | 1                              | 60                 |
|      | E - Rawcliffe Road             | 71                             | 0                | 7               | 245                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.00                           | 0.00             |
|      | C - Airmyn Road                | 0.63                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.88                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 7                              | 11                 |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 2                              | 0                | 0               | 2                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 5                              | 9                | 0               | 0                              | 65                 |
|      | E - Rawcliffe Road             | 1                              | 0                | 13              | 13                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.025                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.052                          | 1.09             |
|      | E - Rawcliffe Road             | 1.015                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 07:15-07:30  | 530             | 530                    |
|                                | 07:30-07:45  | 633             | 633                    |
|                                | 07:45-08:00  | 775             | 775                    |
|                                | 08:00-08:15  | 775             | 775                    |
|                                | 08:15-08:30  | 633             | 633                    |
|                                | 08:30-08:45  | 530             | 530                    |
| B - Local Access               | 07:15-07:30  | 5               | 5                      |
|                                | 07:30-07:45  | 7               | 7                      |
|                                | 07:45-08:00  | 8               | 8                      |
|                                | 08:00-08:15  | 8               | 8                      |
|                                | 08:15-08:30  | 7               | 7                      |
|                                | 08:30-08:45  | 5               | 5                      |
| C - Airmyn Road                | 07:15-07:30  | 153             | 153                    |
|                                | 07:30-07:45  | 183             | 183                    |
|                                | 07:45-08:00  | 224             | 224                    |
|                                | 08:00-08:15  | 224             | 224                    |
|                                | 08:15-08:30  | 183             | 183                    |
|                                | 08:30-08:45  | 153             | 153                    |
| D - A614 Rawcliffe Road (East) | 07:15-07:30  | 561             | 561                    |
|                                | 07:30-07:45  | 670             | 670                    |
|                                | 07:45-08:00  | 821             | 821                    |
|                                | 08:00-08:15  | 821             | 821                    |
|                                | 08:15-08:30  | 670             | 670                    |
|                                | 08:30-08:45  | 561             | 561                    |
| E - Rawcliffe Road             | 07:15-07:30  | 244             | 244                    |
|                                | 07:30-07:45  | 292             | 292                    |
|                                | 07:45-08:00  | 357             | 357                    |
|                                | 08:00-08:15  | 357             | 357                    |
|                                | 08:15-08:30  | 292             | 292                    |
|                                | 08:30-08:45  | 244             | 244                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.50    | 4.94          | 1.1             | A       | 646                     | 969                           |
| B - Local Access               | 0.01    | 5.70          | 0.0             | A       | 7                       | 10                            |
| C - Airmyn Road                | 0.39    | 10.28         | 0.6             | B       | 187                     | 280                           |
| D - A614 Rawcliffe Road (East) | 0.47    | 4.15          | 0.9             | A       | 684                     | 1026                          |
| E - Rawcliffe Road             | 0.51    | 11.31         | 1.1             | B       | 298                     | 447                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 530                   | 132                     | 222                       | 1614              | 0.328 | 528                 | 633                             | 0.0               | 0.5             | 3.521     | A                             |
| B - Local Access               | 5                     | 1                       | 739                       | 821               | 0.007 | 5                   | 10                              | 0.0               | 0.0             | 4.415     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 664                       | 728               | 0.210 | 152                 | 81                              | 0.0               | 0.3             | 6.366     | A                             |
| D - A614 Rawcliffe Road (East) | 561                   | 140                     | 146                       | 1801              | 0.312 | 559                 | 670                             | 0.0               | 0.5             | 3.134     | A                             |
| E - Rawcliffe Road             | 244                   | 61                      | 612                       | 863               | 0.283 | 243                 | 93                              | 0.0               | 0.4             | 6.355     | A                             |

#### 07:30 - 07:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 633                   | 158                     | 266                       | 1587              | 0.399 | 632                 | 758                             | 0.5               | 0.7             | 4.012     | A                             |
| B - Local Access               | 7                     | 2                       | 885                       | 744               | 0.009 | 7                   | 13                              | 0.0               | 0.0             | 4.878     | A                             |
| C - Airmyn Road                | 183                   | 46                      | 795                       | 666               | 0.275 | 182                 | 97                              | 0.3               | 0.4             | 7.589     | A                             |
| D - A614 Rawcliffe Road (East) | 670                   | 168                     | 175                       | 1783              | 0.376 | 669                 | 802                             | 0.5               | 0.6             | 3.494     | A                             |
| E - Rawcliffe Road             | 292                   | 73                      | 733                       | 797               | 0.366 | 291                 | 112                             | 0.4               | 0.6             | 7.795     | A                             |

#### 07:45 - 08:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 775                   | 194                     | 325                       | 1550              | 0.500 | 773                 | 927                             | 0.7               | 1.1             | 4.921     | A                             |
| B - Local Access               | 8                     | 2                       | 1083                      | 641               | 0.012 | 8                   | 15                              | 0.0               | 0.0             | 5.684     | A                             |
| C - Airmyn Road                | 224                   | 56                      | 973                       | 582               | 0.385 | 223                 | 118                             | 0.4               | 0.6             | 10.190    | B                             |
| D - A614 Rawcliffe Road (East) | 821                   | 205                     | 214                       | 1758              | 0.467 | 820                 | 982                             | 0.6               | 0.9             | 4.142     | A                             |
| E - Rawcliffe Road             | 357                   | 89                      | 897                       | 708               | 0.505 | 356                 | 137                             | 0.6               | 1.1             | 11.165    | B                             |

#### 08:00 - 08:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 775                   | 194                     | 326                       | 1550              | 0.500 | 775                 | 929                             | 1.1               | 1.1             | 4.944     | A                             |
| B - Local Access               | 8                     | 2                       | 1086                      | 640               | 0.012 | 8                   | 15                              | 0.0               | 0.0             | 5.698     | A                             |
| C - Airmyn Road                | 224                   | 56                      | 975                       | 581               | 0.385 | 224                 | 118                             | 0.6               | 0.6             | 10.283    | B                             |
| D - A614 Rawcliffe Road (East) | 821                   | 205                     | 215                       | 1758              | 0.467 | 821                 | 984                             | 0.9               | 0.9             | 4.154     | A                             |
| E - Rawcliffe Road             | 357                   | 89                      | 898                       | 707               | 0.506 | 357                 | 137                             | 1.1               | 1.1             | 11.307    | B                             |

**08:15 - 08:30**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 633                   | 158                     | 268                       | 1585              | 0.399 | 634                 | 761                             | 1.1               | 0.7             | 4.032     | A                             |
| B - Local Access               | 7                     | 2                       | 889                       | 742               | 0.009 | 7                   | 13                              | 0.0               | 0.0             | 4.893     | A                             |
| C - Airmyn Road                | 183                   | 46                      | 799                       | 664               | 0.275 | 184                 | 97                              | 0.6               | 0.4             | 7.661     | A                             |
| D - A614 Rawcliffe Road (East) | 670                   | 168                     | 176                       | 1782              | 0.376 | 671                 | 807                             | 0.9               | 0.7             | 3.507     | A                             |
| E - Rawcliffe Road             | 292                   | 73                      | 735                       | 796               | 0.367 | 294                 | 112                             | 1.1               | 0.6             | 7.901     | A                             |

**08:30 - 08:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 530                   | 132                     | 224                       | 1613              | 0.329 | 531                 | 637                             | 0.7               | 0.5             | 3.542     | A                             |
| B - Local Access               | 5                     | 1                       | 744                       | 818               | 0.007 | 5                   | 11                              | 0.0               | 0.0             | 4.431     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 668                       | 726               | 0.211 | 154                 | 81                              | 0.4               | 0.3             | 6.423     | A                             |
| D - A614 Rawcliffe Road (East) | 561                   | 140                     | 147                       | 1800              | 0.312 | 562                 | 674                             | 0.7               | 0.5             | 3.146     | A                             |
| E - Rawcliffe Road             | 244                   | 61                      | 615                       | 862               | 0.284 | 245                 | 94                              | 0.6               | 0.4             | 6.425     | A                             |

# 2022 Future Baseline , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 6.41               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 6.41              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D4 | 2022 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 773                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 17                      | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 155                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 752                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 356                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 116             | 608                            | 49                 |
|      | B - Local Access               | 2                              | 0                | 4               | 11                             | 0                  |
|      | C - Airmyn Road                | 93                             | 1                | 0               | 38                             | 23                 |
|      | D - A614 Rawcliffe Road (East) | 562                            | 3                | 86              | 5                              | 97                 |
|      | E - Rawcliffe Road             | 77                             | 0                | 33              | 245                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.12                           | 0.00             |
|      | C - Airmyn Road                | 0.60                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.75                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 4                              | 4                  |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 0                              | 0                | 0               | 3                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 2                              | 0                | 0               | 100                            | 78                 |
|      | E - Rawcliffe Road             | 4                              | 0                | 15              | 15                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.000                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.025                          | 1.00             |
|      | E - Rawcliffe Road             | 1.043                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 16:30-16:45  | 582             | 582                    |
|                                | 16:45-17:00  | 695             | 695                    |
|                                | 17:00-17:15  | 851             | 851                    |
|                                | 17:15-17:30  | 851             | 851                    |
|                                | 17:30-17:45  | 695             | 695                    |
|                                | 17:45-18:00  | 582             | 582                    |
| B - Local Access               | 16:30-16:45  | 13              | 13                     |
|                                | 16:45-17:00  | 15              | 15                     |
|                                | 17:00-17:15  | 19              | 19                     |
|                                | 17:15-17:30  | 19              | 19                     |
|                                | 17:30-17:45  | 15              | 15                     |
|                                | 17:45-18:00  | 13              | 13                     |
| C - Airmyn Road                | 16:30-16:45  | 117             | 117                    |
|                                | 16:45-17:00  | 139             | 139                    |
|                                | 17:00-17:15  | 171             | 171                    |
|                                | 17:15-17:30  | 171             | 171                    |
|                                | 17:30-17:45  | 139             | 139                    |
|                                | 17:45-18:00  | 117             | 117                    |
| D - A614 Rawcliffe Road (East) | 16:30-16:45  | 568             | 568                    |
|                                | 16:45-17:00  | 678             | 678                    |
|                                | 17:00-17:15  | 828             | 828                    |
|                                | 17:15-17:30  | 828             | 828                    |
|                                | 17:30-17:45  | 678             | 678                    |
|                                | 17:45-18:00  | 568             | 568                    |
| E - Rawcliffe Road             | 16:30-16:45  | 268             | 268                    |
|                                | 16:45-17:00  | 320             | 320                    |
|                                | 17:00-17:15  | 392             | 392                    |
|                                | 17:15-17:30  | 392             | 392                    |
|                                | 17:30-17:45  | 320             | 320                    |
|                                | 17:45-18:00  | 268             | 268                    |



## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.57    | 5.78          | 1.4             | A       | 709                     | 1064                          |
| B - Local Access               | 0.03    | 6.78          | 0.0             | A       | 16                      | 24                            |
| C - Airmyn Road                | 0.30    | 9.24          | 0.4             | A       | 142                     | 214                           |
| D - A614 Rawcliffe Road (East) | 0.47    | 4.11          | 0.9             | A       | 690                     | 1036                          |
| E - Rawcliffe Road             | 0.53    | 11.40         | 1.2             | B       | 327                     | 490                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 582                   | 145                     | 280                       | 1578              | 0.369 | 579                 | 550                             | 0.0               | 0.6             | 3.730     | A                             |
| B - Local Access               | 13                    | 3                       | 856                       | 760               | 0.017 | 13                  | 3                               | 0.0               | 0.0             | 4.821     | A                             |
| C - Airmyn Road                | 117                   | 29                      | 690                       | 716               | 0.163 | 116                 | 179                             | 0.0               | 0.2             | 6.033     | A                             |
| D - A614 Rawcliffe Road (East) | 566                   | 142                     | 126                       | 1814              | 0.312 | 565                 | 680                             | 0.0               | 0.5             | 3.122     | A                             |
| E - Rawcliffe Road             | 268                   | 67                      | 563                       | 890               | 0.301 | 266                 | 127                             | 0.0               | 0.5             | 6.450     | A                             |

#### 16:45 - 17:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 695                   | 174                     | 335                       | 1544              | 0.450 | 694                 | 659                             | 0.6               | 0.8             | 4.390     | A                             |
| B - Local Access               | 15                    | 4                       | 1025                      | 671               | 0.023 | 15                  | 4                               | 0.0               | 0.0             | 5.489     | A                             |
| C - Airmyn Road                | 139                   | 35                      | 826                       | 651               | 0.214 | 139                 | 214                             | 0.2               | 0.3             | 7.067     | A                             |
| D - A614 Rawcliffe Road (East) | 676                   | 169                     | 151                       | 1798              | 0.376 | 676                 | 814                             | 0.5               | 0.6             | 3.474     | A                             |
| E - Rawcliffe Road             | 320                   | 80                      | 675                       | 829               | 0.386 | 319                 | 153                             | 0.5               | 0.7             | 7.900     | A                             |

#### 17:00 - 17:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 851                   | 213                     | 410                       | 1498              | 0.568 | 849                 | 806                             | 0.8               | 1.3             | 5.737     | A                             |
| B - Local Access               | 19                    | 5                       | 1254                      | 552               | 0.034 | 19                  | 5                               | 0.0               | 0.0             | 6.754     | A                             |
| C - Airmyn Road                | 171                   | 43                      | 1011                      | 565               | 0.303 | 170                 | 262                             | 0.3               | 0.4             | 9.174     | A                             |
| D - A614 Rawcliffe Road (East) | 828                   | 207                     | 185                       | 1776              | 0.466 | 827                 | 996                             | 0.6               | 0.9             | 4.103     | A                             |
| E - Rawcliffe Road             | 392                   | 98                      | 826                       | 747               | 0.525 | 390                 | 187                             | 0.7               | 1.2             | 11.253    | B                             |

#### 17:15 - 17:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 851                   | 213                     | 412                       | 1497              | 0.568 | 851                 | 808                             | 1.3               | 1.4             | 5.780     | A                             |
| B - Local Access               | 19                    | 5                       | 1258                      | 550               | 0.034 | 19                  | 5                               | 0.0               | 0.0             | 6.778     | A                             |
| C - Airmyn Road                | 171                   | 43                      | 1014                      | 563               | 0.303 | 171                 | 263                             | 0.4               | 0.4             | 9.237     | A                             |
| D - A614 Rawcliffe Road (East) | 828                   | 207                     | 186                       | 1776              | 0.466 | 828                 | 999                             | 0.9               | 0.9             | 4.115     | A                             |
| E - Rawcliffe Road             | 392                   | 98                      | 827                       | 746               | 0.526 | 392                 | 187                             | 1.2               | 1.2             | 11.401    | B                             |

**17:30 - 17:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 695                   | 174                     | 338                       | 1542              | 0.450 | 697                 | 661                             | 1.4               | 0.9             | 4.427     | A                             |
| B - Local Access               | 15                    | 4                       | 1031                      | 668               | 0.023 | 15                  | 4                               | 0.0               | 0.0             | 5.515     | A                             |
| C - Airmyn Road                | 139                   | 35                      | 831                       | 649               | 0.215 | 140                 | 215                             | 0.4               | 0.3             | 7.126     | A                             |
| D - A614 Rawcliffe Road (East) | 676                   | 169                     | 152                       | 1797              | 0.376 | 678                 | 819                             | 0.9               | 0.7             | 3.488     | A                             |
| E - Rawcliffe Road             | 320                   | 80                      | 677                       | 828               | 0.387 | 322                 | 153                             | 1.2               | 0.7             | 8.010     | A                             |

**17:45 - 18:00**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 582                   | 145                     | 282                       | 1577              | 0.369 | 583                 | 553                             | 0.9               | 0.6             | 3.764     | A                             |
| B - Local Access               | 13                    | 3                       | 862                       | 756               | 0.017 | 13                  | 3                               | 0.0               | 0.0             | 4.841     | A                             |
| C - Airmyn Road                | 117                   | 29                      | 695                       | 714               | 0.164 | 117                 | 180                             | 0.3               | 0.2             | 6.077     | A                             |
| D - A614 Rawcliffe Road (East) | 566                   | 142                     | 127                       | 1813              | 0.312 | 567                 | 685                             | 0.7               | 0.5             | 3.133     | A                             |
| E - Rawcliffe Road             | 268                   | 67                      | 566                       | 888               | 0.302 | 269                 | 128                             | 0.7               | 0.5             | 6.524     | A                             |

# 2026 Future Baseline, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 6.56               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 6.56              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 724                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 7                       | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 209                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 768                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 334                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 1                | 73              | 606                            | 44                 |
|      | B - Local Access               | 0                              | 0                | 0               | 7                              | 0                  |
|      | C - Airmyn Road                | 132                            | 1                | 1               | 54                             | 21                 |
|      | D - A614 Rawcliffe Road (East) | 664                            | 12               | 29              | 1                              | 62                 |
|      | E - Rawcliffe Road             | 73                             | 0                | 7               | 252                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.00                           | 0.00             |
|      | C - Airmyn Road                | 0.63                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.86                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 7                              | 11                 |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 2                              | 0                | 0               | 2                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 5                              | 9                | 0               | 0                              | 65                 |
|      | E - Rawcliffe Road             | 1                              | 0                | 13              | 13                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.025                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.052                          | 1.09             |
|      | E - Rawcliffe Road             | 1.015                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 07:15-07:30  | 545             | 545                    |
|                                | 07:30-07:45  | 651             | 651                    |
|                                | 07:45-08:00  | 798             | 798                    |
|                                | 08:00-08:15  | 798             | 798                    |
|                                | 08:15-08:30  | 651             | 651                    |
|                                | 08:30-08:45  | 545             | 545                    |
| B - Local Access               | 07:15-07:30  | 6               | 6                      |
|                                | 07:30-07:45  | 7               | 7                      |
|                                | 07:45-08:00  | 8               | 8                      |
|                                | 08:00-08:15  | 8               | 8                      |
|                                | 08:15-08:30  | 7               | 7                      |
|                                | 08:30-08:45  | 6               | 6                      |
| C - Airmyn Road                | 07:15-07:30  | 158             | 158                    |
|                                | 07:30-07:45  | 188             | 188                    |
|                                | 07:45-08:00  | 231             | 231                    |
|                                | 08:00-08:15  | 231             | 231                    |
|                                | 08:15-08:30  | 188             | 188                    |
|                                | 08:30-08:45  | 158             | 158                    |
| D - A614 Rawcliffe Road (East) | 07:15-07:30  | 578             | 578                    |
|                                | 07:30-07:45  | 690             | 690                    |
|                                | 07:45-08:00  | 845             | 845                    |
|                                | 08:00-08:15  | 845             | 845                    |
|                                | 08:15-08:30  | 690             | 690                    |
|                                | 08:30-08:45  | 578             | 578                    |
| E - Rawcliffe Road             | 07:15-07:30  | 252             | 252                    |
|                                | 07:30-07:45  | 300             | 300                    |
|                                | 07:45-08:00  | 368             | 368                    |
|                                | 08:00-08:15  | 368             | 368                    |
|                                | 08:15-08:30  | 300             | 300                    |
|                                | 08:30-08:45  | 252             | 252                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.52    | 5.13          | 1.1             | A       | 685                     | 997                           |
| B - Local Access               | 0.01    | 5.85          | 0.0             | A       | 7                       | 10                            |
| C - Airmyn Road                | 0.41    | 10.90         | 0.7             | B       | 192                     | 288                           |
| D - A614 Rawcliffe Road (East) | 0.48    | 4.28          | 1.0             | A       | 704                     | 1058                          |
| E - Rawcliffe Road             | 0.53    | 12.18         | 1.2             | B       | 307                     | 480                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 545                   | 136                     | 228                       | 1610              | 0.339 | 543                 | 652                             | 0.0               | 0.5             | 3.583     | A                             |
| B - Local Access               | 6                     | 1                       | 761                       | 809               | 0.007 | 6                   | 11                              | 0.0               | 0.0             | 4.478     | A                             |
| C - Airmyn Road                | 158                   | 39                      | 683                       | 719               | 0.219 | 157                 | 83                              | 0.0               | 0.3             | 6.519     | A                             |
| D - A614 Rawcliffe Road (East) | 578                   | 144                     | 150                       | 1799              | 0.321 | 576                 | 690                             | 0.0               | 0.5             | 3.178     | A                             |
| E - Rawcliffe Road             | 252                   | 63                      | 630                       | 854               | 0.295 | 250                 | 96                              | 0.0               | 0.5             | 6.529     | A                             |

#### 07:30 - 07:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 651                   | 163                     | 274                       | 1582              | 0.412 | 650                 | 780                             | 0.5               | 0.7             | 4.109     | A                             |
| B - Local Access               | 7                     | 2                       | 911                       | 731               | 0.009 | 7                   | 13                              | 0.0               | 0.0             | 4.971     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 818                       | 655               | 0.287 | 188                 | 99                              | 0.3               | 0.4             | 7.853     | A                             |
| D - A614 Rawcliffe Road (East) | 690                   | 172                     | 180                       | 1780              | 0.388 | 689                 | 826                             | 0.5               | 0.7             | 3.568     | A                             |
| E - Rawcliffe Road             | 300                   | 75                      | 754                       | 788               | 0.382 | 300                 | 115                             | 0.5               | 0.7             | 8.122     | A                             |

#### 07:45 - 08:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 798                   | 199                     | 334                       | 1545              | 0.516 | 796                 | 955                             | 0.7               | 1.1             | 5.107     | A                             |
| B - Local Access               | 8                     | 2                       | 1114                      | 625               | 0.013 | 8                   | 16                              | 0.0               | 0.0             | 5.839     | A                             |
| C - Airmyn Road                | 231                   | 58                      | 1001                      | 569               | 0.405 | 230                 | 122                             | 0.4               | 0.7             | 10.785    | B                             |
| D - A614 Rawcliffe Road (East) | 845                   | 211                     | 220                       | 1754              | 0.482 | 844                 | 1010                            | 0.7               | 1.0             | 4.269     | A                             |
| E - Rawcliffe Road             | 368                   | 92                      | 923                       | 693               | 0.531 | 366                 | 141                             | 0.7               | 1.2             | 11.996    | B                             |

#### 08:00 - 08:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 798                   | 199                     | 336                       | 1544              | 0.517 | 798                 | 957                             | 1.1               | 1.1             | 5.134     | A                             |
| B - Local Access               | 8                     | 2                       | 1118                      | 623               | 0.013 | 8                   | 16                              | 0.0               | 0.0             | 5.854     | A                             |
| C - Airmyn Road                | 231                   | 58                      | 1004                      | 568               | 0.406 | 231                 | 122                             | 0.7               | 0.7             | 10.898    | B                             |
| D - A614 Rawcliffe Road (East) | 845                   | 211                     | 221                       | 1754              | 0.482 | 845                 | 1014                            | 1.0               | 1.0             | 4.283     | A                             |
| E - Rawcliffe Road             | 368                   | 92                      | 925                       | 692               | 0.532 | 368                 | 141                             | 1.2               | 1.2             | 12.183    | B                             |

**08:15 - 08:30**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 651                   | 163                     | 276                       | 1580              | 0.412 | 653                 | 784                             | 1.1               | 0.8             | 4.137     | A                             |
| B - Local Access               | 7                     | 2                       | 916                       | 728               | 0.009 | 7                   | 13                              | 0.0               | 0.0             | 4.988     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 823                       | 653               | 0.288 | 189                 | 100                             | 0.7               | 0.4             | 7.942     | A                             |
| D - A614 Rawcliffe Road (East) | 690                   | 172                     | 181                       | 1779              | 0.388 | 691                 | 831                             | 1.0               | 0.7             | 3.582     | A                             |
| E - Rawcliffe Road             | 300                   | 75                      | 757                       | 784               | 0.383 | 303                 | 115                             | 1.2               | 0.7             | 8.250     | A                             |

**08:30 - 08:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 545                   | 136                     | 230                       | 1609              | 0.339 | 546                 | 656                             | 0.8               | 0.5             | 3.610     | A                             |
| B - Local Access               | 6                     | 1                       | 766                       | 807               | 0.007 | 6                   | 11                              | 0.0               | 0.0             | 4.495     | A                             |
| C - Airmyn Road                | 158                   | 39                      | 688                       | 717               | 0.220 | 158                 | 84                              | 0.4               | 0.3             | 6.586     | A                             |
| D - A614 Rawcliffe Road (East) | 578                   | 144                     | 152                       | 1798              | 0.321 | 579                 | 695                             | 0.7               | 0.5             | 3.194     | A                             |
| E - Rawcliffe Road             | 252                   | 63                      | 633                       | 852               | 0.295 | 253                 | 97                              | 0.7               | 0.5             | 6.609     | A                             |

# 2026 Future Baseline, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 6.76               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 6.76              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2026 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 795                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 18                      | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 160                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 774                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 366                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 119             | 625                            | 51                 |
|      | B - Local Access               | 2                              | 0                | 4               | 11                             | 0                  |
|      | C - Airmyn Road                | 96                             | 1                | 0               | 40                             | 23                 |
|      | D - A614 Rawcliffe Road (East) | 578                            | 3                | 88              | 5                              | 100                |
|      | E - Rawcliffe Road             | 79                             | 0                | 34              | 252                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.12                           | 0.00             |
|      | C - Airmyn Road                | 0.60                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.75                           | 0.00             |
|      | E - Rawcliffe Road             | 0.22                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 4                              | 4                  |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 0                              | 0                | 0               | 3                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 2                              | 0                | 0               | 100                            | 76                 |
|      | E - Rawcliffe Road             | 4                              | 0                | 15              | 15                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.000                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.025                          | 1.00             |
|      | E - Rawcliffe Road             | 1.043                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 16:30-16:45  | 599             | 599                    |
|                                | 16:45-17:00  | 715             | 715                    |
|                                | 17:00-17:15  | 876             | 876                    |
|                                | 17:15-17:30  | 876             | 876                    |
|                                | 17:30-17:45  | 715             | 715                    |
|                                | 17:45-18:00  | 599             | 599                    |
| B - Local Access               | 16:30-16:45  | 13              | 13                     |
|                                | 16:45-17:00  | 16              | 16                     |
|                                | 17:00-17:15  | 19              | 19                     |
|                                | 17:15-17:30  | 19              | 19                     |
|                                | 17:30-17:45  | 16              | 16                     |
|                                | 17:45-18:00  | 13              | 13                     |
| C - Airmyn Road                | 16:30-16:45  | 120             | 120                    |
|                                | 16:45-17:00  | 143             | 143                    |
|                                | 17:00-17:15  | 176             | 176                    |
|                                | 17:15-17:30  | 176             | 176                    |
|                                | 17:30-17:45  | 143             | 143                    |
|                                | 17:45-18:00  | 120             | 120                    |
| D - A614 Rawcliffe Road (East) | 16:30-16:45  | 583             | 583                    |
|                                | 16:45-17:00  | 696             | 696                    |
|                                | 17:00-17:15  | 852             | 852                    |
|                                | 17:15-17:30  | 852             | 852                    |
|                                | 17:30-17:45  | 696             | 696                    |
|                                | 17:45-18:00  | 583             | 583                    |
| E - Rawcliffe Road             | 16:30-16:45  | 276             | 276                    |
|                                | 16:45-17:00  | 329             | 329                    |
|                                | 17:00-17:15  | 403             | 403                    |
|                                | 17:15-17:30  | 403             | 403                    |
|                                | 17:30-17:45  | 329             | 329                    |
|                                | 17:45-18:00  | 276             | 276                    |



## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.59    | 6.08          | 1.5             | A       | 730                     | 1095                          |
| B - Local Access               | 0.04    | 7.04          | 0.0             | A       | 16                      | 24                            |
| C - Airmyn Road                | 0.32    | 9.70          | 0.5             | A       | 146                     | 220                           |
| D - A614 Rawcliffe Road (East) | 0.48    | 4.24          | 1.0             | A       | 710                     | 1065                          |
| E - Rawcliffe Road             | 0.55    | 12.23         | 1.4             | B       | 336                     | 504                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 599                   | 150                     | 288                       | 1573              | 0.381 | 596                 | 566                             | 0.0               | 0.6             | 3.814     | A                             |
| B - Local Access               | 13                    | 3                       | 881                       | 747               | 0.018 | 13                  | 3                               | 0.0               | 0.0             | 4.908     | A                             |
| C - Airmyn Road                | 120                   | 30                      | 710                       | 706               | 0.170 | 119                 | 184                             | 0.0               | 0.2             | 6.162     | A                             |
| D - A614 Rawcliffe Road (East) | 583                   | 146                     | 130                       | 1811              | 0.322 | 581                 | 699                             | 0.0               | 0.5             | 3.164     | A                             |
| E - Rawcliffe Road             | 276                   | 69                      | 579                       | 881               | 0.313 | 274                 | 131                             | 0.0               | 0.5             | 6.622     | A                             |

#### 16:45 - 17:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 715                   | 179                     | 345                       | 1538              | 0.465 | 714                 | 677                             | 0.6               | 0.9             | 4.528     | A                             |
| B - Local Access               | 16                    | 4                       | 1055                      | 656               | 0.024 | 16                  | 4                               | 0.0               | 0.0             | 5.626     | A                             |
| C - Airmyn Road                | 143                   | 36                      | 850                       | 640               | 0.224 | 143                 | 220                             | 0.2               | 0.3             | 7.286     | A                             |
| D - A614 Rawcliffe Road (East) | 696                   | 174                     | 156                       | 1795              | 0.388 | 695                 | 837                             | 0.5               | 0.7             | 3.545     | A                             |
| E - Rawcliffe Road             | 329                   | 82                      | 694                       | 819               | 0.402 | 328                 | 157                             | 0.5               | 0.7             | 8.213     | A                             |

#### 17:00 - 17:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 876                   | 219                     | 421                       | 1491              | 0.587 | 873                 | 829                             | 0.9               | 1.5             | 6.029     | A                             |
| B - Local Access               | 19                    | 5                       | 1290                      | 533               | 0.036 | 19                  | 5                               | 0.0               | 0.0             | 7.009     | A                             |
| C - Airmyn Road                | 176                   | 44                      | 1040                      | 551               | 0.319 | 175                 | 270                             | 0.3               | 0.5             | 9.625     | A                             |
| D - A614 Rawcliffe Road (East) | 852                   | 213                     | 191                       | 1773              | 0.481 | 851                 | 1024                            | 0.7               | 1.0             | 4.226     | A                             |
| E - Rawcliffe Road             | 403                   | 101                     | 849                       | 734               | 0.550 | 401                 | 193                             | 0.7               | 1.3             | 12.042    | B                             |

#### 17:15 - 17:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 876                   | 219                     | 423                       | 1490              | 0.588 | 876                 | 831                             | 1.5               | 1.5             | 6.084     | A                             |
| B - Local Access               | 19                    | 5                       | 1294                      | 531               | 0.037 | 19                  | 5                               | 0.0               | 0.0             | 7.038     | A                             |
| C - Airmyn Road                | 176                   | 44                      | 1043                      | 549               | 0.320 | 176                 | 270                             | 0.5               | 0.5             | 9.703     | A                             |
| D - A614 Rawcliffe Road (East) | 852                   | 213                     | 192                       | 1772              | 0.481 | 852                 | 1027                            | 1.0               | 1.0             | 4.238     | A                             |
| E - Rawcliffe Road             | 403                   | 101                     | 851                       | 733               | 0.550 | 403                 | 193                             | 1.3               | 1.4             | 12.234    | B                             |

**17:30 - 17:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 715                   | 179                     | 348                       | 1536              | 0.465 | 717                 | 680                             | 1.5               | 0.9             | 4.575     | A                             |
| B - Local Access               | 16                    | 4                       | 1061                      | 652               | 0.024 | 16                  | 4                               | 0.0               | 0.0             | 5.655     | A                             |
| C - Airmyn Road                | 143                   | 36                      | 856                       | 638               | 0.225 | 144                 | 221                             | 0.5               | 0.3             | 7.353     | A                             |
| D - A614 Rawcliffe Road (East) | 696                   | 174                     | 157                       | 1794              | 0.388 | 697                 | 842                             | 1.0               | 0.7             | 3.558     | A                             |
| E - Rawcliffe Road             | 329                   | 82                      | 696                       | 817               | 0.403 | 332                 | 158                             | 1.4               | 0.8             | 8.346     | A                             |

**17:45 - 18:00**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 599                   | 150                     | 290                       | 1572              | 0.381 | 600                 | 569                             | 0.9               | 0.6             | 3.848     | A                             |
| B - Local Access               | 13                    | 3                       | 887                       | 743               | 0.018 | 13                  | 3                               | 0.0               | 0.0             | 4.931     | A                             |
| C - Airmyn Road                | 120                   | 30                      | 715                       | 704               | 0.171 | 120                 | 185                             | 0.3               | 0.2             | 6.215     | A                             |
| D - A614 Rawcliffe Road (East) | 583                   | 146                     | 131                       | 1810              | 0.322 | 583                 | 704                             | 0.7               | 0.5             | 3.182     | A                             |
| E - Rawcliffe Road             | 276                   | 69                      | 583                       | 879               | 0.314 | 277                 | 132                             | 0.8               | 0.5             | 6.708     | A                             |

# 2026 Do Minimum, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 9.45               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 9.45              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name   | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D7 | 2026 Do Minimum | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 818                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 8                       | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 223                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 899                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 420                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 1                | 73              | 685                            | 59                 |
|      | B - Local Access               | 0                              | 0                | 0               | 8                              | 0                  |
|      | C - Airmyn Road                | 136                            | 1                | 1               | 58                             | 26                 |
|      | D - A614 Rawcliffe Road (East) | 727                            | 12               | 31              | 1                              | 128                |
|      | E - Rawcliffe Road             | 84                             | 0                | 14              | 320                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.00                           | 0.00             |
|      | C - Airmyn Road                | 0.61                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.81                           | 0.00             |
|      | E - Rawcliffe Road             | 0.20                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 7                              | 11                 |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 2                              | 0                | 0               | 2                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 5                              | 9                | 0               | 0                              | 65                 |
|      | E - Rawcliffe Road             | 1                              | 0                | 13              | 13                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.025                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.052                          | 1.09             |
|      | E - Rawcliffe Road             | 1.015                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 07:15-07:30  | 616             | 616                    |
|                                | 07:30-07:45  | 736             | 736                    |
|                                | 07:45-08:00  | 901             | 901                    |
|                                | 08:00-08:15  | 901             | 901                    |
|                                | 08:15-08:30  | 736             | 736                    |
|                                | 08:30-08:45  | 616             | 616                    |
| B - Local Access               | 07:15-07:30  | 6               | 6                      |
|                                | 07:30-07:45  | 7               | 7                      |
|                                | 07:45-08:00  | 9               | 9                      |
|                                | 08:00-08:15  | 9               | 9                      |
|                                | 08:15-08:30  | 7               | 7                      |
|                                | 08:30-08:45  | 6               | 6                      |
| C - Airmyn Road                | 07:15-07:30  | 168             | 168                    |
|                                | 07:30-07:45  | 200             | 200                    |
|                                | 07:45-08:00  | 245             | 245                    |
|                                | 08:00-08:15  | 245             | 245                    |
|                                | 08:15-08:30  | 200             | 200                    |
|                                | 08:30-08:45  | 168             | 168                    |
| D - A614 Rawcliffe Road (East) | 07:15-07:30  | 677             | 677                    |
|                                | 07:30-07:45  | 808             | 808                    |
|                                | 07:45-08:00  | 990             | 990                    |
|                                | 08:00-08:15  | 990             | 990                    |
|                                | 08:15-08:30  | 808             | 808                    |
|                                | 08:30-08:45  | 677             | 677                    |
| E - Rawcliffe Road             | 07:15-07:30  | 316             | 316                    |
|                                | 07:30-07:45  | 378             | 378                    |
|                                | 07:45-08:00  | 463             | 463                    |
|                                | 08:00-08:15  | 463             | 463                    |
|                                | 08:15-08:30  | 378             | 378                    |
|                                | 08:30-08:45  | 316             | 316                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.60    | 6.49          | 1.6             | A       | 751                     | 1126                          |
| B - Local Access               | 0.02    | 6.98          | 0.0             | A       | 7                       | 11                            |
| C - Airmyn Road                | 0.51    | 15.40         | 1.0             | C       | 205                     | 307                           |
| D - A614 Rawcliffe Road (East) | 0.57    | 5.33          | 1.5             | A       | 825                     | 1238                          |
| E - Rawcliffe Road             | 0.71    | 20.93         | 2.6             | C       | 388                     | 578                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 616                   | 154                     | 286                       | 1574              | 0.391 | 613                 | 709                             | 0.0               | 0.7             | 3.979     | A                             |
| B - Local Access               | 6                     | 2                       | 888                       | 743               | 0.008 | 6                   | 11                              | 0.0               | 0.0             | 4.886     | A                             |
| C - Airmyn Road                | 168                   | 42                      | 804                       | 662               | 0.254 | 166                 | 90                              | 0.0               | 0.3             | 7.395     | A                             |
| D - A614 Rawcliffe Road (East) | 677                   | 169                     | 168                       | 1787              | 0.379 | 674                 | 803                             | 0.0               | 0.7             | 3.570     | A                             |
| E - Rawcliffe Road             | 316                   | 79                      | 682                       | 825               | 0.383 | 314                 | 160                             | 0.0               | 0.7             | 7.704     | A                             |

#### 07:30 - 07:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 736                   | 184                     | 343                       | 1539              | 0.478 | 734                 | 850                             | 0.7               | 1.0             | 4.757     | A                             |
| B - Local Access               | 7                     | 2                       | 1084                      | 651               | 0.011 | 7                   | 13                              | 0.0               | 0.0             | 5.591     | A                             |
| C - Airmyn Road                | 200                   | 50                      | 963                       | 587               | 0.342 | 200                 | 108                             | 0.3               | 0.5             | 9.469     | A                             |
| D - A614 Rawcliffe Road (East) | 808                   | 202                     | 201                       | 1766              | 0.458 | 807                 | 962                             | 0.7               | 0.9             | 4.151     | A                             |
| E - Rawcliffe Road             | 378                   | 94                      | 816                       | 752               | 0.503 | 376                 | 192                             | 0.7               | 1.1             | 10.504    | B                             |

#### 07:45 - 08:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 901                   | 225                     | 417                       | 1494              | 0.603 | 898                 | 1039                            | 1.0               | 1.6             | 6.413     | A                             |
| B - Local Access               | 9                     | 2                       | 1299                      | 528               | 0.017 | 9                   | 16                              | 0.0               | 0.0             | 6.929     | A                             |
| C - Airmyn Road                | 245                   | 61                      | 1176                      | 487               | 0.505 | 244                 | 132                             | 0.5               | 1.0             | 14.995    | B                             |
| D - A614 Rawcliffe Road (East) | 990                   | 247                     | 246                       | 1738              | 0.570 | 988                 | 1174                            | 0.9               | 1.4             | 5.295     | A                             |
| E - Rawcliffe Road             | 463                   | 116                     | 999                       | 652               | 0.709 | 457                 | 235                             | 1.1               | 2.5             | 19.756    | C                             |

#### 08:00 - 08:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 901                   | 225                     | 421                       | 1491              | 0.604 | 901                 | 1043                            | 1.6               | 1.6             | 6.493     | A                             |
| B - Local Access               | 9                     | 2                       | 1306                      | 525               | 0.017 | 9                   | 16                              | 0.0               | 0.0             | 6.976     | A                             |
| C - Airmyn Road                | 245                   | 61                      | 1182                      | 484               | 0.508 | 245                 | 132                             | 1.0               | 1.0             | 15.405    | C                             |
| D - A614 Rawcliffe Road (East) | 990                   | 247                     | 247                       | 1737              | 0.570 | 990                 | 1180                            | 1.4               | 1.5             | 5.332     | A                             |
| E - Rawcliffe Road             | 463                   | 116                     | 1002                      | 650               | 0.711 | 462                 | 236                             | 2.5               | 2.6             | 20.931    | C                             |

**08:15 - 08:30**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 738                   | 184                     | 349                       | 1538              | 0.479 | 738                 | 855                             | 1.6               | 1.0             | 4.822     | A                             |
| B - Local Access               | 7                     | 2                       | 1074                      | 848               | 0.011 | 7                   | 13                              | 0.0               | 0.0             | 5.838     | A                             |
| C - Airmyn Road                | 200                   | 50                      | 972                       | 583               | 0.344 | 202                 | 109                             | 1.0               | 0.5             | 9.710     | A                             |
| D - A614 Rawcliffe Road (East) | 808                   | 202                     | 204                       | 1785              | 0.458 | 810                 | 971                             | 1.5               | 0.9             | 4.185     | A                             |
| E - Rawcliffe Road             | 378                   | 94                      | 821                       | 749               | 0.504 | 384                 | 193                             | 2.6               | 1.1             | 11.001    | B                             |

**08:30 - 08:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 618                   | 154                     | 290                       | 1572              | 0.392 | 617                 | 715                             | 1.0               | 0.7             | 4.020     | A                             |
| B - Local Access               | 6                     | 2                       | 896                       | 739               | 0.008 | 6                   | 11                              | 0.0               | 0.0             | 4.914     | A                             |
| C - Airmyn Road                | 168                   | 42                      | 811                       | 659               | 0.255 | 169                 | 91                              | 0.5               | 0.4             | 7.508     | A                             |
| D - A614 Rawcliffe Road (East) | 677                   | 169                     | 170                       | 1786              | 0.379 | 678                 | 810                             | 0.9               | 0.7             | 3.598     | A                             |
| E - Rawcliffe Road             | 318                   | 79                      | 688                       | 823               | 0.384 | 318                 | 182                             | 1.1               | 0.7             | 7.880     | A                             |

# 2026 Do Minimum, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 10.28              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 10.28             | B           |

## 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 | 2026 Do Minimum | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 879                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 18                      | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 171                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 924                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 458                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 119             | 699                            | 61                 |
|      | B - Local Access               | 2                              | 0                | 4               | 11                             | 0                  |
|      | C - Airmyn Road                | 96                             | 1                | 0               | 44                             | 30                 |
|      | D - A614 Rawcliffe Road (East) | 670                            | 3                | 98              | 5                              | 147                |
|      | E - Rawcliffe Road             | 94                             | 0                | 44              | 319                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.12                           | 0.00             |
|      | C - Airmyn Road                | 0.56                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.73                           | 0.00             |
|      | E - Rawcliffe Road             | 0.21                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 4                              | 4                  |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 0                              | 0                | 0               | 3                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 2                              | 0                | 0               | 100                            | 76                 |
|      | E - Rawcliffe Road             | 4                              | 0                | 15              | 15                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.000                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.025                          | 1.00             |
|      | E - Rawcliffe Road             | 1.043                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 16:30-16:45  | 662             | 662                    |
|                                | 16:45-17:00  | 790             | 790                    |
|                                | 17:00-17:15  | 968             | 968                    |
|                                | 17:15-17:30  | 968             | 968                    |
|                                | 17:30-17:45  | 790             | 790                    |
|                                | 17:45-18:00  | 662             | 662                    |
| B - Local Access               | 16:30-16:45  | 13              | 13                     |
|                                | 16:45-17:00  | 16              | 16                     |
|                                | 17:00-17:15  | 19              | 19                     |
|                                | 17:15-17:30  | 19              | 19                     |
|                                | 17:30-17:45  | 16              | 16                     |
|                                | 17:45-18:00  | 13              | 13                     |
| C - Airmyn Road                | 16:30-16:45  | 128             | 128                    |
|                                | 16:45-17:00  | 153             | 153                    |
|                                | 17:00-17:15  | 188             | 188                    |
|                                | 17:15-17:30  | 188             | 188                    |
|                                | 17:30-17:45  | 153             | 153                    |
|                                | 17:45-18:00  | 128             | 128                    |
| D - A614 Rawcliffe Road (East) | 16:30-16:45  | 695             | 695                    |
|                                | 16:45-17:00  | 830             | 830                    |
|                                | 17:00-17:15  | 1017            | 1017                   |
|                                | 17:15-17:30  | 1017            | 1017                   |
|                                | 17:30-17:45  | 830             | 830                    |
|                                | 17:45-18:00  | 695             | 695                    |
| E - Rawcliffe Road             | 16:30-16:45  | 345             | 345                    |
|                                | 16:45-17:00  | 412             | 412                    |
|                                | 17:00-17:15  | 504             | 504                    |
|                                | 17:15-17:30  | 504             | 504                    |
|                                | 17:30-17:45  | 412             | 412                    |
|                                | 17:45-18:00  | 345             | 345                    |



## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.68    | 8.06          | 2.1             | A       | 807                     | 1210                          |
| B - Local Access               | 0.04    | 8.70          | 0.0             | A       | 16                      | 24                            |
| C - Airmyn Road                | 0.40    | 12.78         | 0.7             | B       | 157                     | 235                           |
| D - A614 Rawcliffe Road (East) | 0.58    | 5.31          | 1.5             | A       | 847                     | 1271                          |
| E - Rawcliffe Road             | 0.75    | 23.72         | 3.2             | C       | 420                     | 630                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 662                   | 165                     | 352                       | 1534              | 0.432 | 659                 | 646                             | 0.0               | 0.8             | 4.256     | A                             |
| B - Local Access               | 13                    | 3                       | 1007                      | 681               | 0.020 | 13                  | 3                               | 0.0               | 0.0             | 5.394     | A                             |
| C - Airmyn Road                | 128                   | 32                      | 822                       | 654               | 0.197 | 127                 | 199                             | 0.0               | 0.2             | 6.875     | A                             |
| D - A614 Rawcliffe Road (East) | 695                   | 174                     | 143                       | 1803              | 0.386 | 693                 | 806                             | 0.0               | 0.7             | 3.549     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 656                       | 839               | 0.411 | 342                 | 179                             | 0.0               | 0.8             | 8.067     | A                             |

#### 16:45 - 17:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 790                   | 198                     | 422                       | 1491              | 0.530 | 789                 | 774                             | 0.8               | 1.2             | 5.313     | A                             |
| B - Local Access               | 16                    | 4                       | 1207                      | 577               | 0.028 | 16                  | 4                               | 0.0               | 0.0             | 6.420     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 984                       | 577               | 0.266 | 153                 | 238                             | 0.2               | 0.4             | 8.538     | A                             |
| D - A614 Rawcliffe Road (East) | 830                   | 208                     | 171                       | 1785              | 0.465 | 829                 | 966                             | 0.7               | 0.9             | 4.129     | A                             |
| E - Rawcliffe Road             | 412                   | 103                     | 786                       | 768               | 0.536 | 410                 | 215                             | 0.8               | 1.3             | 11.195    | B                             |

#### 17:00 - 17:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 968                   | 242                     | 513                       | 1435              | 0.675 | 964                 | 946                             | 1.2               | 2.1             | 7.880     | A                             |
| B - Local Access               | 19                    | 5                       | 1472                      | 438               | 0.044 | 19                  | 5                               | 0.0               | 0.0             | 8.597     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 1201                      | 475               | 0.396 | 187                 | 291                             | 0.4               | 0.6             | 12.526    | B                             |
| D - A614 Rawcliffe Road (East) | 1017                  | 254                     | 209                       | 1761              | 0.577 | 1015                | 1178                            | 0.9               | 1.5             | 5.279     | A                             |
| E - Rawcliffe Road             | 504                   | 126                     | 961                       | 672               | 0.750 | 497                 | 263                             | 1.3               | 3.1             | 22.145    | C                             |

#### 17:15 - 17:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 968                   | 242                     | 518                       | 1431              | 0.676 | 968                 | 949                             | 2.1               | 2.1             | 8.057     | A                             |
| B - Local Access               | 19                    | 5                       | 1481                      | 433               | 0.045 | 19                  | 5                               | 0.0               | 0.0             | 8.698     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 1208                      | 471               | 0.399 | 188                 | 292                             | 0.6               | 0.7             | 12.781    | B                             |
| D - A614 Rawcliffe Road (East) | 1017                  | 254                     | 210                       | 1760              | 0.578 | 1017                | 1186                            | 1.5               | 1.5             | 5.312     | A                             |
| E - Rawcliffe Road             | 504                   | 126                     | 964                       | 671               | 0.751 | 503                 | 264                             | 3.1               | 3.2             | 23.723    | C                             |

**17:30 - 17:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 790                   | 198                     | 430                       | 1486              | 0.532 | 794                 | 779                             | 2.1               | 1.2             | 5.434     | A                             |
| B - Local Access               | 16                    | 4                       | 1220                      | 570               | 0.028 | 16                  | 4                               | 0.0               | 0.0             | 6.501     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 996                       | 572               | 0.268 | 155                 | 240                             | 0.7               | 0.4             | 8.712     | A                             |
| D - A614 Rawcliffe Road (East) | 830                   | 208                     | 173                       | 1784              | 0.465 | 832                 | 977                             | 1.5               | 1.0             | 4.160     | A                             |
| E - Rawcliffe Road             | 412                   | 103                     | 789                       | 766               | 0.537 | 419                 | 216                             | 3.2               | 1.3             | 11.867    | B                             |

**17:45 - 18:00**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 662                   | 165                     | 356                       | 1531              | 0.432 | 663                 | 651                             | 1.2               | 0.8             | 4.316     | A                             |
| B - Local Access               | 13                    | 3                       | 1017                      | 676               | 0.020 | 13                  | 3                               | 0.0               | 0.0             | 5.436     | A                             |
| C - Airmyn Road                | 128                   | 32                      | 830                       | 650               | 0.198 | 129                 | 200                             | 0.4               | 0.3             | 6.964     | A                             |
| D - A614 Rawcliffe Road (East) | 695                   | 174                     | 144                       | 1802              | 0.386 | 696                 | 814                             | 1.0               | 0.7             | 3.578     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 660                       | 837               | 0.412 | 347                 | 181                             | 1.3               | 0.8             | 8.276     | A                             |

# 2026 Do Something, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 10.46              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 10.46             | B           |

## 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 | 2026 Do Something | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 844                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 8                       | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 223                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 955                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 420                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 1                | 73              | 711                            | 59                 |
|      | B - Local Access               | 0                              | 0                | 0               | 8                              | 0                  |
|      | C - Airmyn Road                | 136                            | 1                | 1               | 58                             | 26                 |
|      | D - A614 Rawcliffe Road (East) | 782                            | 12               | 31              | 1                              | 128                |
|      | E - Rawcliffe Road             | 84                             | 0                | 14              | 320                            | 1                  |

### Proportions

|      | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.00                           | 0.00             |
|      | C - Airmyn Road                | 0.61                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.82                           | 0.00             |
|      | E - Rawcliffe Road             | 0.20                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 7                              | 11                 |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 2                              | 0                | 0               | 2                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 5                              | 9                | 0               | 0                              | 65                 |
|      | E - Rawcliffe Road             | 1                              | 0                | 13              | 13                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.025                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.052                          | 1.09             |
|      | E - Rawcliffe Road             | 1.015                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 07:15-07:30  | 635             | 635                    |
|                                | 07:30-07:45  | 759             | 759                    |
|                                | 07:45-08:00  | 929             | 929                    |
|                                | 08:00-08:15  | 929             | 929                    |
|                                | 08:15-08:30  | 759             | 759                    |
|                                | 08:30-08:45  | 635             | 635                    |
| B - Local Access               | 07:15-07:30  | 6               | 6                      |
|                                | 07:30-07:45  | 7               | 7                      |
|                                | 07:45-08:00  | 9               | 9                      |
|                                | 08:00-08:15  | 9               | 9                      |
|                                | 08:15-08:30  | 7               | 7                      |
|                                | 08:30-08:45  | 6               | 6                      |
| C - Airmyn Road                | 07:15-07:30  | 168             | 168                    |
|                                | 07:30-07:45  | 200             | 200                    |
|                                | 07:45-08:00  | 245             | 245                    |
|                                | 08:00-08:15  | 245             | 245                    |
|                                | 08:15-08:30  | 200             | 200                    |
|                                | 08:30-08:45  | 168             | 168                    |
| D - A614 Rawcliffe Road (East) | 07:15-07:30  | 719             | 719                    |
|                                | 07:30-07:45  | 859             | 859                    |
|                                | 07:45-08:00  | 1052            | 1052                   |
|                                | 08:00-08:15  | 1052            | 1052                   |
|                                | 08:15-08:30  | 859             | 859                    |
|                                | 08:30-08:45  | 719             | 719                    |
| E - Rawcliffe Road             | 07:15-07:30  | 316             | 316                    |
|                                | 07:30-07:45  | 378             | 378                    |
|                                | 07:45-08:00  | 463             | 463                    |
|                                | 08:00-08:15  | 463             | 463                    |
|                                | 08:15-08:30  | 378             | 378                    |
|                                | 08:30-08:45  | 316             | 316                    |

## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.62    | 6.82          | 1.7             | A       | 775                     | 1162                          |
| B - Local Access               | 0.02    | 7.18          | 0.0             | A       | 7                       | 11                            |
| C - Airmyn Road                | 0.52    | 18.31         | 1.1             | C       | 205                     | 307                           |
| D - A614 Rawcliffe Road (East) | 0.61    | 5.79          | 1.7             | A       | 876                     | 1315                          |
| E - Rawcliffe Road             | 0.75    | 25.32         | 3.1             | D       | 388                     | 578                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 635                   | 159                     | 288                       | 1574              | 0.404 | 633                 | 751                             | 0.0               | 0.7             | 4.059     | A                             |
| B - Local Access               | 6                     | 2                       | 907                       | 733               | 0.008 | 6                   | 11                              | 0.0               | 0.0             | 4.953     | A                             |
| C - Airmyn Road                | 168                   | 42                      | 823                       | 653               | 0.257 | 166                 | 90                              | 0.0               | 0.3             | 7.529     | A                             |
| D - A614 Rawcliffe Road (East) | 719                   | 180                     | 168                       | 1787              | 0.402 | 716                 | 822                             | 0.0               | 0.7             | 3.699     | A                             |
| E - Rawcliffe Road             | 316                   | 79                      | 724                       | 802               | 0.394 | 313                 | 160                             | 0.0               | 0.7             | 8.061     | A                             |

#### 07:30 - 07:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 759                   | 190                     | 343                       | 1540              | 0.493 | 758                 | 900                             | 0.7               | 1.0             | 4.896     | A                             |
| B - Local Access               | 7                     | 2                       | 1087                      | 639               | 0.011 | 7                   | 13                              | 0.0               | 0.0             | 5.697     | A                             |
| C - Airmyn Road                | 200                   | 50                      | 986                       | 576               | 0.348 | 200                 | 108                             | 0.3               | 0.5             | 9.740     | A                             |
| D - A614 Rawcliffe Road (East) | 859                   | 215                     | 201                       | 1766              | 0.486 | 857                 | 985                             | 0.7               | 1.0             | 4.365     | A                             |
| E - Rawcliffe Road             | 378                   | 94                      | 867                       | 724               | 0.522 | 376                 | 192                             | 0.7               | 1.2             | 11.313    | B                             |

#### 07:45 - 08:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 929                   | 232                     | 416                       | 1495              | 0.622 | 927                 | 1100                            | 1.0               | 1.7             | 6.718     | A                             |
| B - Local Access               | 9                     | 2                       | 1326                      | 514               | 0.017 | 9                   | 16                              | 0.0               | 0.0             | 7.122     | A                             |
| C - Airmyn Road                | 245                   | 61                      | 1203                      | 474               | 0.518 | 243                 | 132                             | 0.5               | 1.1             | 15.801    | C                             |
| D - A614 Rawcliffe Road (East) | 1052                  | 263                     | 246                       | 1738              | 0.605 | 1049                | 1201                            | 1.0               | 1.7             | 5.743     | A                             |
| E - Rawcliffe Road             | 463                   | 116                     | 1060                      | 619               | 0.748 | 455                 | 235                             | 1.2               | 3.0             | 23.311    | C                             |

#### 08:00 - 08:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 929                   | 232                     | 421                       | 1491              | 0.623 | 929                 | 1104                            | 1.7               | 1.7             | 6.821     | A                             |
| B - Local Access               | 9                     | 2                       | 1334                      | 510               | 0.017 | 9                   | 16                              | 0.0               | 0.0             | 7.181     | A                             |
| C - Airmyn Road                | 245                   | 61                      | 1211                      | 470               | 0.522 | 245                 | 132                             | 1.1               | 1.1             | 16.313    | C                             |
| D - A614 Rawcliffe Road (East) | 1052                  | 263                     | 247                       | 1737              | 0.605 | 1051                | 1209                            | 1.7               | 1.7             | 5.792     | A                             |
| E - Rawcliffe Road             | 463                   | 116                     | 1063                      | 617               | 0.750 | 462                 | 236                             | 3.0               | 3.1             | 25.324    | D                             |

**08:15 - 08:30**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 759                   | 190                     | 350                       | 1535              | 0.494 | 762                 | 907                             | 1.7               | 1.1             | 4.979     | A                             |
| B - Local Access               | 7                     | 2                       | 1099                      | 633               | 0.011 | 7                   | 13                              | 0.0               | 0.0             | 5.753     | A                             |
| C - Airmyn Road                | 200                   | 50                      | 997                       | 571               | 0.351 | 203                 | 109                             | 1.1               | 0.6             | 10.028    | B                             |
| D - A614 Rawcliffe Road (East) | 859                   | 215                     | 204                       | 1765              | 0.487 | 861                 | 996                             | 1.7               | 1.1             | 4.407     | A                             |
| E - Rawcliffe Road             | 378                   | 94                      | 872                       | 721               | 0.523 | 385                 | 193                             | 3.1               | 1.2             | 12.033    | B                             |

**08:30 - 08:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 635                   | 159                     | 290                       | 1572              | 0.404 | 637                 | 757                             | 1.1               | 0.7             | 4.107     | A                             |
| B - Local Access               | 6                     | 2                       | 916                       | 728               | 0.008 | 6                   | 11                              | 0.0               | 0.0             | 4.983     | A                             |
| C - Airmyn Road                | 168                   | 42                      | 831                       | 649               | 0.258 | 169                 | 91                              | 0.6               | 0.4             | 7.652     | A                             |
| D - A614 Rawcliffe Road (East) | 719                   | 180                     | 170                       | 1786              | 0.403 | 720                 | 830                             | 1.1               | 0.7             | 3.730     | A                             |
| E - Rawcliffe Road             | 316                   | 79                      | 729                       | 800               | 0.396 | 318                 | 162                             | 1.2               | 0.7             | 8.266     | A                             |

# 2026 Do Something, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 2        | Site 2 | Standard Roundabout |                       | C, D, E, A, B | 11.43              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 11.43             | B           |

## 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 | 2026 Do Something | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 950                     | 100.000            |
| B - Local Access               |            | ONE HOUR     | ✓            | 18                      | 100.000            |
| C - Airmyn Road                |            | ONE HOUR     | ✓            | 171                     | 100.000            |
| D - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 949                     | 100.000            |
| E - Rawcliffe Road             |            | ONE HOUR     | ✓            | 458                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                                | To                             |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
| From | A - A614 Rawcliffe Road (West) | 0                              | 0                | 119             | 770                            | 61                 |
|      | B - Local Access               | 2                              | 0                | 4               | 11                             | 0                  |
|      | C - Airmyn Road                | 96                             | 1                | 0               | 44                             | 30                 |
|      | D - A614 Rawcliffe Road (East) | 696                            | 3                | 98              | 5                              | 147                |
|      | E - Rawcliffe Road             | 94                             | 0                | 44              | 319                            | 1                  |

### Proportions

|      |                                | To                             |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
| From | A - A614 Rawcliffe Road (West) | 0.00                           | 0.00             |
|      | B - Local Access               | 0.12                           | 0.00             |
|      | C - Airmyn Road                | 0.56                           | 0.00             |
|      | D - A614 Rawcliffe Road (East) | 0.73                           | 0.00             |
|      | E - Rawcliffe Road             | 0.21                           | 0.00             |

## Vehicle Mix

### Heavy Vehicle Percentages

| From | To                             |                                |                  |                 |                                |                    |
|------|--------------------------------|--------------------------------|------------------|-----------------|--------------------------------|--------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access | C - Airmyn Road | D - A614 Rawcliffe Road (East) | E - Rawcliffe Road |
|      | A - A614 Rawcliffe Road (West) | 0                              | 0                | 1               | 4                              | 4                  |
|      | B - Local Access               | 0                              | 0                | 0               | 0                              | 0                  |
|      | C - Airmyn Road                | 0                              | 0                | 0               | 3                              | 0                  |
|      | D - A614 Rawcliffe Road (East) | 2                              | 0                | 0               | 100                            | 76                 |
|      | E - Rawcliffe Road             | 4                              | 0                | 15              | 15                             | 0                  |

### Average PCU Per Veh

| From | To                             |                                |                  |
|------|--------------------------------|--------------------------------|------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - Local Access |
|      | A - A614 Rawcliffe Road (West) | 1.000                          | 1.00             |
|      | B - Local Access               | 1.000                          | 1.00             |
|      | C - Airmyn Road                | 1.000                          | 1.00             |
|      | D - A614 Rawcliffe Road (East) | 1.025                          | 1.00             |
|      | E - Rawcliffe Road             | 1.043                          | 1.00             |

## Detailed Demand Data

### Demand for each time segment

| Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|--------------------------------|--------------|-----------------|------------------------|
| A - A614 Rawcliffe Road (West) | 16:30-16:45  | 715             | 715                    |
|                                | 16:45-17:00  | 854             | 854                    |
|                                | 17:00-17:15  | 1046            | 1046                   |
|                                | 17:15-17:30  | 1046            | 1046                   |
|                                | 17:30-17:45  | 854             | 854                    |
|                                | 17:45-18:00  | 715             | 715                    |
| B - Local Access               | 16:30-16:45  | 13              | 13                     |
|                                | 16:45-17:00  | 16              | 16                     |
|                                | 17:00-17:15  | 19              | 19                     |
|                                | 17:15-17:30  | 19              | 19                     |
|                                | 17:30-17:45  | 16              | 16                     |
|                                | 17:45-18:00  | 13              | 13                     |
| C - Airmyn Road                | 16:30-16:45  | 128             | 128                    |
|                                | 16:45-17:00  | 153             | 153                    |
|                                | 17:00-17:15  | 188             | 188                    |
|                                | 17:15-17:30  | 188             | 188                    |
|                                | 17:30-17:45  | 153             | 153                    |
|                                | 17:45-18:00  | 128             | 128                    |
| D - A614 Rawcliffe Road (East) | 16:30-16:45  | 715             | 715                    |
|                                | 16:45-17:00  | 854             | 854                    |
|                                | 17:00-17:15  | 1045            | 1045                   |
|                                | 17:15-17:30  | 1045            | 1045                   |
|                                | 17:30-17:45  | 854             | 854                    |
|                                | 17:45-18:00  | 715             | 715                    |
| E - Rawcliffe Road             | 16:30-16:45  | 345             | 345                    |
|                                | 16:45-17:00  | 412             | 412                    |
|                                | 17:00-17:15  | 504             | 504                    |
|                                | 17:15-17:30  | 504             | 504                    |
|                                | 17:30-17:45  | 412             | 412                    |
|                                | 17:45-18:00  | 345             | 345                    |



## 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) |
|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 0.73    | 9.68          | 2.8             | A       | 872                     | 1308                          |
| B - Local Access               | 0.05    | 9.64          | 0.1             | A       | 16                      | 24                            |
| C - Airmyn Road                | 0.43    | 14.68         | 0.8             | B       | 157                     | 235                           |
| D - A614 Rawcliffe Road (East) | 0.59    | 5.51          | 1.6             | A       | 871                     | 1307                          |
| E - Rawcliffe Road             | 0.77    | 28.21         | 3.5             | D       | 420                     | 630                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 715                   | 179                     | 352                       | 1534              | 0.466 | 712                 | 665                             | 0.0               | 0.9             | 4.528     | A                             |
| B - Local Access               | 13                    | 3                       | 1080                      | 653               | 0.020 | 13                  | 3                               | 0.0               | 0.0             | 5.627     | A                             |
| C - Airmyn Road                | 128                   | 32                      | 875                       | 629               | 0.204 | 127                 | 199                             | 0.0               | 0.3             | 7.215     | A                             |
| D - A614 Rawcliffe Road (East) | 715                   | 179                     | 143                       | 1803              | 0.396 | 712                 | 859                             | 0.0               | 0.7             | 3.605     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 676                       | 829               | 0.416 | 341                 | 179                             | 0.0               | 0.8             | 8.240     | A                             |

#### 16:45 - 17:00

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 854                   | 214                     | 422                       | 1491              | 0.573 | 852                 | 797                             | 0.9               | 1.4             | 5.837     | A                             |
| B - Local Access               | 16                    | 4                       | 1270                      | 544               | 0.029 | 16                  | 4                               | 0.0               | 0.0             | 6.821     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 1048                      | 547               | 0.280 | 153                 | 238                             | 0.3               | 0.4             | 9.182     | A                             |
| D - A614 Rawcliffe Road (East) | 854                   | 213                     | 171                       | 1785              | 0.478 | 852                 | 1029                            | 0.7               | 1.0             | 4.222     | A                             |
| E - Rawcliffe Road             | 412                   | 103                     | 809                       | 756               | 0.545 | 409                 | 215                             | 0.8               | 1.3             | 11.595    | B                             |

#### 17:00 - 17:15

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 1046                  | 261                     | 512                       | 1435              | 0.729 | 1041                | 974                             | 1.4               | 2.7             | 9.353     | A                             |
| B - Local Access               | 19                    | 5                       | 1548                      | 398               | 0.049 | 19                  | 5                               | 0.0               | 0.1             | 9.493     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 1286                      | 435               | 0.432 | 188                 | 292                             | 0.7               | 0.8             | 14.678    | B                             |
| D - A614 Rawcliffe Road (East) | 1045                  | 261                     | 209                       | 1761              | 0.594 | 1043                | 1254                            | 1.0               | 1.6             | 5.472     | A                             |
| E - Rawcliffe Road             | 504                   | 126                     | 990                       | 657               | 0.767 | 496                 | 263                             | 1.3               | 3.3             | 23.966    | C                             |

#### 17:15 - 17:30

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 1046                  | 261                     | 518                       | 1431              | 0.731 | 1046                | 977                             | 2.7               | 2.8             | 9.677     | A                             |
| B - Local Access               | 19                    | 5                       | 1559                      | 393               | 0.050 | 19                  | 5                               | 0.1               | 0.1             | 9.643     | A                             |
| C - Airmyn Road                | 188                   | 47                      | 1286                      | 435               | 0.432 | 188                 | 292                             | 0.7               | 0.8             | 14.678    | B                             |
| D - A614 Rawcliffe Road (East) | 1045                  | 261                     | 210                       | 1761              | 0.594 | 1045                | 1264                            | 1.6               | 1.6             | 5.513     | A                             |
| E - Rawcliffe Road             | 504                   | 126                     | 992                       | 656               | 0.769 | 503                 | 264                             | 3.3               | 3.5             | 26.207    | D                             |

**17:30 - 17:45**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 854                   | 214                     | 430                       | 1485              | 0.575 | 859                 | 803                             | 2.8               | 1.4             | 6.022     | A                             |
| B - Local Access               | 16                    | 4                       | 1286                      | 535               | 0.030 | 16                  | 4                               | 0.1               | 0.0             | 6.933     | A                             |
| C - Airmyn Road                | 153                   | 38                      | 1061                      | 541               | 0.284 | 155                 | 240                             | 0.8               | 0.4             | 9.429     | A                             |
| D - A614 Rawcliffe Road (East) | 854                   | 213                     | 173                       | 1784              | 0.478 | 856                 | 1043                            | 1.6               | 1.0             | 4.280     | A                             |
| E - Rawcliffe Road             | 412                   | 103                     | 813                       | 753               | 0.546 | 420                 | 216                             | 3.5               | 1.4             | 12.401    | B                             |

**17:45 - 18:00**

| Arm                            | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A614 Rawcliffe Road (West) | 715                   | 179                     | 357                       | 1531              | 0.467 | 717                 | 670                             | 1.4               | 0.9             | 4.606     | A                             |
| B - Local Access               | 13                    | 3                       | 1071                      | 648               | 0.021 | 13                  | 3                               | 0.0               | 0.0             | 5.678     | A                             |
| C - Airmyn Road                | 128                   | 32                      | 883                       | 625               | 0.206 | 129                 | 201                             | 0.4               | 0.3             | 7.324     | A                             |
| D - A614 Rawcliffe Road (East) | 715                   | 179                     | 145                       | 1802              | 0.397 | 716                 | 888                             | 1.0               | 0.7             | 3.633     | A                             |
| E - Rawcliffe Road             | 345                   | 86                      | 680                       | 826               | 0.417 | 347                 | 181                             | 1.4               | 0.8             | 8.465     | A                             |



| <b>Junctions 10</b>                                                                                                                                              |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>ARCADY 10 - Roundabout Module</b>                                                                                                                             |  |
| Version: 10.0.4.1693                                                                                                                                             |  |
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**Filename:** J4\_wo Lane simulation.j10

**Path:** \\uk.wspgroup.com\Central Data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\8 - Traffic Flow Analysis and Models\05 - Models and Outputs\Models

**Report generation date:** 18/03/2022 10:05:04

- 
- »2018 Baseline, AM
  - »2018 Baseline, PM
  - »2022 Future Baseline , AM
  - »2022 Future Baseline , PM
  - »2026 Future Baseline, AM
  - »2026 Future Baseline, PM
  - »2026 Do Nothing, AM
  - »2026 Do Nothing, PM
  - »2026 Do Something, AM
  - »2026 Do Something, PM

## Summary of junction performance

|                                              | AM                   |             |           |      |     | PM     |             |           |      |     |
|----------------------------------------------|----------------------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|
|                                              | Set ID               | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS |
|                                              | 2018 Baseline        |             |           |      |     |        |             |           |      |     |
| 3E - Site 3 - A - Link                       | D1                   | 1.2         | 3.69      | 0.52 | A   | D2     | 1.4         | 3.84      | 0.56 | A   |
| 3E - Site 3 - B - M62 Southbound Off-Ramp    |                      | 1.2         | 9.11      | 0.52 | A   |        | 0.7         | 7.88      | 0.39 | A   |
| 3E - Site 3 - C - A614 Rawcliffe Road (East) |                      | 0.5         | 3.07      | 0.31 | A   |        | 0.7         | 3.24      | 0.40 | A   |
| 3E - Site 3 - D - A161                       |                      | 0.3         | 3.94      | 0.18 | A   |        | 0.4         | 4.20      | 0.26 | A   |
| 3W - Site 3 - A - A614 Rawcliffe Road (West) |                      | 2.2         | 8.48      | 0.67 | A   |        | 3.4         | 12.08     | 0.77 | B   |
| 3W - Site 3 - C - Link                       |                      | 1.0         | 4.59      | 0.46 | A   |        | 1.5         | 5.59      | 0.58 | A   |
| 3W - Site 3 - D - M62 Northbound Off-Ramp    |                      | 0.9         | 3.22      | 0.43 | A   |        | 0.9         | 3.26      | 0.43 | A   |
|                                              | 2022 Future Baseline |             |           |      |     |        |             |           |      |     |
| 3E - Site 3 - A - Link                       | D3                   | 1.3         | 3.84      | 0.54 | A   | D4     | 1.5         | 4.02      | 0.58 | A   |
| 3E - Site 3 - B - M62 Southbound Off-Ramp    |                      | 1.3         | 9.92      | 0.55 | A   |        | 0.8         | 8.37      | 0.41 | A   |
| 3E - Site 3 - C - A614 Rawcliffe Road (East) |                      | 0.5         | 3.18      | 0.32 | A   |        | 0.7         | 3.37      | 0.42 | A   |
| 3E - Site 3 - D - A161                       |                      | 0.3         | 4.05      | 0.19 | A   |        | 0.4         | 4.35      | 0.27 | A   |
| 3W - Site 3 - A - A614 Rawcliffe Road (West) |                      | 2.5         | 9.42      | 0.70 | A   |        | 4.1         | 14.28     | 0.80 | B   |
| 3W - Site 3 - C - Link                       |                      | 1.0         | 4.73      | 0.48 | A   |        | 1.6         | 5.86      | 0.60 | A   |
| 3W - Site 3 - D - M62 Northbound Off-Ramp    |                      | 1.0         | 3.36      | 0.45 | A   |        | 1.0         | 3.41      | 0.45 | A   |
|                                              | 2026 Future Baseline |             |           |      |     |        |             |           |      |     |
| 3E - Site 3 - A - Link                       | D5                   | 1.4         | 3.98      | 0.55 | A   | D6     | 1.6         | 4.18      | 0.59 | A   |
| 3E - Site 3 - B - M62 Southbound Off-Ramp    |                      | 1.5         | 10.80     | 0.58 | B   |        | 0.9         | 8.86      | 0.43 | A   |
| 3E - Site 3 - C - A614 Rawcliffe Road (East) |                      | 0.5         | 3.28      | 0.34 | A   |        | 0.8         | 3.50      | 0.43 | A   |
| 3E - Site 3 - D - A161                       |                      | 0.3         | 4.16      | 0.20 | A   |        | 0.4         | 4.50      | 0.28 | A   |
| 3W - Site 3 - A - A614 Rawcliffe Road (West) |                      | 2.9         | 10.43     | 0.73 | B   |        | 4.9         | 16.88     | 0.83 | C   |
| 3W - Site 3 - C - Link                       |                      | 1.1         | 4.87      | 0.49 | A   |        | 1.7         | 6.12      | 0.62 | A   |
| 3W - Site 3 - D - M62 Northbound Off-Ramp    |                      | 1.1         | 3.49      | 0.46 | A   |        | 1.0         | 3.55      | 0.47 | A   |
|                                              | 2026 Do Nothing      |             |           |      |     |        |             |           |      |     |
| 3E - Site 3 - A - Link                       | D7                   | 4.3         | 8.57      | 0.79 | A   | D8     | 2.3         | 5.39      | 0.68 | A   |
| 3E - Site 3 - B - M62 Southbound Off-Ramp    |                      | 128.5       | 641.55    | 1.38 | F   |        | 3.0         | 21.50     | 0.73 | C   |
| 3E - Site 3 - C - A614 Rawcliffe Road (East) |                      | 2.1         | 8.55      | 0.67 | A   |        | 1.6         | 5.44      | 0.60 | A   |
| 3E - Site 3 - D - A161                       |                      | 0.5         | 5.19      | 0.29 | A   |        | 2.2         | 11.24     | 0.67 | B   |
| 3W - Site 3 - A - A614 Rawcliffe Road (West) |                      | 72.8        | 201.96    | 1.12 | F   |        | 113.0       | 299.34    | 1.20 | F   |
| 3W - Site 3 - C - Link                       |                      | 1.5         | 5.79      | 0.57 | A   |        | 7.7         | 20.24     | 0.89 | C   |
| 3W - Site 3 - D - M62 Northbound Off-Ramp    |                      | 3.1         | 6.85      | 0.72 | A   |        | 2.2         | 6.43      | 0.66 | A   |
|                                              | 2026 Do Something    |             |           |      |     |        |             |           |      |     |
| 3E - Site 3 - A - Link                       | D9                   | 4.4         | 8.71      | 0.79 | A   | D10    | 2.3         | 5.49      | 0.68 | A   |
| 3E - Site 3 - B - M62 Southbound Off-Ramp    |                      | 135.4       | 682.06    | 1.39 | F   |        | 3.0         | 22.06     | 0.73 | C   |
| 3E - Site 3 - C - A614 Rawcliffe Road (East) |                      | 2.2         | 8.68      | 0.67 | A   |        | 1.6         | 5.62      | 0.61 | A   |
| 3E - Site 3 - D - A161                       |                      | 0.5         | 5.27      | 0.29 | A   |        | 2.4         | 12.23     | 0.69 | B   |
| 3W - Site 3 - A - A614 Rawcliffe Road (West) |                      | 88.2        | 234.25    | 1.15 | F   |        | 153.9       | 440.49    | 1.28 | F   |
| 3W - Site 3 - C - Link                       |                      | 1.5         | 5.80      | 0.57 | A   |        | 7.7         | 20.23     | 0.89 | C   |
| 3W - Site 3 - D - M62 Northbound Off-Ramp    |                      | 3.5         | 7.54      | 0.74 | A   |        | 2.3         | 6.73      | 0.67 | 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.

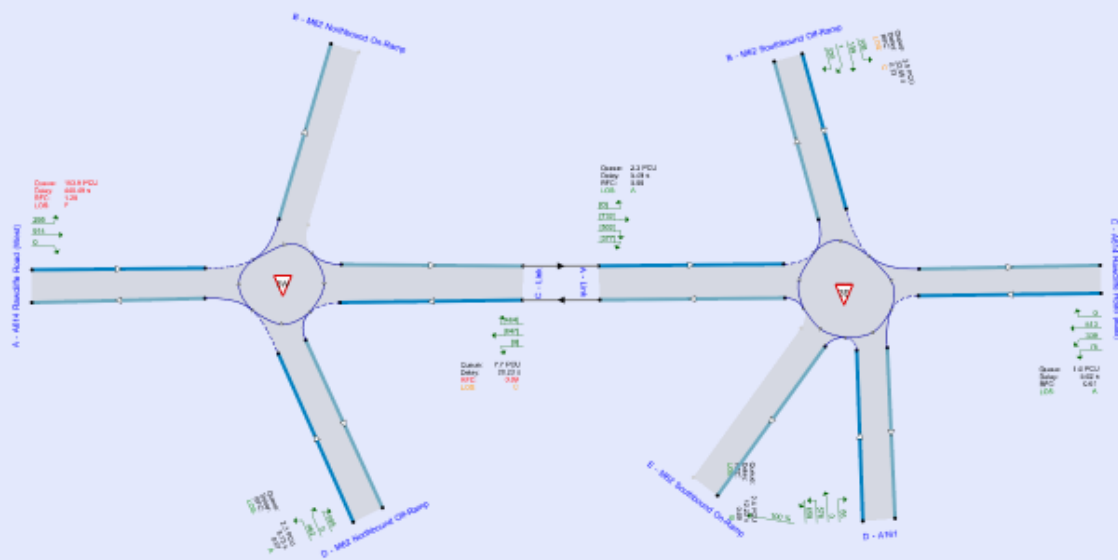
## File summary

### File Description

|             |                |
|-------------|----------------|
| Title       | Site 3         |
| Location    |                |
| Site number |                |
| Date        | 28/03/2018     |
| Version     |                |
| Status      |                |
| Identifier  |                |
| Client      |                |
| Jobnumber   |                |
| Enumerator  | CORP\INTW00749 |
| 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              |



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

## Analysis Options

| Vehicle length (m) | Calculate Queue Percentiles | Calculate detailed queueing delay | Show lane queues in feet / metres | Show all PICADY stream intercepts | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) | Use iterations with HCM roundabouts | Max number of iterations for roundabouts |
|--------------------|-----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------|---------------|-----------------------------|-----------------------|-------------------------------------|------------------------------------------|
| 5.75               |                             |                                   |                                   |                                   |                             | 0.85          | 38.00                       | 20.00                 |                                     | 500                                      |

## Demand Set Summary

| ID  | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1  | 2018 Baseline        | AM               | ONE HOUR             | 07:30              | 09:00               | 15                        | ✓                 |
| D2  | 2018 Baseline        | PM               | ONE HOUR             | 16:15              | 17:45               | 15                        | ✓                 |
| D3  | 2022 Future Baseline | AM               | ONE HOUR             | 07:30              | 09:00               | 15                        | ✓                 |
| D4  | 2022 Future Baseline | PM               | ONE HOUR             | 16:15              | 17:45               | 15                        | ✓                 |
| D5  | 2026 Future Baseline | AM               | ONE HOUR             | 07:30              | 09:00               | 15                        | ✓                 |
| D6  | 2026 Future Baseline | PM               | ONE HOUR             | 16:15              | 17:45               | 15                        | ✓                 |
| D7  | 2026 Do Nothing      | AM               | ONE HOUR             | 07:30              | 09:00               | 15                        | ✓                 |
| D8  | 2026 Do Nothing      | PM               | ONE HOUR             | 16:15              | 17:45               | 15                        | ✓                 |
| D9  | 2026 Do Something    | AM               | ONE HOUR             | 07:30              | 09:00               | 15                        | ✓                 |
| D10 | 2026 Do Something    | PM               | ONE HOUR             | 16:15              | 17:45               | 15                        | ✓                 |

## Analysis Set Details

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

# 2018 Baseline, AM

## Data Errors and Warnings

| Severity | Area              | Item                                                               | Description                                                                                                                                                                                                                                               |
|----------|-------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry          | 3W - Site 3 - D - M82 Northbound Off-Ramp - Roundabout Geometry    | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3E - Site 3 - A - Link - Roundabout Geometry                       | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Linked Roundabout | 3W - Site 3 - C - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |
| Warning  | Linked Roundabout | 3E - Site 3 - A - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 3E       | Site 3 | Standard Roundabout |                       | B, C, D, E, A | 4.53               | A            |
| 3W       | Site 3 | Standard Roundabout |                       | B, C, D, A    | 5.42               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 4.97              | A           |

## Arms

### Arms

| Junction    | Arm | Name                       | Description | No give-way line |
|-------------|-----|----------------------------|-------------|------------------|
| 3E - Site 3 | A   | Link                       |             |                  |
|             | B   | M82 Southbound Off-Ramp    |             |                  |
|             | C   | A614 Rawcliffe Road (East) |             |                  |
|             | D   | A161                       |             |                  |
|             | E   | M82 Southbound On-Ramp     |             |                  |
| 3W - Site 3 | A   | A614 Rawcliffe Road (West) |             |                  |
|             | B   | M82 Northbound On-Ramp     |             |                  |
|             | C   | Link                       |             |                  |
|             | D   | M82 Northbound Off-Ramp    |             |                  |

## Roundabout Geometry

| Junction    | Arm                            | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Entry only | Exit only |
|-------------|--------------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|------------|-----------|
| 3E - Site 3 | A - Link                       | 6.80                             | 7.80                | 61.7                            | 19.8                 | 70.0                              | 29.0                               |            |           |
|             | B - M62 Southbound Off-Ramp    | 5.10                             | 5.30                | 0.5                             | 37.6                 | 70.0                              | 58.0                               |            |           |
|             | C - A614 Rawcliffe Road (East) | 5.90                             | 9.70                | 29.7                            | 18.0                 | 70.0                              | 37.0                               |            |           |
|             | D - A161                       | 3.40                             | 9.10                | 16.8                            | 18.3                 | 70.0                              | 21.0                               |            |           |
|             | E - M62 Southbound On-Ramp     |                                  |                     |                                 |                      |                                   |                                    |            | ✓         |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 3.90                             | 8.60                | 53.4                            | 21.6                 | 67.8                              | 45.0                               |            |           |
|             | B - M62 Northbound On-Ramp     |                                  |                     |                                 |                      |                                   |                                    |            | ✓         |
|             | C - Link                       | 3.80                             | 5.80                | 6.7                             | 23.0                 | 67.1                              | 0.0                                |            |           |
|             | D - M62 Northbound Off-Ramp    | 6.70                             | 9.80                | 34.2                            | 27.9                 | 67.8                              | 14.0                               |            |           |

## Bypass

| Junction    | Arm                            | Arm has bypass | Bypass utilisation (%) |
|-------------|--------------------------------|----------------|------------------------|
| 3E - Site 3 | A - Link                       |                |                        |
|             | B - M62 Southbound Off-Ramp    |                |                        |
|             | C - A614 Rawcliffe Road (East) |                |                        |
|             | D - A161                       | ✓              | 100                    |
|             | E - M62 Southbound On-Ramp     |                |                        |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) |                |                        |
|             | B - M62 Northbound On-Ramp     |                |                        |
|             | C - Link                       |                |                        |
|             | D - M62 Northbound Off-Ramp    |                |                        |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Junction    | Arm                            | Final slope | Final intercept (PCU/hr) |
|-------------|--------------------------------|-------------|--------------------------|
| 3E - Site 3 | A - Link                       | 0.610       | 2358                     |
|             | B - M62 Southbound Off-Ramp    | 0.450       | 1455                     |
|             | C - A614 Rawcliffe Road (East) | 0.629       | 2527                     |
|             | D - A161                       | 0.545       | 1908                     |
|             | E - M62 Southbound On-Ramp     |             |                          |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 0.581       | 2182                     |
|             | B - M62 Northbound On-Ramp     |             |                          |
|             | C - Link                       | 0.534       | 1622                     |
|             | D - M62 Northbound Off-Ramp    | 0.733       | 2950                     |

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

### Arm Capacity Adjustments

| Junction    | Arm                            | Type   | Reason | Direct capacity adjustment (PCU/hr) |
|-------------|--------------------------------|--------|--------|-------------------------------------|
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | Direct |        | -400                                |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2018 Baseline | AM               | ONE HOUR             | 07:30              | 09:00               | 15                        | ✓                 |

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



## Linked Arm Data

| Junction    | Arm      | Feeding Junction | Feeding Arm | Link Type                  | Flow source | Uniform flow (PCU/hr) | Flow multiplier (%) | Internal storage space (PCU) |
|-------------|----------|------------------|-------------|----------------------------|-------------|-----------------------|---------------------|------------------------------|
| 3E - Site 3 | A - Link | 3W               | C           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |
| 3W - Site 3 | C - Link | 3E               | A           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |

## Demand overview (Traffic)

| Junction    | Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 3E - Site 3 | A - Link                       | ✓          |              |              |                         |                    |
|             | B - M62 Southbound Off-Ramp    |            | ONE HOUR     | ✓            | 428                     | 100.000            |
|             | C - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 515                     | 100.000            |
|             | D - A161                       |            | ONE HOUR     | ✓            | 480                     | 100.000            |
|             | E - M62 Southbound On-Ramp     |            |              |              |                         |                    |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 857                     | 100.000            |
|             | B - M62 Northbound On-Ramp     |            |              |              |                         |                    |
|             | C - Link                       | ✓          |              |              |                         |                    |
|             | D - M62 Northbound Off-Ramp    |            | ONE HOUR     | ✓            | 931                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

3W  
-  
Site  
3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 233                        | 625      | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 577                            | 107                        | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 451                            | 1                          | 479      | 0                           |

### Proportions

|      |                                | To                             |
|------|--------------------------------|--------------------------------|
|      |                                | A - A614 Rawcliffe Road (West) |
| From | A - A614 Rawcliffe Road (West) | 0.00                           |
|      | B - M62 Northbound On-Ramp     | 0.25                           |
|      | C - Link                       | 0.84                           |
|      | D - M62 Northbound Off-Ramp    | 0.48                           |

### Demand (PCU/hr)

3E -  
Site  
3

|      |                                | To       |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 466                            | 346      | 292                        |
|      | B - M62 Southbound Off-Ramp    | 234      | 0                           | 85                             | 110      | 0                          |
|      | C - A614 Rawcliffe Road (East) | 239      | 0                           | 5                              | 12       | 259                        |
|      | D - A161                       | 211      | 0                           | 2                              | 2        | 264                        |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Proportions

|      |                                | To       |
|------|--------------------------------|----------|
|      |                                | A - Link |
| From | A - Link                       | 0        |
|      | B - M62 Southbound Off-Ramp    | 0        |
|      | C - A614 Rawcliffe Road (East) | 0        |
|      | D - A161                       | 0        |
|      | E - M62 Southbound On-Ramp     | 0        |

## Vehicle Mix

### Heavy Vehicle Percentages

3W  
-  
Site  
3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 13                         | 8        | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 10                             | 18                         | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 26                             | 0                          | 20       | 0                           |

### Average PCU Per Veh

|      |                                | To                             |
|------|--------------------------------|--------------------------------|
|      |                                | A - A614 Rawcliffe Road (West) |
| From | A - A614 Rawcliffe Road (West) | 1.000                          |
|      | B - M62 Northbound On-Ramp     | 1.000                          |
|      | C - Link                       | 1.098                          |
|      | D - M62 Northbound Off-Ramp    | 1.258                          |

3E -  
Site  
3

### Heavy Vehicle Percentages

|      | To                             |          |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 11                             | 20       | 22                         |
|      | B - M62 Southbound Off-Ramp    | 9        | 0                           | 6                              | 14       | 0                          |
|      | C - A614 Rawcliffe Road (East) | 9        | 0                           | 0                              | 9        | 10                         |
|      | D - A161                       | 15       | 0                           | 50                             | 100      | 33                         |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Average PCU Per Veh

|      |                                | L  |
|------|--------------------------------|----|
| From | A - Link                       | 1. |
|      | B - M62 Southbound Off-Ramp    | 1. |
|      | C - A614 Rawcliffe Road (East) | 1. |
|      | D - A161                       | 1. |
|      | E - M62 Southbound On-Ramp     | 1. |

## Detailed Demand Data

### Demand for each time segment

| Junction    | Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------|--------------------------------|--------------|-----------------|------------------------|
| 3E - Site 3 | A - Link                       | 07:30-07:45  | 831             | 831                    |
|             |                                | 07:45-08:00  | 993             | 993                    |
|             |                                | 08:00-08:15  | 1216            | 1216                   |
|             |                                | 08:15-08:30  | 1216            | 1216                   |
|             |                                | 08:30-08:45  | 993             | 993                    |
|             |                                | 08:45-09:00  | 831             | 831                    |
|             | B - M62 Southbound Off-Ramp    | 07:30-07:45  | 323             | 323                    |
|             |                                | 07:45-08:00  | 385             | 385                    |
|             |                                | 08:00-08:15  | 472             | 472                    |
|             |                                | 08:15-08:30  | 472             | 472                    |
|             |                                | 08:30-08:45  | 385             | 385                    |
|             |                                | 08:45-09:00  | 323             | 323                    |
|             | C - A614 Rawcliffe Road (East) | 07:30-07:45  | 388             | 388                    |
|             |                                | 07:45-08:00  | 463             | 463                    |
|             |                                | 08:00-08:15  | 567             | 567                    |
|             |                                | 08:15-08:30  | 567             | 567                    |
|             |                                | 08:30-08:45  | 463             | 463                    |
|             |                                | 08:45-09:00  | 388             | 388                    |
|             | D - A161                       | 07:30-07:45  | 361             | 361                    |
|             |                                | 07:45-08:00  | 431             | 431                    |
|             |                                | 08:00-08:15  | 528             | 528                    |
|             |                                | 08:15-08:30  | 528             | 528                    |
|             |                                | 08:30-08:45  | 431             | 431                    |
|             |                                | 08:45-09:00  | 361             | 361                    |
|             | E - M62 Southbound On-Ramp     | 07:30-07:45  | 0               | 0                      |
|             |                                | 07:45-08:00  | 0               | 0                      |
|             |                                | 08:00-08:15  | 0               | 0                      |
|             |                                | 08:15-08:30  | 0               | 0                      |
|             |                                | 08:30-08:45  | 0               | 0                      |
|             |                                | 08:45-09:00  | 0               | 0                      |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 07:30-07:45  | 645             | 645                    |
|             |                                | 07:45-08:00  | 771             | 771                    |
|             |                                | 08:00-08:15  | 944             | 944                    |
|             |                                | 08:15-08:30  | 944             | 944                    |
|             |                                | 08:30-08:45  | 771             | 771                    |
|             |                                | 08:45-09:00  | 645             | 645                    |
|             | B - M62 Northbound On-Ramp     | 07:30-07:45  | 0               | 0                      |
|             |                                | 07:45-08:00  | 0               | 0                      |
|             |                                | 08:00-08:15  | 0               | 0                      |
|             |                                | 08:15-08:30  | 0               | 0                      |
|             |                                | 08:30-08:45  | 0               | 0                      |
|             |                                | 08:45-09:00  | 0               | 0                      |
|             | C - Link                       | 07:30-07:45  | 515             | 515                    |
|             |                                | 07:45-08:00  | 615             | 615                    |
|             |                                | 08:00-08:15  | 753             | 753                    |
|             |                                | 08:15-08:30  | 753             | 753                    |
|             |                                | 08:30-08:45  | 615             | 615                    |
|             |                                | 08:45-09:00  | 515             | 515                    |
|             | D - M62 Northbound Off-Ramp    | 07:30-07:45  | 701             | 701                    |
|             |                                | 07:45-08:00  | 837             | 837                    |
|             |                                | 08:00-08:15  | 1025            | 1025                   |
|             |                                | 08:15-08:30  | 1025            | 1025                   |
|             |                                | 08:30-08:45  | 837             | 837                    |
|             |                                | 08:45-09:00  | 701             | 701                    |

## Results

### Results Summary for whole modelled period

| Junction    | Arm                            | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-------------|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 3E - Site 3 | A - Link                       | 0.52    | 3.69          | 1.2             | A       | 1013                    | 1519                          |
|             | B - M62 Southbound Off-Ramp    | 0.52    | 9.11          | 1.2             | A       | 393                     | 590                           |
|             | C - A614 Rawcliffe Road (East) | 0.31    | 3.07          | 0.5             | A       | 472                     | 709                           |
|             | D - A161                       | 0.18    | 3.94          | 0.3             | A       | 440                     | 297                           |
|             | E - M62 Southbound On-Ramp     |         |               |                 |         |                         |                               |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 0.67    | 8.48          | 2.2             | A       | 787                     | 1180                          |
|             | B - M62 Northbound On-Ramp     |         |               |                 |         |                         |                               |
|             | C - Link                       | 0.46    | 4.59          | 1.0             | A       | 627                     | 941                           |
|             | D - M62 Northbound Off-Ramp    | 0.43    | 3.22          | 0.9             | A       | 854                     | 1282                          |

### Main Results for each time segment

#### 07:30 - 07:45

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 828                   | 828                      | 207                     | 0                      | 0                         | 7                         | 2351              | 0.352 | 825                 | 513                             | 0.0               |
|             | B - M62 Southbound Off-Ramp    | 323                   | 323                      | 81                      | 0                      | 0                         | 832                       | 1081              | 0.298 | 321                 | 0                               | 0.0               |
|             | C - A614 Rawcliffe Road (East) | 388                   | 388                      | 97                      | 0                      | 0                         | 736                       | 2064              | 0.188 | 387                 | 417                             | 0.0               |
|             | D - A161                       | 361                   | 162                      | 41                      | 199                    | 0                         | 771                       | 1488              | 0.109 | 162                 | 352                             | 0.0               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 520                       |                   |       |                     | 412                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 645                   |                          | 161                     |                        |                           | 441                       | 1526              | 0.423 | 642                 | 769                             | 0.0               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 828                       |                   |       |                     | 255                             |                   |
|             | C - Link                       | 513                   |                          | 128                     |                        |                           | 0                         | 1622              | 0.316 | 511                 | 828                             | 0.0               |
|             | D - M62 Northbound Off-Ramp    | 701                   |                          | 175                     |                        |                           | 511                       | 2575              | 0.272 | 699                 | 0                               | 0.0               |

#### 07:45 - 08:00

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 991                   | 991                      | 248                     | 0                      | 0                         | 8                         | 2350              | 0.422 | 990                 | 614                             | 0.6               |
|             | B - M62 Southbound Off-Ramp    | 385                   | 385                      | 96                      | 0                      | 0                         | 999                       | 1006              | 0.383 | 384                 | 0                               | 0.5               |
|             | C - A614 Rawcliffe Road (East) | 463                   | 463                      | 116                     | 0                      | 0                         | 883                       | 1972              | 0.235 | 462                 | 500                             | 0.3               |
|             | D - A161                       | 431                   | 194                      | 48                      | 237                    | 0                         | 923                       | 1405              | 0.138 | 194                 | 422                             | 0.1               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 623                       |                   |       |                     | 494                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 771                   |                          | 193                     |                        |                           | 528                       | 1475              | 0.523 | 769                 | 922                             | 0.8               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 991                       |                   |       |                     | 306                             |                   |
|             | C - Link                       | 614                   |                          | 154                     |                        |                           | 0                         | 1622              | 0.379 | 614                 | 991                             | 0.5               |
|             | D - M62 Northbound Off-Ramp    | 837                   |                          | 209                     |                        |                           | 614                       | 2500              | 0.335 | 836                 | 0                               | 0.5               |

## 08:00 - 08:15

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1212                  | 1212                     | 303                     | 0                      | 0                         | 10                        | 2349              | 0.516 | 1211                | 752                             | 0.8               |
|             | B - M62 Southbound Off-Ramp    | 472                   | 472                      | 118                     | 0                      | 0                         | 1221                      | 906               | 0.520 | 470                 | 0                               | 0.7               |
|             | C - A614 Rawcliffe Road (East) | 567                   | 567                      | 142                     | 0                      | 0                         | 1079                      | 1849              | 0.307 | 566                 | 612                             | 0.3               |
|             | D - A161                       | 528                   | 237                      | 59                      | 291                    | 0                         | 1130                      | 1292              | 0.184 | 237                 | 516                             | 0.2               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 762                       |                   |       |                     | 605                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 944                   |                          | 236                     |                        |                           | 646                       | 1406              | 0.671 | 940                 | 1129                            | 1.2               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1212                      |                   |       |                     | 374                             |                   |
|             | C - Link                       | 752                   |                          | 188                     |                        |                           | 0                         | 1622              | 0.463 | 751                 | 1212                            | 0.7               |
|             | D - M62 Northbound Off-Ramp    | 1025                  |                          | 256                     |                        |                           | 751                       | 2399              | 0.427 | 1024                | 0                               | 0.6               |

## 08:15 - 08:30

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1216                  | 1216                     | 304                     | 0                      | 0                         | 10                        | 2349              | 0.517 | 1215                | 753                             | 1.2               |
|             | B - M62 Southbound Off-Ramp    | 472                   | 472                      | 118                     | 0                      | 0                         | 1226                      | 904               | 0.522 | 472                 | 0                               | 1.2               |
|             | C - A614 Rawcliffe Road (East) | 567                   | 567                      | 142                     | 0                      | 0                         | 1083                      | 1846              | 0.307 | 567                 | 614                             | 0.5               |
|             | D - A161                       | 528                   | 237                      | 59                      | 291                    | 0                         | 1132                      | 1291              | 0.184 | 237                 | 518                             | 0.3               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 764                       |                   |       |                     | 606                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 944                   |                          | 236                     |                        |                           | 647                       | 1406              | 0.672 | 944                 | 1131                            | 2.2               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1216                      |                   |       |                     | 375                             |                   |
|             | C - Link                       | 753                   |                          | 188                     |                        |                           | 0                         | 1622              | 0.464 | 753                 | 1216                            | 0.9               |
|             | D - M62 Northbound Off-Ramp    | 1025                  |                          | 256                     |                        |                           | 753                       | 2397              | 0.428 | 1025                | 0                               | 0.9               |

## 08:30 - 08:45

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 996                   | 996                      | 249                     | 0                      | 0                         | 8                         | 2350              | 0.424 | 998                 | 617                             | 1.2               |
|             | B - M62 Southbound Off-Ramp    | 385                   | 385                      | 96                      | 0                      | 0                         | 1006                      | 1003              | 0.384 | 387                 | 0                               | 1.2               |
|             | C - A614 Rawcliffe Road (East) | 463                   | 463                      | 116                     | 0                      | 0                         | 889                       | 1968              | 0.235 | 463                 | 504                             | 0.5               |
|             | D - A161                       | 431                   | 194                      | 48                      | 237                    | 0                         | 928                       | 1402              | 0.138 | 194                 | 425                             | 0.3               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 625                       |                   |       |                     | 497                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 771                   |                          | 193                     |                        |                           | 529                       | 1474              | 0.523 | 775                 | 927                             | 2.2               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 996                       |                   |       |                     | 308                             |                   |
|             | C - Link                       | 617                   |                          | 154                     |                        |                           | 0                         | 1622              | 0.380 | 618                 | 996                             | 1.0               |
|             | D - M62 Northbound Off-Ramp    | 837                   |                          | 209                     |                        |                           | 618                       | 2497              | 0.335 | 838                 | 0                               | 0.9               |

## 08:45 - 09:00

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 833                   | 833                      | 208                     | 0                      | 0                         | 7                         | 2351              | 0.354 | 834                 | 516                             | 0.9               |
|             | B - M62 Southbound Off-Ramp    | 323                   | 323                      | 81                      | 0                      | 0                         | 841                       | 1077              | 0.299 | 323                 | 0                               | 0.7               |
|             | C - A614 Rawcliffe Road (East) | 388                   | 388                      | 97                      | 0                      | 0                         | 743                       | 2060              | 0.188 | 388                 | 421                             | 0.3               |
|             | D - A161                       | 361                   | 162                      | 41                      | 199                    | 0                         | 776                       | 1485              | 0.109 | 162                 | 355                             | 0.2               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 523                       |                   |       |                     | 415                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 645                   |                          | 161                     |                        |                           | 443                       | 1524              | 0.423 | 647                 | 775                             | 1.2               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 833                       |                   |       |                     | 257                             |                   |
|             | C - Link                       | 516                   |                          | 129                     |                        |                           | 0                         | 1622              | 0.318 | 517                 | 833                             | 0.7               |
|             | D - M62 Northbound Off-Ramp    | 701                   |                          | 175                     |                        |                           | 517                       | 2571              | 0.273 | 702                 | 0                               | 0.6               |

# 2018 Baseline, PM

## Data Errors and Warnings

| Severity | Area              | Item                                                               | Description                                                                                                                                                                                                                                               |
|----------|-------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry          | 3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry    | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3E - Site 3 - A - Link - Roundabout Geometry                       | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Linked Roundabout | 3W - Site 3 - C - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |
| Warning  | Linked Roundabout | 3E - Site 3 - A - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 3E       | Site 3 | Standard Roundabout |                       | B, C, D, E, A | 4.21               | A            |
| 3W       | Site 3 | Standard Roundabout |                       | B, C, D, A    | 7.09               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.65              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2018 Baseline | PM               | ONE HOUR             | 16:15              | 17:45               | 15                        | ✓                 |

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

### Linked Arm Data

| Junction    | Arm      | Feeding Junction | Feeding Arm | Link Type                  | Flow source | Uniform flow (PCU/hr) | Flow multiplier (%) | Internal storage space (PCU) |
|-------------|----------|------------------|-------------|----------------------------|-------------|-----------------------|---------------------|------------------------------|
| 3E - Site 3 | A - Link | 3W               | C           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |
| 3W - Site 3 | C - Link | 3E               | A           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |

## Demand overview (Traffic)

| Junction    | Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 3E - Site 3 | A - Link                       | ✓          |              |              |                         |                    |
|             | B - M62 Southbound Off-Ramp    |            | ONE HOUR     | ✓            | 304                     | 100.000            |
|             | C - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 700                     | 100.000            |
|             | D - A161                       |            | ONE HOUR     | ✓            | 480                     | 100.000            |
|             | E - M62 Southbound On-Ramp     |            |              |              |                         |                    |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 935                     | 100.000            |
|             | B - M62 Northbound On-Ramp     |            |              |              |                         |                    |
|             | C - Link                       | ✓          |              |              |                         |                    |
|             | D - M62 Northbound Off-Ramp    |            | ONE HOUR     | ✓            | 885                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

3W  
-  
Site  
3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 242                        | 693      | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 688                            | 188                        | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 391                            | 0                          | 494      | 0                           |
|      |                                |                                |                            |          |                             |

### Proportions

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 0.00                           |  |
|      | B - M62 Northbound On-Ramp     | 0.25                           |  |
|      | C - Link                       | 0.78                           |  |
|      | D - M62 Northbound Off-Ramp    | 0.44                           |  |
|      |                                |                                |  |

### Demand (PCU/hr)

3E -  
Site  
3

|      |                                | To       |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 576                            | 347      | 284                        |
|      | B - M62 Southbound Off-Ramp    | 178      | 0                           | 56                             | 69       | 1                          |
|      | C - A614 Rawcliffe Road (East) | 403      | 0                           | 3                              | 34       | 280                        |
|      | D - A161                       | 275      | 0                           | 11                             | 5        | 190                        |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |
|      |                                |          |                             |                                |          |                            |

### Proportions

|      |                                | To       |  |
|------|--------------------------------|----------|--|
|      |                                | A - Link |  |
| From | A - Link                       | 0        |  |
|      | B - M62 Southbound Off-Ramp    | 0        |  |
|      | C - A614 Rawcliffe Road (East) | 0        |  |
|      | D - A161                       | 0        |  |
|      | E - M62 Southbound On-Ramp     | 0        |  |
|      |                                |          |  |

## Vehicle Mix

### Heavy Vehicle Percentages

3W  
-  
Site  
3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 12                         | 5        | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 6                              | 6                          | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 22                             | 0                          | 13       | 0                           |
|      |                                |                                |                            |          |                             |

### Average PCU Per Veh

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 1.000                          |  |
|      | B - M62 Northbound On-Ramp     | 1.000                          |  |
|      | C - Link                       | 1.055                          |  |
|      | D - M62 Northbound Off-Ramp    | 1.220                          |  |
|      |                                |                                |  |

### Heavy Vehicle Percentages

3E -  
Site  
3

|      | To                             |          |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 5                              | 15       | 19                         |
|      | B - M62 Southbound Off-Ramp    | 13       | 0                           | 15                             | 19       | 0                          |
|      | C - A614 Rawcliffe Road (East) | 2        | 0                           | 0                              | 20       | 7                          |
|      | D - A161                       | 6        | 0                           | 33                             | 67       | 22                         |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Average PCU Per Veh

|      |                                | L  |
|------|--------------------------------|----|
| From | A - Link                       | 1. |
|      | B - M62 Southbound Off-Ramp    | 1. |
|      | C - A614 Rawcliffe Road (East) | 1. |
|      | D - A161                       | 1. |
|      | E - M62 Southbound On-Ramp     | 1. |

## Detailed Demand Data



### Demand for each time segment

| Junction    | Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------|--------------------------------|--------------|-----------------|------------------------|
| 3E - Site 3 | A - Link                       | 16:15-16:30  | 894             | 894                    |
|             |                                | 16:30-16:45  | 1068            | 1068                   |
|             |                                | 16:45-17:00  | 1307            | 1307                   |
|             |                                | 17:00-17:15  | 1307            | 1307                   |
|             |                                | 17:15-17:30  | 1068            | 1068                   |
|             |                                | 17:30-17:45  | 894             | 894                    |
|             | B - M62 Southbound Off-Ramp    | 16:15-16:30  | 229             | 229                    |
|             |                                | 16:30-16:45  | 274             | 274                    |
|             |                                | 16:45-17:00  | 335             | 335                    |
|             |                                | 17:00-17:15  | 335             | 335                    |
|             |                                | 17:15-17:30  | 274             | 274                    |
|             |                                | 17:30-17:45  | 229             | 229                    |
|             | C - A614 Rawcliffe Road (East) | 16:15-16:30  | 527             | 527                    |
|             |                                | 16:30-16:45  | 629             | 629                    |
|             |                                | 16:45-17:00  | 770             | 770                    |
|             |                                | 17:00-17:15  | 770             | 770                    |
|             |                                | 17:15-17:30  | 629             | 629                    |
|             |                                | 17:30-17:45  | 527             | 527                    |
|             | D - A161                       | 16:15-16:30  | 362             | 362                    |
|             |                                | 16:30-16:45  | 432             | 432                    |
|             |                                | 16:45-17:00  | 529             | 529                    |
|             |                                | 17:00-17:15  | 529             | 529                    |
|             |                                | 17:15-17:30  | 432             | 432                    |
|             |                                | 17:30-17:45  | 362             | 362                    |
|             | E - M62 Southbound On-Ramp     | 16:15-16:30  | 0               | 0                      |
|             |                                | 16:30-16:45  | 0               | 0                      |
|             |                                | 16:45-17:00  | 0               | 0                      |
|             |                                | 17:00-17:15  | 0               | 0                      |
|             |                                | 17:15-17:30  | 0               | 0                      |
|             |                                | 17:30-17:45  | 0               | 0                      |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 16:15-16:30  | 704             | 704                    |
|             |                                | 16:30-16:45  | 841             | 841                    |
|             |                                | 16:45-17:00  | 1030            | 1030                   |
|             |                                | 17:00-17:15  | 1030            | 1030                   |
|             |                                | 17:15-17:30  | 841             | 841                    |
|             |                                | 17:30-17:45  | 704             | 704                    |
|             | B - M62 Northbound On-Ramp     | 16:15-16:30  | 0               | 0                      |
|             |                                | 16:30-16:45  | 0               | 0                      |
|             |                                | 16:45-17:00  | 0               | 0                      |
|             |                                | 17:00-17:15  | 0               | 0                      |
|             |                                | 17:15-17:30  | 0               | 0                      |
|             |                                | 17:30-17:45  | 0               | 0                      |
|             | C - Link                       | 16:15-16:30  | 644             | 644                    |
|             |                                | 16:30-16:45  | 769             | 769                    |
|             |                                | 16:45-17:00  | 942             | 942                    |
|             |                                | 17:00-17:15  | 942             | 942                    |
|             |                                | 17:15-17:30  | 769             | 769                    |
|             |                                | 17:30-17:45  | 644             | 644                    |
|             | D - M62 Northbound Off-Ramp    | 16:15-16:30  | 666             | 666                    |
|             |                                | 16:30-16:45  | 796             | 796                    |
|             |                                | 16:45-17:00  | 974             | 974                    |
|             |                                | 17:00-17:15  | 974             | 974                    |
|             |                                | 17:15-17:30  | 796             | 796                    |
|             |                                | 17:30-17:45  | 666             | 666                    |

## Results

### Results Summary for whole modelled period

| Junction    | Arm                            | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-------------|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 3E - Site 3 | A - Link                       | 0.56    | 3.84          | 1.4             | A       | 1089                    | 1634                          |
|             | B - M62 Southbound Off-Ramp    | 0.39    | 7.88          | 0.7             | A       | 279                     | 419                           |
|             | C - A614 Rawcliffe Road (East) | 0.40    | 3.24          | 0.7             | A       | 642                     | 963                           |
|             | D - A161                       | 0.26    | 4.20          | 0.4             | A       | 441                     | 400                           |
|             | E - M62 Southbound On-Ramp     |         |               |                 |         |                         |                               |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 0.77    | 12.08         | 3.4             | B       | 858                     | 1287                          |
|             | B - M62 Northbound On-Ramp     |         |               |                 |         |                         |                               |
|             | C - Link                       | 0.58    | 5.59          | 1.5             | A       | 785                     | 1177                          |
|             | D - M62 Northbound Off-Ramp    | 0.43    | 3.26          | 0.9             | A       | 812                     | 1218                          |

### Main Results for each time segment

#### 16:15 - 16:30

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 890                   | 890                      | 223                     | 0                      | 0                         | 14                        | 2347              | 0.379 | 888                 | 642                             | 0.0               |
|             | B - M62 Southbound Off-Ramp    | 229                   | 229                      | 57                      | 0                      | 0                         | 902                       | 1050              | 0.218 | 228                 | 0                               | 0.0               |
|             | C - A614 Rawcliffe Road (East) | 527                   | 527                      | 132                     | 0                      | 0                         | 646                       | 2121              | 0.248 | 525                 | 483                             | 0.0               |
|             | D - A161                       | 362                   | 219                      | 55                      | 143                    | 0                         | 831                       | 1455              | 0.150 | 218                 | 340                             | 0.0               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 656                       |                   |       |                     | 393                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 704                   |                          | 176                     |                        |                           | 511                       | 1485              | 0.474 | 700                 | 792                             | 0.0               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 890                       |                   |       |                     | 321                             |                   |
|             | C - Link                       | 642                   |                          | 160                     |                        |                           | 0                         | 1622              | 0.396 | 639                 | 890                             | 0.0               |
|             | D - M62 Northbound Off-Ramp    | 666                   |                          | 167                     |                        |                           | 639                       | 2481              | 0.269 | 665                 | 0                               | 0.0               |

#### 16:30 - 16:45

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1066                  | 1066                     | 266                     | 0                      | 0                         | 17                        | 2345              | 0.454 | 1065                | 768                             | 0.7               |
|             | B - M62 Southbound Off-Ramp    | 274                   | 274                      | 68                      | 0                      | 0                         | 1081                      | 969               | 0.282 | 273                 | 0                               | 0.3               |
|             | C - A614 Rawcliffe Road (East) | 629                   | 629                      | 157                     | 0                      | 0                         | 775                       | 2040              | 0.308 | 629                 | 580                             | 0.3               |
|             | D - A161                       | 432                   | 261                      | 65                      | 170                    | 0                         | 995                       | 1366              | 0.191 | 261                 | 408                             | 0.2               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 785                       |                   |       |                     | 471                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 841                   |                          | 210                     |                        |                           | 612                       | 1426              | 0.590 | 839                 | 950                             | 0.9               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1066                      |                   |       |                     | 385                             |                   |
|             | C - Link                       | 768                   |                          | 192                     |                        |                           | 0                         | 1622              | 0.474 | 767                 | 1066                            | 0.7               |
|             | D - M62 Northbound Off-Ramp    | 796                   |                          | 199                     |                        |                           | 767                       | 2387              | 0.333 | 795                 | 0                               | 0.4               |

**16:45 - 17:00**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1302                  | 1302                     | 325                     | 0                      | 0                         | 21                        | 2343              | 0.556 | 1300                | 941                             | 0.9               |
|             | B - M62 Southbound Off-Ramp    | 335                   | 335                      | 84                      | 0                      | 0                         | 1320                      | 882               | 0.389 | 334                 | 0                               | 0.4               |
|             | C - A614 Rawcliffe Road (East) | 770                   | 770                      | 193                     | 0                      | 0                         | 946                       | 1932              | 0.399 | 770                 | 708                             | 0.5               |
|             | D - A161                       | 529                   | 320                      | 80                      | 209                    | 0                         | 1217                      | 1245              | 0.257 | 320                 | 499                             | 0.3               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 961                       |                   |       |                     | 578                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1030                  |                          | 257                     |                        |                           | 749                       | 1346              | 0.765 | 1023                | 1162                            | 1.5               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1302                      |                   |       |                     | 471                             |                   |
|             | C - Link                       | 941                   |                          | 235                     |                        |                           | 0                         | 1622              | 0.580 | 939                 | 1302                            | 0.9               |
|             | D - M62 Northbound Off-Ramp    | 974                   |                          | 244                     |                        |                           | 939                       | 2262              | 0.431 | 973                 | 0                               | 0.6               |

**17:00 - 17:15**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1307                  | 1307                     | 327                     | 0                      | 0                         | 21                        | 2343              | 0.558 | 1307                | 942                             | 1.4               |
|             | B - M62 Southbound Off-Ramp    | 335                   | 335                      | 84                      | 0                      | 0                         | 1328                      | 858               | 0.391 | 335                 | 0                               | 0.7               |
|             | C - A614 Rawcliffe Road (East) | 770                   | 770                      | 193                     | 0                      | 0                         | 951                       | 1929              | 0.399 | 770                 | 712                             | 0.7               |
|             | D - A161                       | 529                   | 320                      | 80                      | 209                    | 0                         | 1220                      | 1243              | 0.258 | 320                 | 501                             | 0.4               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 963                       |                   |       |                     | 578                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1030                  |                          | 257                     |                        |                           | 751                       | 1345              | 0.765 | 1029                | 1166                            | 3.3               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1307                      |                   |       |                     | 473                             |                   |
|             | C - Link                       | 942                   |                          | 236                     |                        |                           | 0                         | 1622              | 0.581 | 942                 | 1307                            | 1.4               |
|             | D - M62 Northbound Off-Ramp    | 974                   |                          | 244                     |                        |                           | 942                       | 2259              | 0.431 | 974                 | 0                               | 0.9               |

**17:15 - 17:30**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1074                  | 1074                     | 288                     | 0                      | 0                         | 17                        | 2345              | 0.458 | 1075                | 771                             | 1.4               |
|             | B - M62 Southbound Off-Ramp    | 274                   | 274                      | 68                      | 0                      | 0                         | 1092                      | 984               | 0.284 | 275                 | 0                               | 0.7               |
|             | C - A614 Rawcliffe Road (East) | 629                   | 629                      | 157                     | 0                      | 0                         | 782                       | 2036              | 0.309 | 630                 | 585                             | 0.7               |
|             | D - A161                       | 432                   | 261                      | 65                      | 170                    | 0                         | 1000                      | 1383              | 0.192 | 262                 | 412                             | 0.4               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 788                       |                   |       |                     | 474                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 841                   |                          | 210                     |                        |                           | 615                       | 1425              | 0.590 | 848                 | 955                             | 3.4               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1074                      |                   |       |                     | 389                             |                   |
|             | C - Link                       | 771                   |                          | 193                     |                        |                           | 0                         | 1622              | 0.475 | 773                 | 1074                            | 1.5               |
|             | D - M62 Northbound Off-Ramp    | 796                   |                          | 199                     |                        |                           | 773                       | 2383              | 0.334 | 797                 | 0                               | 0.9               |

**17:30 - 17:45**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 896                   | 896                      | 224                     | 0                      | 0                         | 14                        | 2347              | 0.382 | 897                 | 645                             | 0.9               |
|             | B - M62 Southbound Off-Ramp    | 229                   | 229                      | 57                      | 0                      | 0                         | 911                       | 1045              | 0.219 | 230                 | 0                               | 0.5               |
|             | C - A614 Rawcliffe Road (East) | 527                   | 527                      | 132                     | 0                      | 0                         | 653                       | 2117              | 0.249 | 527                 | 488                             | 0.5               |
|             | D - A161                       | 362                   | 219                      | 55                      | 143                    | 0                         | 836                       | 1452              | 0.151 | 219                 | 344                             | 0.3               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 659                       |                   |       |                     | 396                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 704                   |                          | 176                     |                        |                           | 514                       | 1483              | 0.475 | 706                 | 799                             | 1.6               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 896                       |                   |       |                     | 325                             |                   |
|             | C - Link                       | 645                   |                          | 161                     |                        |                           | 0                         | 1622              | 0.398 | 646                 | 896                             | 1.0               |
|             | D - M62 Northbound Off-Ramp    | 666                   |                          | 167                     |                        |                           | 646                       | 2476              | 0.269 | 667                 | 0                               | 0.6               |

# 2022 Future Baseline , AM

## Data Errors and Warnings

| Severity | Area              | Item                                                               | Description                                                                                                                                                                                                                                               |
|----------|-------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry          | 3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry    | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3E - Site 3 - A - Link - Roundabout Geometry                       | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Linked Roundabout | 3W - Site 3 - C - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |
| Warning  | Linked Roundabout | 3E - Site 3 - A - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 3E       | Site 3 | Standard Roundabout |                       | B, C, D, E, A | 4.78               | A            |
| 3W       | Site 3 | Standard Roundabout |                       | B, C, D, A    | 5.84               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.30              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D3 | 2022 Future Baseline | AM               | ONE HOUR             | 07:30              | 09:00               | 15                        | ✓                 |

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

### Linked Arm Data

| Junction    | Arm      | Feeding Junction | Feeding Arm | Link Type                  | Flow source | Uniform flow (PCU/hr) | Flow multiplier (%) | Internal storage space (PCU) |
|-------------|----------|------------------|-------------|----------------------------|-------------|-----------------------|---------------------|------------------------------|
| 3E - Site 3 | A - Link | 3W               | C           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |
| 3W - Site 3 | C - Link | 3E               | A           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |

## Demand overview (Traffic)

| Junction    | Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 3E - Site 3 | A - Link                       | ✓          |              |              |                         |                    |
|             | B - M62 Southbound Off-Ramp    |            | ONE HOUR     | ✓            | 443                     | 100.000            |
|             | C - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 533                     | 100.000            |
|             | D - A161                       |            | ONE HOUR     | ✓            | 496                     | 100.000            |
|             | E - M62 Southbound On-Ramp     |            |              |              |                         |                    |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 888                     | 100.000            |
|             | B - M62 Northbound On-Ramp     |            |              |              |                         |                    |
|             | C - Link                       | ✓          |              |              |                         |                    |
|             | D - M62 Northbound Off-Ramp    |            | ONE HOUR     | ✓            | 964                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

3W  
-  
Site  
3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 241                        | 647      | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 597                            | 111                        | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 467                            | 1                          | 496      | 0                           |

### Proportions

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 0.00                           |  |
|      | B - M62 Northbound On-Ramp     | 0.25                           |  |
|      | C - Link                       | 0.84                           |  |
|      | D - M62 Northbound Off-Ramp    | 0.48                           |  |

### Demand (PCU/hr)

3E -  
Site  
3

|      |                                | To       |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 482                            | 358      | 302                        |
|      | B - M62 Southbound Off-Ramp    | 242      | 0                           | 88                             | 113      | 0                          |
|      | C - A614 Rawcliffe Road (East) | 247      | 0                           | 5                              | 13       | 288                        |
|      | D - A161                       | 219      | 0                           | 2                              | 2        | 273                        |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Proportions

|      |                                | To       |  |
|------|--------------------------------|----------|--|
|      |                                | A - Link |  |
| From | A - Link                       | 0        |  |
|      | B - M62 Southbound Off-Ramp    | 0        |  |
|      | C - A614 Rawcliffe Road (East) | 0        |  |
|      | D - A161                       | 0        |  |
|      | E - M62 Southbound On-Ramp     | 0        |  |

## Vehicle Mix

### Heavy Vehicle Percentages

3W  
-  
Site  
3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 13                         | 8        | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 10                             | 18                         | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 26                             | 0                          | 20       | 0                           |

### Average PCU Per Veh

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 1.000                          |  |
|      | B - M62 Northbound On-Ramp     | 1.000                          |  |
|      | C - Link                       | 1.096                          |  |
|      | D - M62 Northbound Off-Ramp    | 1.256                          |  |

### Heavy Vehicle Percentages

3E -  
Site  
3

|      | To                             |          |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 11                             | 20       | 22                         |
|      | B - M62 Southbound Off-Ramp    | 9        | 0                           | 6                              | 14       | 0                          |
|      | C - A614 Rawcliffe Road (East) | 9        | 0                           | 0                              | 9        | 10                         |
|      | D - A161                       | 15       | 0                           | 50                             | 100      | 33                         |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Average PCU Per Veh

|      |                                | L  |
|------|--------------------------------|----|
| From | A - Link                       | 1. |
|      | B - M62 Southbound Off-Ramp    | 1. |
|      | C - A614 Rawcliffe Road (East) | 1. |
|      | D - A161                       | 1. |
|      | E - M62 Southbound On-Ramp     | 1. |

## Detailed Demand Data

### Demand for each time segment

| Junction    | Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------|--------------------------------|--------------|-----------------|------------------------|
| 3E - Site 3 | A - Link                       | 07:30-07:45  | 880             | 880                    |
|             |                                | 07:45-08:00  | 1027            | 1027                   |
|             |                                | 08:00-08:15  | 1257            | 1257                   |
|             |                                | 08:15-08:30  | 1257            | 1257                   |
|             |                                | 08:30-08:45  | 1027            | 1027                   |
|             |                                | 08:45-09:00  | 880             | 880                    |
|             | B - M62 Southbound Off-Ramp    | 07:30-07:45  | 334             | 334                    |
|             |                                | 07:45-08:00  | 398             | 398                    |
|             |                                | 08:00-08:15  | 488             | 488                    |
|             |                                | 08:15-08:30  | 488             | 488                    |
|             |                                | 08:30-08:45  | 398             | 398                    |
|             |                                | 08:45-09:00  | 334             | 334                    |
|             | C - A614 Rawcliffe Road (East) | 07:30-07:45  | 402             | 402                    |
|             |                                | 07:45-08:00  | 480             | 480                    |
|             |                                | 08:00-08:15  | 587             | 587                    |
|             |                                | 08:15-08:30  | 587             | 587                    |
|             |                                | 08:30-08:45  | 480             | 480                    |
|             |                                | 08:45-09:00  | 402             | 402                    |
|             | D - A161                       | 07:30-07:45  | 374             | 374                    |
|             |                                | 07:45-08:00  | 446             | 446                    |
|             |                                | 08:00-08:15  | 546             | 546                    |
|             |                                | 08:15-08:30  | 546             | 546                    |
|             |                                | 08:30-08:45  | 446             | 446                    |
|             |                                | 08:45-09:00  | 374             | 374                    |
|             | E - M62 Southbound On-Ramp     | 07:30-07:45  | 0               | 0                      |
|             |                                | 07:45-08:00  | 0               | 0                      |
|             |                                | 08:00-08:15  | 0               | 0                      |
|             |                                | 08:15-08:30  | 0               | 0                      |
|             |                                | 08:30-08:45  | 0               | 0                      |
|             |                                | 08:45-09:00  | 0               | 0                      |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 07:30-07:45  | 669             | 669                    |
|             |                                | 07:45-08:00  | 798             | 798                    |
|             |                                | 08:00-08:15  | 978             | 978                    |
|             |                                | 08:15-08:30  | 978             | 978                    |
|             |                                | 08:30-08:45  | 798             | 798                    |
|             |                                | 08:45-09:00  | 669             | 669                    |
|             | B - M62 Northbound On-Ramp     | 07:30-07:45  | 0               | 0                      |
|             |                                | 07:45-08:00  | 0               | 0                      |
|             |                                | 08:00-08:15  | 0               | 0                      |
|             |                                | 08:15-08:30  | 0               | 0                      |
|             |                                | 08:30-08:45  | 0               | 0                      |
|             |                                | 08:45-09:00  | 0               | 0                      |
|             | C - Link                       | 07:30-07:45  | 533             | 533                    |
|             |                                | 07:45-08:00  | 636             | 636                    |
|             |                                | 08:00-08:15  | 780             | 780                    |
|             |                                | 08:15-08:30  | 780             | 780                    |
|             |                                | 08:30-08:45  | 636             | 636                    |
|             |                                | 08:45-09:00  | 533             | 533                    |
|             | D - M62 Northbound Off-Ramp    | 07:30-07:45  | 726             | 726                    |
|             |                                | 07:45-08:00  | 867             | 867                    |
|             |                                | 08:00-08:15  | 1061            | 1061                   |
|             |                                | 08:15-08:30  | 1061            | 1061                   |
|             |                                | 08:30-08:45  | 867             | 867                    |
|             |                                | 08:45-09:00  | 726             | 726                    |

## Results

### Results Summary for whole modelled period

| Junction    | Arm                            | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-------------|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 3E - Site 3 | A - Link                       | 0.54    | 3.84          | 1.3             | A       | 1048                    | 1572                          |
|             | B - M62 Southbound Off-Ramp    | 0.55    | 9.92          | 1.3             | A       | 407                     | 810                           |
|             | C - A614 Rawcliffe Road (East) | 0.32    | 3.18          | 0.5             | A       | 490                     | 734                           |
|             | D - A161                       | 0.19    | 4.05          | 0.3             | A       | 455                     | 307                           |
|             | E - M62 Southbound On-Ramp     |         |               |                 |         |                         |                               |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 0.70    | 9.42          | 2.5             | A       | 815                     | 1222                          |
|             | B - M62 Northbound On-Ramp     |         |               |                 |         |                         |                               |
|             | C - Link                       | 0.48    | 4.73          | 1.0             | A       | 649                     | 974                           |
|             | D - M62 Northbound Off-Ramp    | 0.45    | 3.38          | 1.0             | A       | 885                     | 1327                          |













































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

### Linked Arm Data

| Junction    | Arm      | Feeding Junction | Feeding Arm | Link Type                  | Flow source | Uniform flow (PCU/hr) | Flow multiplier (%) | Internal storage space (PCU) |
|-------------|----------|------------------|-------------|----------------------------|-------------|-----------------------|---------------------|------------------------------|
| 3E - Site 3 | A - Link | 3W               | C           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |
| 3W - Site 3 | C - Link | 3E               | A           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |

## Demand overview (Traffic)

| Junction    | Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 3E - Site 3 | A - Link                       | ✓          |              |              |                         |                    |
|             | B - M62 Southbound Off-Ramp    |            | ONE HOUR     | ✓            | 762                     | 100.000            |
|             | C - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 828                     | 100.000            |
|             | D - A161                       |            | ONE HOUR     | ✓            | 861                     | 100.000            |
|             | E - M62 Southbound On-Ramp     |            |              |              |                         |                    |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 1064                    | 100.000            |
|             | B - M62 Northbound On-Ramp     |            |              |              |                         |                    |
|             | C - Link                       | ✓          |              |              |                         |                    |
|             | D - M62 Northbound Off-Ramp    |            | ONE HOUR     | ✓            | 1477                    | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

3W  
-  
Site  
3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 273                        | 791      | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 721                            | 202                        | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 509                            | 1                          | 967      | 0                           |
|      |                                |                                |                            |          |                             |

### Proportions

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 0.00                           |  |
|      | B - M62 Northbound On-Ramp     | 0.25                           |  |
|      | C - Link                       | 0.78                           |  |
|      | D - M62 Northbound Off-Ramp    | 0.34                           |  |
|      |                                |                                |  |

### Demand (PCU/hr)

3E -  
Site  
3

|      |                                | To       |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 524                            | 896      | 339                        |
|      | B - M62 Southbound Off-Ramp    | 286      | 0                           | 97                             | 379      | 0                          |
|      | C - A614 Rawcliffe Road (East) | 364      | 0                           | 13                             | 95       | 358                        |
|      | D - A161                       | 274      | 0                           | 9                              | 17       | 381                        |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |
|      |                                |          |                             |                                |          |                            |

### Proportions

|      |                                | To       |  |
|------|--------------------------------|----------|--|
|      |                                | A - Link |  |
| From | A - Link                       | 0        |  |
|      | B - M62 Southbound Off-Ramp    | 0        |  |
|      | C - A614 Rawcliffe Road (East) | 0        |  |
|      | D - A161                       | 0        |  |
|      | E - M62 Southbound On-Ramp     | 0        |  |
|      |                                |          |  |

## Vehicle Mix

### Heavy Vehicle Percentages

3W  
-  
Site  
3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 13                         | 8        | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 10                             | 18                         | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 26                             | 0                          | 20       | 0                           |
|      |                                |                                |                            |          |                             |

### Average PCU Per Veh

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 1.000                          |  |
|      | B - M62 Northbound On-Ramp     | 1.000                          |  |
|      | C - Link                       | 1.096                          |  |
|      | D - M62 Northbound Off-Ramp    | 1.256                          |  |
|      |                                |                                |  |

### Heavy Vehicle Percentages

3E -  
Site  
3

|      | To                             |          |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 11                             | 20       | 22                         |
|      | B - M62 Southbound Off-Ramp    | 9        | 0                           | 6                              | 14       | 0                          |
|      | C - A614 Rawcliffe Road (East) | 9        | 0                           | 0                              | 9        | 10                         |
|      | D - A161                       | 15       | 0                           | 50                             | 100      | 33                         |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Average PCU Per Veh

|      |                                | L  |
|------|--------------------------------|----|
| From | A - Link                       | 1. |
|      | B - M62 Southbound Off-Ramp    | 1. |
|      | C - A614 Rawcliffe Road (East) | 1. |
|      | D - A161                       | 1. |
|      | E - M62 Southbound On-Ramp     | 1. |

## Detailed Demand Data

### Demand for each time segment

| Junction    | Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------|--------------------------------|--------------|-----------------|------------------------|
| 3E - Site 3 | A - Link                       | 07:30-07:45  | 1324            | 1324                   |
|             |                                | 07:45-08:00  | 1581            | 1581                   |
|             |                                | 08:00-08:15  | 1937            | 1937                   |
|             |                                | 08:15-08:30  | 1937            | 1937                   |
|             |                                | 08:30-08:45  | 1581            | 1581                   |
|             |                                | 08:45-09:00  | 1324            | 1324                   |
|             | B - M62 Southbound Off-Ramp    | 07:30-07:45  | 574             | 574                    |
|             |                                | 07:45-08:00  | 685             | 685                    |
|             |                                | 08:00-08:15  | 839             | 839                    |
|             |                                | 08:15-08:30  | 839             | 839                    |
|             |                                | 08:30-08:45  | 685             | 685                    |
|             |                                | 08:45-09:00  | 574             | 574                    |
|             | C - A614 Rawcliffe Road (East) | 07:30-07:45  | 623             | 623                    |
|             |                                | 07:45-08:00  | 744             | 744                    |
|             |                                | 08:00-08:15  | 911             | 911                    |
|             |                                | 08:15-08:30  | 911             | 911                    |
|             |                                | 08:30-08:45  | 744             | 744                    |
|             |                                | 08:45-09:00  | 623             | 623                    |
|             | D - A161                       | 07:30-07:45  | 498             | 498                    |
|             |                                | 07:45-08:00  | 594             | 594                    |
|             |                                | 08:00-08:15  | 728             | 728                    |
|             |                                | 08:15-08:30  | 728             | 728                    |
|             |                                | 08:30-08:45  | 594             | 594                    |
|             |                                | 08:45-09:00  | 498             | 498                    |
|             | E - M62 Southbound On-Ramp     | 07:30-07:45  | 0               | 0                      |
|             |                                | 07:45-08:00  | 0               | 0                      |
|             |                                | 08:00-08:15  | 0               | 0                      |
|             |                                | 08:15-08:30  | 0               | 0                      |
|             |                                | 08:30-08:45  | 0               | 0                      |
|             |                                | 08:45-09:00  | 0               | 0                      |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 07:30-07:45  | 801             | 801                    |
|             |                                | 07:45-08:00  | 957             | 957                    |
|             |                                | 08:00-08:15  | 1171            | 1171                   |
|             |                                | 08:15-08:30  | 1171            | 1171                   |
|             |                                | 08:30-08:45  | 957             | 957                    |
|             |                                | 08:45-09:00  | 801             | 801                    |
|             | B - M62 Northbound On-Ramp     | 07:30-07:45  | 0               | 0                      |
|             |                                | 07:45-08:00  | 0               | 0                      |
|             |                                | 08:00-08:15  | 0               | 0                      |
|             |                                | 08:15-08:30  | 0               | 0                      |
|             |                                | 08:30-08:45  | 0               | 0                      |
|             |                                | 08:45-09:00  | 0               | 0                      |
|             | C - Link                       | 07:30-07:45  | 695             | 695                    |
|             |                                | 07:45-08:00  | 830             | 830                    |
|             |                                | 08:00-08:15  | 1016            | 1016                   |
|             |                                | 08:15-08:30  | 1016            | 1016                   |
|             |                                | 08:30-08:45  | 830             | 830                    |
|             |                                | 08:45-09:00  | 695             | 695                    |
|             | D - M62 Northbound Off-Ramp    | 07:30-07:45  | 1112            | 1112                   |
|             |                                | 07:45-08:00  | 1328            | 1328                   |
|             |                                | 08:00-08:15  | 1626            | 1626                   |
|             |                                | 08:15-08:30  | 1626            | 1626                   |
|             |                                | 08:30-08:45  | 1328            | 1328                   |
|             |                                | 08:45-09:00  | 1112            | 1112                   |

## Results

### Results Summary for whole modelled period

| Junction    | Arm                            | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-------------|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 3E - Site 3 | A - Link                       | 0.79    | 8.57          | 4.3             | A       | 1612                    | 2418                          |
|             | B - M62 Southbound Off-Ramp    | 1.38    | 641.55        | 128.5           | F       | 699                     | 1049                          |
|             | C - A614 Rawcliffe Road (East) | 0.67    | 8.55          | 2.1             | A       | 760                     | 1139                          |
|             | D - A161                       | 0.29    | 5.19          | 0.5             | A       | 607                     | 413                           |
|             | E - M62 Southbound On-Ramp     |         |               |                 |         |                         |                               |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1.12    | 201.96        | 72.8            | F       | 976                     | 1465                          |
|             | B - M62 Northbound On-Ramp     |         |               |                 |         |                         |                               |
|             | C - Link                       | 0.57    | 5.79          | 1.5             | A       | 830                     | 1245                          |
|             | D - M62 Northbound Off-Ramp    | 0.72    | 6.85          | 3.1             | A       | 1355                    | 2033                          |

### Main Results for each time segment

#### 07:30 - 07:45

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1315                  | 1315                     | 329                     | 0                      | 0                         | 29                        | 2338              | 0.563 | 1310                | 690                             | 0.0               |
|             | B - M62 Southbound Off-Ramp    | 574                   | 574                      | 143                     | 0                      | 0                         | 1339                      | 853               | 0.672 | 565                 | 0                               | 0.0               |
|             | C - A614 Rawcliffe Road (East) | 623                   | 623                      | 156                     | 0                      | 0                         | 1425                      | 1631              | 0.382 | 621                 | 479                             | 0.0               |
|             | D - A161                       | 498                   | 226                      | 56                      | 272                    | 0                         | 1014                      | 1356              | 0.167 | 225                 | 1032                            | 0.0               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 720                       |                   |       |                     | 519                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 801                   |                          | 200                     |                        |                           | 877                       | 1272              | 0.630 | 794                 | 919                             | 0.0               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1315                      |                   |       |                     | 355                             |                   |
|             | C - Link                       | 690                   |                          | 173                     |                        |                           | 0                         | 1622              | 0.426 | 687                 | 1315                            | 0.0               |
|             | D - M62 Northbound Off-Ramp    | 1112                  |                          | 278                     |                        |                           | 687                       | 2446              | 0.455 | 1108                | 0                               | 0.0               |

#### 07:45 - 08:00

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1571                  | 1571                     | 393                     | 0                      | 0                         | 35                        | 2334              | 0.673 | 1568                | 820                             | 1.5               |
|             | B - M62 Southbound Off-Ramp    | 685                   | 685                      | 171                     | 0                      | 0                         | 1603                      | 735               | 0.932 | 659                 | 0                               | 2.2               |
|             | C - A614 Rawcliffe Road (East) | 744                   | 744                      | 186                     | 0                      | 0                         | 1691                      | 1464              | 0.508 | 742                 | 571                             | 0.7               |
|             | D - A161                       | 594                   | 270                      | 67                      | 325                    | 0                         | 1207                      | 1250              | 0.216 | 269                 | 1227                            | 0.2               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 855                       |                   |       |                     | 621                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 957                   |                          | 239                     |                        |                           | 1048                      | 1173              | 0.816 | 946                 | 1096                            | 1.8               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1571                      |                   |       |                     | 423                             |                   |
|             | C - Link                       | 820                   |                          | 205                     |                        |                           | 0                         | 1622              | 0.505 | 819                 | 1571                            | 0.8               |
|             | D - M62 Northbound Off-Ramp    | 1328                  |                          | 332                     |                        |                           | 819                       | 2350              | 0.565 | 1326                | 0                               | 1.0               |



## 08:00 - 08:15

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1825                  | 1825                     | 456                     | 0                      | 0                         | 43                        | 2329              | 0.784 | 1818                | 931                             | 2.4               |
|             | B - M62 Southbound Off-Ramp    | 839                   | 839                      | 210                     | 0                      | 0                         | 1881                      | 818               | 1.357 | 815                 | 0                               | 8.7               |
|             | C - A614 Rawcliffe Road (East) | 911                   | 911                      | 228                     | 0                      | 0                         | 1832                      | 1375              | 0.663 | 908                 | 844                             | 1.1               |
|             | D - A161                       | 728                   | 330                      | 83                      | 397                    | 0                         | 1385                      | 1153              | 0.286 | 330                 | 1355                            | 0.3               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 974                       |                   |       |                     | 741                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1171                  |                          | 293                     |                        |                           | 1286                      | 1046              | 1.120 | 1028                | 1285                            | 4.4               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1825                      |                   |       |                     | 468                             |                   |
|             | C - Link                       | 931                   |                          | 233                     |                        |                           | 0                         | 1622              | 0.574 | 930                 | 1825                            | 1.1               |
|             | D - M62 Northbound Off-Ramp    | 1626                  |                          | 407                     |                        |                           | 930                       | 2288              | 0.717 | 1621                | 0                               | 1.6               |

## 08:15 - 08:30

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1839                  | 1839                     | 460                     | 0                      | 0                         | 43                        | 2329              | 0.789 | 1838                | 931                             | 4.1               |
|             | B - M62 Southbound Off-Ramp    | 839                   | 839                      | 210                     | 0                      | 0                         | 1881                      | 810               | 1.378 | 809                 | 0                               | 84.7              |
|             | C - A614 Rawcliffe Road (East) | 911                   | 911                      | 228                     | 0                      | 0                         | 1841                      | 1370              | 0.665 | 911                 | 849                             | 2.1               |
|             | D - A161                       | 728                   | 330                      | 83                      | 397                    | 0                         | 1390                      | 1151              | 0.287 | 330                 | 1363                            | 0.5               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 974                       |                   |       |                     | 746                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1171                  |                          | 293                     |                        |                           | 1270                      | 1044              | 1.122 | 1041                | 1288                            | 40.2              |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1839                      |                   |       |                     | 472                             |                   |
|             | C - Link                       | 931                   |                          | 233                     |                        |                           | 0                         | 1622              | 0.574 | 931                 | 1839                            | 1.5               |
|             | D - M62 Northbound Off-Ramp    | 1626                  |                          | 407                     |                        |                           | 931                       | 2267              | 0.717 | 1626                | 0                               | 3.0               |

## 08:30 - 08:45

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1729                  | 1729                     | 432                     | 0                      | 0                         | 35                        | 2334              | 0.741 | 1733                | 823                             | 4.3               |
|             | B - M62 Southbound Off-Ramp    | 685                   | 685                      | 171                     | 0                      | 0                         | 1788                      | 880               | 1.037 | 859                 | 0                               | 122.1             |
|             | C - A614 Rawcliffe Road (East) | 744                   | 744                      | 186                     | 0                      | 0                         | 1807                      | 1391              | 0.535 | 748                 | 820                             | 2.1               |
|             | D - A161                       | 594                   | 270                      | 67                      | 325                    | 0                         | 1243                      | 1230              | 0.219 | 270                 | 1312                            | 0.5               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 858                       |                   |       |                     | 655                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 957                   |                          | 239                     |                        |                           | 1055                      | 1189              | 0.818 | 1152                | 1104                            | 72.8              |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1729                      |                   |       |                     | 477                             |                   |
|             | C - Link                       | 823                   |                          | 206                     |                        |                           | 0                         | 1622              | 0.507 | 824                 | 1729                            | 1.5               |
|             | D - M62 Northbound Off-Ramp    | 1328                  |                          | 332                     |                        |                           | 824                       | 2345              | 0.566 | 1334                | 0                               | 3.1               |

## 08:45 - 09:00

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1390                  | 1390                     | 348                     | 0                      | 0                         | 29                        | 2338              | 0.595 | 1397                | 784                             | 3.4               |
|             | B - M62 Southbound Off-Ramp    | 574                   | 574                      | 143                     | 0                      | 0                         | 1427                      | 814               | 0.705 | 807                 | 0                               | 128.5             |
|             | C - A614 Rawcliffe Road (East) | 623                   | 623                      | 156                     | 0                      | 0                         | 1698                      | 1460              | 0.427 | 625                 | 536                             | 1.3               |
|             | D - A161                       | 498                   | 226                      | 56                      | 272                    | 0                         | 1125                      | 1295              | 0.174 | 226                 | 1198                            | 0.3               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 814                       |                   |       |                     | 538                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 801                   |                          | 200                     |                        |                           | 902                       | 1258              | 0.637 | 889                 | 997                             | 24.0              |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1390                      |                   |       |                     | 401                             |                   |
|             | C - Link                       | 784                   |                          | 196                     |                        |                           | 0                         | 1622              | 0.483 | 785                 | 1390                            | 1.2               |
|             | D - M62 Northbound Off-Ramp    | 1112                  |                          | 278                     |                        |                           | 785                       | 2374              | 0.468 | 1114                | 0                               | 1.6               |

# 2026 Do Nothing, PM

## Data Errors and Warnings

| Severity | Area              | Item                                                               | Description                                                                                                                                                                                                                                               |
|----------|-------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry          | 3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry    | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3E - Site 3 - A - Link - Roundabout Geometry                       | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Linked Roundabout | 3W - Site 3 - C - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |
| Warning  | Linked Roundabout | 3E - Site 3 - A - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 3E       | Site 3 | Standard Roundabout |                       | B, C, D, E, A | 8.96               | A            |
| 3W       | Site 3 | Standard Roundabout |                       | B, C, D, A    | 104.62             | F            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 52.48             | F           |

## 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 | 2026 Do Nothing | PM               | ONE HOUR             | 16:15              | 17:45               | 15                        | ✓                 |

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

### Linked Arm Data

| Junction    | Arm      | Feeding Junction | Feeding Arm | Link Type                  | Flow source | Uniform flow (PCU/hr) | Flow multiplier (%) | Internal storage space (PCU) |
|-------------|----------|------------------|-------------|----------------------------|-------------|-----------------------|---------------------|------------------------------|
| 3E - Site 3 | A - Link | 3W               | C           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |
| 3W - Site 3 | C - Link | 3E               | A           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |

## Demand overview (Traffic)

| Junction    | Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 3E - Site 3 | A - Link                       | ✓          |              |              |                         |                    |
|             | B - M62 Southbound Off-Ramp    |            | ONE HOUR     | ✓            | 468                     | 100.000            |
|             | C - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 961                     | 100.000            |
|             | D - A161                       |            | ONE HOUR     | ✓            | 1316                    | 100.000            |
|             | E - M62 Southbound On-Ramp     |            |              |              |                         |                    |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 1138                    | 100.000            |
|             | B - M62 Northbound On-Ramp     |            |              |              |                         |                    |
|             | C - Link                       | ✓          |              |              |                         |                    |
|             | D - M62 Northbound Off-Ramp    |            | ONE HOUR     | ✓            | 1131                    | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

3W - Site 3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 289                        | 849      | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 847                            | 464                        | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 436                            | 0                          | 695      | 0                           |

### Proportions

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 0.00                           |  |
|      | B - M62 Northbound On-Ramp     | 0.25                           |  |
|      | C - Link                       | 0.65                           |  |
|      | D - M62 Northbound Off-Ramp    | 0.39                           |  |

### Demand (PCU/hr)

3E - Site 3

|      |                                | To       |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 732                            | 502      | 312                        |
|      | B - M62 Southbound Off-Ramp    | 220      | 0                           | 108                            | 139      | 1                          |
|      | C - A614 Rawcliffe Road (East) | 513      | 0                           | 34                             | 75       | 339                        |
|      | D - A161                       | 578      | 0                           | 55                             | 25       | 658                        |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Proportions

|      |                                | To       |  |
|------|--------------------------------|----------|--|
|      |                                | A - Link |  |
| From | A - Link                       | 0        |  |
|      | B - M62 Southbound Off-Ramp    | 0        |  |
|      | C - A614 Rawcliffe Road (East) | 0        |  |
|      | D - A161                       | 0        |  |
|      | E - M62 Southbound On-Ramp     | 0        |  |

## Vehicle Mix

### Heavy Vehicle Percentages

3W - Site 3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 12                         | 5        | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 6                              | 6                          | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 22                             | 0                          | 13       | 0                           |

### Average PCU Per Veh

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 1.000                          |  |
|      | B - M62 Northbound On-Ramp     | 1.000                          |  |
|      | C - Link                       | 1.055                          |  |
|      | D - M62 Northbound Off-Ramp    | 1.220                          |  |

### Heavy Vehicle Percentages

3E -  
Site  
3

|      | To                             |          |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 5                              | 15       | 19                         |
|      | B - M62 Southbound Off-Ramp    | 13       | 0                           | 15                             | 19       | 0                          |
|      | C - A614 Rawcliffe Road (East) | 2        | 0                           | 0                              | 20       | 7                          |
|      | D - A161                       | 6        | 0                           | 33                             | 67       | 22                         |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Average PCU Per Veh

|      |                                | L  |
|------|--------------------------------|----|
| From | A - Link                       | 1. |
|      | B - M62 Southbound Off-Ramp    | 1. |
|      | C - A614 Rawcliffe Road (East) | 1. |
|      | D - A161                       | 1. |
|      | E - M62 Southbound On-Ramp     | 1. |

## Detailed Demand Data

### Demand for each time segment

| Junction    | Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------|--------------------------------|--------------|-----------------|------------------------|
| 3E - Site 3 | A - Link                       | 16:15-16:30  | 1184            | 1184                   |
|             |                                | 16:30-16:45  | 1390            | 1390                   |
|             |                                | 16:45-17:00  | 1702            | 1702                   |
|             |                                | 17:00-17:15  | 1702            | 1702                   |
|             |                                | 17:15-17:30  | 1390            | 1390                   |
|             |                                | 17:30-17:45  | 1184            | 1184                   |
|             | B - M62 Southbound Off-Ramp    | 16:15-16:30  | 352             | 352                    |
|             |                                | 16:30-16:45  | 421             | 421                    |
|             |                                | 16:45-17:00  | 515             | 515                    |
|             |                                | 17:00-17:15  | 515             | 515                    |
|             |                                | 17:15-17:30  | 421             | 421                    |
|             |                                | 17:30-17:45  | 352             | 352                    |
|             | C - A614 Rawcliffe Road (East) | 16:15-16:30  | 723             | 723                    |
|             |                                | 16:30-16:45  | 884             | 884                    |
|             |                                | 16:45-17:00  | 1058            | 1058                   |
|             |                                | 17:00-17:15  | 1058            | 1058                   |
|             |                                | 17:15-17:30  | 884             | 884                    |
|             |                                | 17:30-17:45  | 723             | 723                    |
|             | D - A161                       | 16:15-16:30  | 991             | 991                    |
|             |                                | 16:30-16:45  | 1183            | 1183                   |
|             |                                | 16:45-17:00  | 1449            | 1449                   |
|             |                                | 17:00-17:15  | 1449            | 1449                   |
|             |                                | 17:15-17:30  | 1183            | 1183                   |
|             |                                | 17:30-17:45  | 991             | 991                    |
|             | E - M62 Southbound On-Ramp     | 16:15-16:30  | 0               | 0                      |
|             |                                | 16:30-16:45  | 0               | 0                      |
|             |                                | 16:45-17:00  | 0               | 0                      |
|             |                                | 17:00-17:15  | 0               | 0                      |
|             |                                | 17:15-17:30  | 0               | 0                      |
|             |                                | 17:30-17:45  | 0               | 0                      |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 16:15-16:30  | 857             | 857                    |
|             |                                | 16:30-16:45  | 1023            | 1023                   |
|             |                                | 16:45-17:00  | 1253            | 1253                   |
|             |                                | 17:00-17:15  | 1253            | 1253                   |
|             |                                | 17:15-17:30  | 1023            | 1023                   |
|             |                                | 17:30-17:45  | 857             | 857                    |
|             | B - M62 Northbound On-Ramp     | 16:15-16:30  | 0               | 0                      |
|             |                                | 16:30-16:45  | 0               | 0                      |
|             |                                | 16:45-17:00  | 0               | 0                      |
|             |                                | 17:00-17:15  | 0               | 0                      |
|             |                                | 17:15-17:30  | 0               | 0                      |
|             |                                | 17:30-17:45  | 0               | 0                      |
|             | C - Link                       | 16:15-16:30  | 987             | 987                    |
|             |                                | 16:30-16:45  | 1179            | 1179                   |
|             |                                | 16:45-17:00  | 1443            | 1443                   |
|             |                                | 17:00-17:15  | 1443            | 1443                   |
|             |                                | 17:15-17:30  | 1179            | 1179                   |
|             |                                | 17:30-17:45  | 987             | 987                    |
|             | D - M62 Northbound Off-Ramp    | 16:15-16:30  | 851             | 851                    |
|             |                                | 16:30-16:45  | 1017            | 1017                   |
|             |                                | 16:45-17:00  | 1245            | 1245                   |
|             |                                | 17:00-17:15  | 1245            | 1245                   |
|             |                                | 17:15-17:30  | 1017            | 1017                   |
|             |                                | 17:30-17:45  | 851             | 851                    |

## Results

### Results Summary for whole modelled period

| Junction    | Arm                            | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-------------|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 3E - Site 3 | A - Link                       | 0.68    | 5.39          | 2.3             | A       | 1415                    | 2123                          |
|             | B - M62 Southbound Off-Ramp    | 0.73    | 21.50         | 3.0             | C       | 430                     | 644                           |
|             | C - A614 Rawcliffe Road (East) | 0.60    | 5.44          | 1.6             | A       | 882                     | 1323                          |
|             | D - A161                       | 0.67    | 11.24         | 2.2             | B       | 1208                    | 906                           |
|             | E - M62 Southbound On-Ramp     |         |               |                 |         |                         |                               |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1.20    | 299.34        | 113.0           | F       | 1044                    | 1566                          |
|             | B - M62 Northbound On-Ramp     |         |               |                 |         |                         |                               |
|             | C - Link                       | 0.89    | 20.24         | 7.7             | C       | 1202                    | 1803                          |
|             | D - M62 Northbound Off-Ramp    | 0.66    | 6.43          | 2.2             | A       | 1038                    | 1557                          |

### Main Results for each time segment

#### 16:15 - 16:30

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1154                  | 1154                     | 289                     | 0                      | 0                         | 85                        | 2303              | 0.501 | 1150                | 982                             | 0.0               |
|             | B - M62 Southbound Off-Ramp    | 352                   | 352                      | 88                      | 0                      | 0                         | 1235                      | 900               | 0.392 | 349                 | 0                               | 0.0               |
|             | C - A614 Rawcliffe Road (East) | 723                   | 723                      | 181                     | 0                      | 0                         | 893                       | 1966              | 0.388 | 721                 | 692                             | 0.0               |
|             | D - A161                       | 991                   | 495                      | 124                     | 495                    | 0                         | 1062                      | 1329              | 0.373 | 493                 | 552                             | 0.0               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1067                      |                   |       |                     | 487                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 857                   |                          | 214                     |                        |                           | 867                       | 1278              | 0.670 | 848                 | 958                             | 0.0               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1154                      |                   |       |                     | 561                             |                   |
|             | C - Link                       | 982                   |                          | 246                     |                        |                           | 0                         | 1622              | 0.605 | 976                 | 1154                            | 0.0               |
|             | D - M62 Northbound Off-Ramp    | 851                   |                          | 213                     |                        |                           | 976                       | 2234              | 0.381 | 849                 | 0                               | 0.0               |

#### 16:30 - 16:45

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1376                  | 1376                     | 344                     | 0                      | 0                         | 102                       | 2293              | 0.600 | 1373                | 1176                            | 1.1               |
|             | B - M62 Southbound Off-Ramp    | 421                   | 421                      | 105                     | 0                      | 0                         | 1476                      | 792               | 0.531 | 419                 | 0                               | 0.7               |
|             | C - A614 Rawcliffe Road (East) | 864                   | 864                      | 216                     | 0                      | 0                         | 1068                      | 1856              | 0.466 | 863                 | 827                             | 0.6               |
|             | D - A161                       | 1183                  | 592                      | 148                     | 592                    | 0                         | 1270                      | 1216              | 0.487 | 590                 | 660                             | 0.6               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1278                      |                   |       |                     | 582                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1023                  |                          | 256                     |                        |                           | 1038                      | 1178              | 0.868 | 1008                | 1148                            | 2.1               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1376                      |                   |       |                     | 670                             |                   |
|             | C - Link                       | 1176                  |                          | 294                     |                        |                           | 0                         | 1622              | 0.725 | 1171                | 1376                            | 1.6               |
|             | D - M62 Northbound Off-Ramp    | 1017                  |                          | 254                     |                        |                           | 1171                      | 2091              | 0.486 | 1015                | 0                               | 0.7               |

**16:45 - 17:00**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1537                  | 1537                     | 384                     | 0                      | 0                         | 125                       | 2279              | 0.674 | 1534                | 1435                            | 1.8               |
|             | B - M62 Southbound Off-Ramp    | 515                   | 515                      | 129                     | 0                      | 0                         | 1659                      | 709               | 0.727 | 509                 | 0                               | 1.3               |
|             | C - A614 Rawcliffe Road (East) | 1058                  | 1058                     | 285                     | 0                      | 0                         | 1227                      | 1756              | 0.603 | 1055                | 941                             | 0.9               |
|             | D - A161                       | 1449                  | 724                      | 181                     | 724                    | 0                         | 1523                      | 1078              | 0.672 | 720                 | 759                             | 1.0               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1560                      |                   |       |                     | 683                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1253                  |                          | 313                     |                        |                           | 1285                      | 1047              | 1.197 | 1038                | 1395                            | 6.0               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1537                      |                   |       |                     | 765                             |                   |
|             | C - Link                       | 1435                  |                          | 359                     |                        |                           | 0                         | 1622              | 0.885 | 1418                | 1537                            | 2.7               |
|             | D - M62 Northbound Off-Ramp    | 1245                  |                          | 311                     |                        |                           | 1418                      | 1910              | 0.652 | 1241                | 0                               | 1.1               |

**17:00 - 17:15**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1541                  | 1541                     | 385                     | 0                      | 0                         | 125                       | 2279              | 0.676 | 1541                | 1443                            | 2.3               |
|             | B - M62 Southbound Off-Ramp    | 515                   | 515                      | 129                     | 0                      | 0                         | 1666                      | 706               | 0.730 | 515                 | 0                               | 2.8               |
|             | C - A614 Rawcliffe Road (East) | 1058                  | 1058                     | 285                     | 0                      | 0                         | 1235                      | 1751              | 0.604 | 1058                | 946                             | 1.6               |
|             | D - A161                       | 1449                  | 724                      | 181                     | 724                    | 0                         | 1530                      | 1075              | 0.674 | 724                 | 763                             | 2.2               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1568                      |                   |       |                     | 685                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1253                  |                          | 313                     |                        |                           | 1275                      | 1041              | 1.204 | 1040                | 1410                            | 59.8              |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1541                      |                   |       |                     | 774                             |                   |
|             | C - Link                       | 1443                  |                          | 361                     |                        |                           | 0                         | 1622              | 0.889 | 1440                | 1541                            | 7.0               |
|             | D - M62 Northbound Off-Ramp    | 1245                  |                          | 311                     |                        |                           | 1440                      | 1894              | 0.657 | 1245                | 0                               | 2.1               |

**17:15 - 17:30**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1492                  | 1492                     | 373                     | 0                      | 0                         | 103                       | 2293              | 0.651 | 1492                | 1187                            | 2.3               |
|             | B - M62 Southbound Off-Ramp    | 421                   | 421                      | 105                     | 0                      | 0                         | 1595                      | 738               | 0.570 | 426                 | 0                               | 3.0               |
|             | C - A614 Rawcliffe Road (East) | 864                   | 864                      | 216                     | 0                      | 0                         | 1136                      | 1813              | 0.477 | 866                 | 885                             | 1.6               |
|             | D - A161                       | 1183                  | 592                      | 148                     | 592                    | 0                         | 1301                      | 1199              | 0.493 | 596                 | 701                             | 2.2               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1290                      |                   |       |                     | 608                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1023                  |                          | 256                     |                        |                           | 1054                      | 1169              | 0.875 | 1158                | 1172                            | 113.0             |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1492                      |                   |       |                     | 721                             |                   |
|             | C - Link                       | 1187                  |                          | 297                     |                        |                           | 0                         | 1622              | 0.731 | 1205                | 1492                            | 7.7               |
|             | D - M62 Northbound Off-Ramp    | 1017                  |                          | 254                     |                        |                           | 1205                      | 2066              | 0.492 | 1021                | 0                               | 2.2               |

**17:30 - 17:45**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1392                  | 1392                     | 348                     | 0                      | 0                         | 86                        | 2303              | 0.605 | 1394                | 990                             | 2.1               |
|             | B - M62 Southbound Off-Ramp    | 352                   | 352                      | 88                      | 0                      | 0                         | 1480                      | 790               | 0.446 | 355                 | 0                               | 1.6               |
|             | C - A614 Rawcliffe Road (East) | 723                   | 723                      | 181                     | 0                      | 0                         | 1026                      | 1882              | 0.384 | 725                 | 809                             | 1.0               |
|             | D - A161                       | 991                   | 495                      | 124                     | 495                    | 0                         | 1117                      | 1299              | 0.381 | 497                 | 633                             | 1.1               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1076                      |                   |       |                     | 538                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 857                   |                          | 214                     |                        |                           | 877                       | 1272              | 0.673 | 1164                | 972                             | 79.2              |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1392                      |                   |       |                     | 648                             |                   |
|             | C - Link                       | 990                   |                          | 248                     |                        |                           | 0                         | 1622              | 0.610 | 995                 | 1392                            | 3.0               |
|             | D - M62 Northbound Off-Ramp    | 851                   |                          | 213                     |                        |                           | 995                       | 2220              | 0.384 | 853                 | 0                               | 1.1               |



# 2026 Do Something, AM

## Data Errors and Warnings

| Severity | Area              | Item                                                               | Description                                                                                                                                                                                                                                               |
|----------|-------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry          | 3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry    | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3E - Site 3 - A - Link - Roundabout Geometry                       | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Linked Roundabout | 3W - Site 3 - C - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |
| Warning  | Linked Roundabout | 3E - Site 3 - A - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 3E       | Site 3 | Standard Roundabout |                       | B, C, D, E, A | 135.90             | F            |
| 3W       | Site 3 | Standard Roundabout |                       | B, C, D, A    | 77.24              | F            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 108.56            | F           |

## 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 | 2026 Do Something | AM               | ONE HOUR             | 07:30              | 09:00               | 15                        | ✓                 |

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

### Linked Arm Data

| Junction    | Arm      | Feeding Junction | Feeding Arm | Link Type                  | Flow source | Uniform flow (PCU/hr) | Flow multiplier (%) | Internal storage space (PCU) |
|-------------|----------|------------------|-------------|----------------------------|-------------|-----------------------|---------------------|------------------------------|
| 3E - Site 3 | A - Link | 3W               | C           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |
| 3W - Site 3 | C - Link | 3E               | A           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |



## Demand overview (Traffic)

| Junction    | Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 3E - Site 3 | A - Link                       | ✓          |              |              |                         |                    |
|             | B - M62 Southbound Off-Ramp    |            | ONE HOUR     | ✓            | 766                     | 100.000            |
|             | C - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 828                     | 100.000            |
|             | D - A161                       |            | ONE HOUR     | ✓            | 661                     | 100.000            |
|             | E - M62 Southbound On-Ramp     |            |              |              |                         |                    |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 1090                    | 100.000            |
|             | B - M62 Northbound On-Ramp     |            |              |              |                         |                    |
|             | C - Link                       | ✓          |              |              |                         |                    |
|             | D - M62 Northbound Off-Ramp    |            | ONE HOUR     | ✓            | 1529                    | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

3W - Site 3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 273                        | 817      | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 725                            | 202                        | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 561                            | 1                          | 967      | 0                           |

### Proportions

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 0.00                           |  |
|      | B - M62 Northbound On-Ramp     | 0.25                           |  |
|      | C - Link                       | 0.78                           |  |
|      | D - M62 Northbound Off-Ramp    | 0.37                           |  |

### Demand (PCU/hr)

3E - Site 3

|      |                                | To       |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 524                            | 896      | 364                        |
|      | B - M62 Southbound Off-Ramp    | 290      | 0                           | 97                             | 379      | 0                          |
|      | C - A614 Rawcliffe Road (East) | 364      | 0                           | 13                             | 95       | 356                        |
|      | D - A161                       | 274      | 0                           | 9                              | 17       | 361                        |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Proportions

|      |                                | To       |  |
|------|--------------------------------|----------|--|
|      |                                | A - Link |  |
| From | A - Link                       | 0        |  |
|      | B - M62 Southbound Off-Ramp    | 0        |  |
|      | C - A614 Rawcliffe Road (East) | 0        |  |
|      | D - A161                       | 0        |  |
|      | E - M62 Southbound On-Ramp     | 0        |  |

## Vehicle Mix

### Heavy Vehicle Percentages

3W - Site 3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 13                         | 8        | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 10                             | 18                         | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 26                             | 0                          | 20       | 0                           |

### Average PCU Per Veh

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 1.000                          |  |
|      | B - M62 Northbound On-Ramp     | 1.000                          |  |
|      | C - Link                       | 1.096                          |  |
|      | D - M62 Northbound Off-Ramp    | 1.256                          |  |

### Heavy Vehicle Percentages

3E -  
Site  
3

|      | To                             |          |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 11                             | 20       | 22                         |
|      | B - M62 Southbound Off-Ramp    | 9        | 0                           | 6                              | 14       | 0                          |
|      | C - A614 Rawcliffe Road (East) | 9        | 0                           | 0                              | 9        | 10                         |
|      | D - A161                       | 15       | 0                           | 50                             | 100      | 33                         |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Average PCU Per Veh

|      |                                | L  |
|------|--------------------------------|----|
| From | A - Link                       | 1. |
|      | B - M62 Southbound Off-Ramp    | 1. |
|      | C - A614 Rawcliffe Road (East) | 1. |
|      | D - A161                       | 1. |
|      | E - M62 Southbound On-Ramp     | 1. |

## Detailed Demand Data

### Demand for each time segment

| Junction    | Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------|--------------------------------|--------------|-----------------|------------------------|
| 3E - Site 3 | A - Link                       | 07:30-07:45  | 1343            | 1343                   |
|             |                                | 07:45-08:00  | 1604            | 1604                   |
|             |                                | 08:00-08:15  | 1964            | 1964                   |
|             |                                | 08:15-08:30  | 1964            | 1964                   |
|             |                                | 08:30-08:45  | 1604            | 1604                   |
|             |                                | 08:45-09:00  | 1343            | 1343                   |
|             | B - M62 Southbound Off-Ramp    | 07:30-07:45  | 577             | 577                    |
|             |                                | 07:45-08:00  | 689             | 689                    |
|             |                                | 08:00-08:15  | 843             | 843                    |
|             |                                | 08:15-08:30  | 843             | 843                    |
|             |                                | 08:30-08:45  | 689             | 689                    |
|             |                                | 08:45-09:00  | 577             | 577                    |
|             | C - A614 Rawcliffe Road (East) | 07:30-07:45  | 623             | 623                    |
|             |                                | 07:45-08:00  | 744             | 744                    |
|             |                                | 08:00-08:15  | 911             | 911                    |
|             |                                | 08:15-08:30  | 911             | 911                    |
|             |                                | 08:30-08:45  | 744             | 744                    |
|             |                                | 08:45-09:00  | 623             | 623                    |
|             | D - A161                       | 07:30-07:45  | 498             | 498                    |
|             |                                | 07:45-08:00  | 594             | 594                    |
|             |                                | 08:00-08:15  | 728             | 728                    |
|             |                                | 08:15-08:30  | 728             | 728                    |
|             |                                | 08:30-08:45  | 594             | 594                    |
|             |                                | 08:45-09:00  | 498             | 498                    |
|             | E - M62 Southbound On-Ramp     | 07:30-07:45  | 0               | 0                      |
|             |                                | 07:45-08:00  | 0               | 0                      |
|             |                                | 08:00-08:15  | 0               | 0                      |
|             |                                | 08:15-08:30  | 0               | 0                      |
|             |                                | 08:30-08:45  | 0               | 0                      |
|             |                                | 08:45-09:00  | 0               | 0                      |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 07:30-07:45  | 821             | 821                    |
|             |                                | 07:45-08:00  | 980             | 980                    |
|             |                                | 08:00-08:15  | 1200            | 1200                   |
|             |                                | 08:15-08:30  | 1200            | 1200                   |
|             |                                | 08:30-08:45  | 980             | 980                    |
|             |                                | 08:45-09:00  | 821             | 821                    |
|             | B - M62 Northbound On-Ramp     | 07:30-07:45  | 0               | 0                      |
|             |                                | 07:45-08:00  | 0               | 0                      |
|             |                                | 08:00-08:15  | 0               | 0                      |
|             |                                | 08:15-08:30  | 0               | 0                      |
|             |                                | 08:30-08:45  | 0               | 0                      |
|             |                                | 08:45-09:00  | 0               | 0                      |
|             | C - Link                       | 07:30-07:45  | 698             | 698                    |
|             |                                | 07:45-08:00  | 833             | 833                    |
|             |                                | 08:00-08:15  | 1021            | 1021                   |
|             |                                | 08:15-08:30  | 1021            | 1021                   |
|             |                                | 08:30-08:45  | 833             | 833                    |
|             |                                | 08:45-09:00  | 698             | 698                    |
|             | D - M62 Northbound Off-Ramp    | 07:30-07:45  | 1151            | 1151                   |
|             |                                | 07:45-08:00  | 1375            | 1375                   |
|             |                                | 08:00-08:15  | 1684            | 1684                   |
|             |                                | 08:15-08:30  | 1684            | 1684                   |
|             |                                | 08:30-08:45  | 1375            | 1375                   |
|             |                                | 08:45-09:00  | 1151            | 1151                   |

## Results

### Results Summary for whole modelled period

| Junction    | Arm                            | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-------------|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 3E - Site 3 | A - Link                       | 0.79    | 8.71          | 4.4             | A       | 1635                    | 2453                          |
|             | B - M62 Southbound Off-Ramp    | 1.39    | 682.06        | 135.4           | F       | 703                     | 1054                          |
|             | C - A614 Rawcliffe Road (East) | 0.67    | 8.68          | 2.2             | A       | 760                     | 1139                          |
|             | D - A161                       | 0.29    | 5.27          | 0.5             | A       | 607                     | 413                           |
|             | E - M62 Southbound On-Ramp     |         |               |                 |         |                         |                               |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1.15    | 234.25        | 86.2            | F       | 1000                    | 1500                          |
|             | B - M62 Northbound On-Ramp     |         |               |                 |         |                         |                               |
|             | C - Link                       | 0.57    | 5.80          | 1.5             | A       | 829                     | 1244                          |
|             | D - M62 Northbound Off-Ramp    | 0.74    | 7.54          | 3.5             | A       | 1403                    | 2105                          |

### Main Results for each time segment

#### 07:30 - 07:45

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1335                  | 1335                     | 334                     | 0                      | 0                         | 29                        | 2338              | 0.571 | 1328                | 693                             | 0.0               |
|             | B - M62 Southbound Off-Ramp    | 577                   | 577                      | 144                     | 0                      | 0                         | 1358                      | 845               | 0.683 | 568                 | 0                               | 0.0               |
|             | C - A614 Rawcliffe Road (East) | 623                   | 623                      | 156                     | 0                      | 0                         | 1447                      | 1618              | 0.385 | 621                 | 479                             | 0.0               |
|             | D - A161                       | 498                   | 226                      | 56                      | 272                    | 0                         | 1035                      | 1344              | 0.168 | 225                 | 1032                            | 0.0               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 722                       |                   |       |                     | 538                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 821                   |                          | 205                     |                        |                           | 876                       | 1272              | 0.645 | 813                 | 960                             | 0.0               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1335                      |                   |       |                     | 355                             |                   |
|             | C - Link                       | 693                   |                          | 173                     |                        |                           | 0                         | 1622              | 0.427 | 690                 | 1335                            | 0.0               |
|             | D - M62 Northbound Off-Ramp    | 1151                  |                          | 288                     |                        |                           | 690                       | 2444              | 0.471 | 1147                | 0                               | 0.0               |

#### 07:45 - 08:00

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1593                  | 1593                     | 398                     | 0                      | 0                         | 35                        | 2334              | 0.683 | 1589                | 822                             | 1.5               |
|             | B - M62 Southbound Off-Ramp    | 689                   | 689                      | 172                     | 0                      | 0                         | 1624                      | 725               | 0.950 | 659                 | 0                               | 2.3               |
|             | C - A614 Rawcliffe Road (East) | 744                   | 744                      | 186                     | 0                      | 0                         | 1713                      | 1450              | 0.513 | 742                 | 570                             | 0.7               |
|             | D - A161                       | 594                   | 270                      | 67                      | 325                    | 0                         | 1231                      | 1237              | 0.218 | 269                 | 1225                            | 0.2               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 857                       |                   |       |                     | 643                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 980                   |                          | 245                     |                        |                           | 1048                      | 1173              | 0.835 | 968                 | 1145                            | 1.9               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1593                      |                   |       |                     | 422                             |                   |
|             | C - Link                       | 822                   |                          | 205                     |                        |                           | 0                         | 1622              | 0.507 | 820                 | 1593                            | 0.8               |
|             | D - M62 Northbound Off-Ramp    | 1375                  |                          | 344                     |                        |                           | 820                       | 2348              | 0.585 | 1372                | 0                               | 1.1               |

## 08:00 - 08:15

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1834                  | 1834                     | 459                     | 0                      | 0                         | 43                        | 2329              | 0.788 | 1828                | 932                             | 2.5               |
|             | B - M62 Southbound Off-Ramp    | 843                   | 843                      | 211                     | 0                      | 0                         | 1870                      | 614               | 1.373 | 611                 | 0                               | 9.8               |
|             | C - A614 Rawcliffe Road (East) | 911                   | 911                      | 228                     | 0                      | 0                         | 1844                      | 1368              | 0.666 | 908                 | 638                             | 1.1               |
|             | D - A161                       | 728                   | 330                      | 83                      | 397                    | 0                         | 1408                      | 1141              | 0.290 | 330                 | 1343                            | 0.3               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 974                       |                   |       |                     | 763                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1200                  |                          | 300                     |                        |                           | 1284                      | 1047              | 1.146 | 1033                | 1343                            | 4.9               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1834                      |                   |       |                     | 463                             |                   |
|             | C - Link                       | 932                   |                          | 233                     |                        |                           | 0                         | 1622              | 0.574 | 930                 | 1834                            | 1.1               |
|             | D - M62 Northbound Off-Ramp    | 1684                  |                          | 421                     |                        |                           | 930                       | 2268              | 0.742 | 1677                | 0                               | 1.7               |

## 08:15 - 08:30

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1846                  | 1846                     | 461                     | 0                      | 0                         | 43                        | 2329              | 0.792 | 1845                | 932                             | 4.2               |
|             | B - M62 Southbound Off-Ramp    | 843                   | 843                      | 211                     | 0                      | 0                         | 1888                      | 606               | 1.391 | 606                 | 0                               | 67.8              |
|             | C - A614 Rawcliffe Road (East) | 911                   | 911                      | 228                     | 0                      | 0                         | 1851                      | 1363              | 0.669 | 911                 | 643                             | 2.1               |
|             | D - A161                       | 728                   | 330                      | 83                      | 397                    | 0                         | 1413                      | 1138              | 0.290 | 330                 | 1350                            | 0.5               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 975                       |                   |       |                     | 768                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1200                  |                          | 300                     |                        |                           | 1269                      | 1044              | 1.149 | 1043                | 1346                            | 46.8              |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1846                      |                   |       |                     | 465                             |                   |
|             | C - Link                       | 932                   |                          | 233                     |                        |                           | 0                         | 1622              | 0.574 | 932                 | 1846                            | 1.5               |
|             | D - M62 Northbound Off-Ramp    | 1684                  |                          | 421                     |                        |                           | 932                       | 2267              | 0.743 | 1683                | 0                               | 3.4               |

## 08:30 - 08:45

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1739                  | 1739                     | 435                     | 0                      | 0                         | 35                        | 2334              | 0.745 | 1742                | 824                             | 4.4               |
|             | B - M62 Southbound Off-Ramp    | 689                   | 689                      | 172                     | 0                      | 0                         | 1777                      | 656               | 1.050 | 655                 | 0                               | 127.1             |
|             | C - A614 Rawcliffe Road (East) | 744                   | 744                      | 186                     | 0                      | 0                         | 1818                      | 1384              | 0.538 | 748                 | 615                             | 2.2               |
|             | D - A161                       | 594                   | 270                      | 67                      | 325                    | 0                         | 1266                      | 1218              | 0.221 | 270                 | 1300                            | 0.5               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 859                       |                   |       |                     | 677                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 980                   |                          | 245                     |                        |                           | 1054                      | 1169              | 0.838 | 1154                | 1152                            | 86.2              |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1739                      |                   |       |                     | 470                             |                   |
|             | C - Link                       | 824                   |                          | 206                     |                        |                           | 0                         | 1622              | 0.508 | 825                 | 1739                            | 1.5               |
|             | D - M62 Northbound Off-Ramp    | 1375                  |                          | 344                     |                        |                           | 825                       | 2345              | 0.586 | 1382                | 0                               | 3.5               |

## 08:45 - 09:00

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1466                  | 1466                     | 366                     | 0                      | 0                         | 29                        | 2338              | 0.627 | 1472                | 774                             | 3.5               |
|             | B - M62 Southbound Off-Ramp    | 577                   | 577                      | 144                     | 0                      | 0                         | 1501                      | 780               | 0.739 | 774                 | 0                               | 135.4             |
|             | C - A614 Rawcliffe Road (East) | 623                   | 623                      | 156                     | 0                      | 0                         | 1728                      | 1440              | 0.433 | 625                 | 547                             | 1.3               |
|             | D - A161                       | 498                   | 226                      | 56                      | 272                    | 0                         | 1147                      | 1283              | 0.176 | 226                 | 1207                            | 0.3               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 804                       |                   |       |                     | 569                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 821                   |                          | 205                     |                        |                           | 899                       | 1259              | 0.652 | 982                 | 1029                            | 42.5              |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1466                      |                   |       |                     | 416                             |                   |
|             | C - Link                       | 774                   |                          | 194                     |                        |                           | 0                         | 1622              | 0.477 | 775                 | 1466                            | 1.2               |
|             | D - M62 Northbound Off-Ramp    | 1151                  |                          | 288                     |                        |                           | 775                       | 2382              | 0.483 | 1154                | 0                               | 1.8               |

# 2026 Do Something, PM

## Data Errors and Warnings

| Severity | Area              | Item                                                               | Description                                                                                                                                                                                                                                               |
|----------|-------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry          | 3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry    | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Geometry          | 3E - Site 3 - A - Link - Roundabout Geometry                       | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                                                                                          |
| Warning  | Linked Roundabout | 3W - Site 3 - C - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |
| Warning  | Linked Roundabout | 3E - Site 3 - A - Link                                             | If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order     | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|---------------|--------------------|--------------|
| 3E       | Site 3 | Standard Roundabout |                       | B, C, D, E, A | 9.36               | A            |
| 3W       | Site 3 | Standard Roundabout |                       | B, C, D, A    | 154.22             | F            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 75.89             | F           |

## 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 | 2026 Do Something | PM               | ONE HOUR             | 16:15              | 17:45               | 15                        | ✓                 |

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

### Linked Arm Data

| Junction    | Arm      | Feeding Junction | Feeding Arm | Link Type                  | Flow source | Uniform flow (PCU/hr) | Flow multiplier (%) | Internal storage space (PCU) |
|-------------|----------|------------------|-------------|----------------------------|-------------|-----------------------|---------------------|------------------------------|
| 3E - Site 3 | A - Link | 3W               | C           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |
| 3W - Site 3 | C - Link | 3E               | A           | Simple (vertical queueing) | Normal      | 0                     | 100.00              |                              |

## Demand overview (Traffic)

| Junction    | Arm                            | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------|--------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 3E - Site 3 | A - Link                       | ✓          |              |              |                         |                    |
|             | B - M62 Southbound Off-Ramp    |            | ONE HOUR     | ✓            | 468                     | 100.000            |
|             | C - A614 Rawcliffe Road (East) |            | ONE HOUR     | ✓            | 961                     | 100.000            |
|             | D - A161                       |            | ONE HOUR     | ✓            | 1316                    | 100.000            |
|             | E - M62 Southbound On-Ramp     |            |              |              |                         |                    |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) |            | ONE HOUR     | ✓            | 1209                    | 100.000            |
|             | B - M62 Northbound On-Ramp     |            |              |              |                         |                    |
|             | C - Link                       | ✓          |              |              |                         |                    |
|             | D - M62 Northbound Off-Ramp    |            | ONE HOUR     | ✓            | 1157                    | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

3W  
-  
Site  
3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 295                        | 914      | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 847                            | 464                        | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 462                            | 0                          | 695      | 0                           |

### Proportions

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 0.00                           |  |
|      | B - M62 Northbound On-Ramp     | 0.25                           |  |
|      | C - Link                       | 0.65                           |  |
|      | D - M62 Northbound Off-Ramp    | 0.40                           |  |

### Demand (PCU/hr)

3E -  
Site  
3

|      |                                | To       |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 732                            | 502      | 377                        |
|      | B - M62 Southbound Off-Ramp    | 220      | 0                           | 108                            | 139      | 1                          |
|      | C - A614 Rawcliffe Road (East) | 513      | 0                           | 34                             | 75       | 339                        |
|      | D - A161                       | 578      | 0                           | 55                             | 25       | 658                        |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Proportions

|      |                                | To       |  |
|------|--------------------------------|----------|--|
|      |                                | A - Link |  |
| From | A - Link                       | 0        |  |
|      | B - M62 Southbound Off-Ramp    | 0        |  |
|      | C - A614 Rawcliffe Road (East) | 0        |  |
|      | D - A161                       | 0        |  |
|      | E - M62 Southbound On-Ramp     | 0        |  |

## Vehicle Mix

### Heavy Vehicle Percentages

3W  
-  
Site  
3

|      |                                | To                             |                            |          |                             |
|------|--------------------------------|--------------------------------|----------------------------|----------|-----------------------------|
|      |                                | A - A614 Rawcliffe Road (West) | B - M62 Northbound On-Ramp | C - Link | D - M62 Northbound Off-Ramp |
| From | A - A614 Rawcliffe Road (West) | 0                              | 12                         | 5        | 0                           |
|      | B - M62 Northbound On-Ramp     | 0                              | 0                          | 0        | 0                           |
|      | C - Link                       | 6                              | 6                          | 0        | 0                           |
|      | D - M62 Northbound Off-Ramp    | 22                             | 0                          | 13       | 0                           |

### Average PCU Per Veh

|      |                                | To                             |  |
|------|--------------------------------|--------------------------------|--|
|      |                                | A - A614 Rawcliffe Road (West) |  |
| From | A - A614 Rawcliffe Road (West) | 1.000                          |  |
|      | B - M62 Northbound On-Ramp     | 1.000                          |  |
|      | C - Link                       | 1.055                          |  |
|      | D - M62 Northbound Off-Ramp    | 1.220                          |  |

### Heavy Vehicle Percentages

3E -  
Site  
3

|      | To                             |          |                             |                                |          |                            |
|------|--------------------------------|----------|-----------------------------|--------------------------------|----------|----------------------------|
|      |                                | A - Link | B - M62 Southbound Off-Ramp | C - A614 Rawcliffe Road (East) | D - A161 | E - M62 Southbound On-Ramp |
| From | A - Link                       | 0        | 0                           | 5                              | 15       | 19                         |
|      | B - M62 Southbound Off-Ramp    | 13       | 0                           | 15                             | 19       | 0                          |
|      | C - A614 Rawcliffe Road (East) | 2        | 0                           | 0                              | 20       | 7                          |
|      | D - A161                       | 6        | 0                           | 33                             | 67       | 22                         |
|      | E - M62 Southbound On-Ramp     | 0        | 0                           | 0                              | 0        | 0                          |

### Average PCU Per Veh

|      |                                | L  |
|------|--------------------------------|----|
| From | A - Link                       | 1. |
|      | B - M62 Southbound Off-Ramp    | 1. |
|      | C - A614 Rawcliffe Road (East) | 1. |
|      | D - A161                       | 1. |
|      | E - M62 Southbound On-Ramp     | 1. |

## Detailed Demand Data



### Demand for each time segment

| Junction    | Arm                            | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------|--------------------------------|--------------|-----------------|------------------------|
| 3E - Site 3 | A - Link                       | 16:15-16:30  | 1213            | 1213                   |
|             |                                | 16:30-16:45  | 1448            | 1448                   |
|             |                                | 16:45-17:00  | 1774            | 1774                   |
|             |                                | 17:00-17:15  | 1774            | 1774                   |
|             |                                | 17:15-17:30  | 1448            | 1448                   |
|             |                                | 17:30-17:45  | 1213            | 1213                   |
|             | B - M62 Southbound Off-Ramp    | 16:15-16:30  | 352             | 352                    |
|             |                                | 16:30-16:45  | 421             | 421                    |
|             |                                | 16:45-17:00  | 515             | 515                    |
|             |                                | 17:00-17:15  | 515             | 515                    |
|             |                                | 17:15-17:30  | 421             | 421                    |
|             |                                | 17:30-17:45  | 352             | 352                    |
|             | C - A614 Rawcliffe Road (East) | 16:15-16:30  | 723             | 723                    |
|             |                                | 16:30-16:45  | 884             | 884                    |
|             |                                | 16:45-17:00  | 1058            | 1058                   |
|             |                                | 17:00-17:15  | 1058            | 1058                   |
|             |                                | 17:15-17:30  | 884             | 884                    |
|             |                                | 17:30-17:45  | 723             | 723                    |
|             | D - A161                       | 16:15-16:30  | 991             | 991                    |
|             |                                | 16:30-16:45  | 1183            | 1183                   |
|             |                                | 16:45-17:00  | 1449            | 1449                   |
|             |                                | 17:00-17:15  | 1449            | 1449                   |
|             |                                | 17:15-17:30  | 1183            | 1183                   |
|             |                                | 17:30-17:45  | 991             | 991                    |
|             | E - M62 Southbound On-Ramp     | 16:15-16:30  | 0               | 0                      |
|             |                                | 16:30-16:45  | 0               | 0                      |
|             |                                | 16:45-17:00  | 0               | 0                      |
|             |                                | 17:00-17:15  | 0               | 0                      |
|             |                                | 17:15-17:30  | 0               | 0                      |
|             |                                | 17:30-17:45  | 0               | 0                      |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 16:15-16:30  | 910             | 910                    |
|             |                                | 16:30-16:45  | 1087            | 1087                   |
|             |                                | 16:45-17:00  | 1331            | 1331                   |
|             |                                | 17:00-17:15  | 1331            | 1331                   |
|             |                                | 17:15-17:30  | 1087            | 1087                   |
|             |                                | 17:30-17:45  | 910             | 910                    |
|             | B - M62 Northbound On-Ramp     | 16:15-16:30  | 0               | 0                      |
|             |                                | 16:30-16:45  | 0               | 0                      |
|             |                                | 16:45-17:00  | 0               | 0                      |
|             |                                | 17:00-17:15  | 0               | 0                      |
|             |                                | 17:15-17:30  | 0               | 0                      |
|             |                                | 17:30-17:45  | 0               | 0                      |
|             | C - Link                       | 16:15-16:30  | 987             | 987                    |
|             |                                | 16:30-16:45  | 1179            | 1179                   |
|             |                                | 16:45-17:00  | 1443            | 1443                   |
|             |                                | 17:00-17:15  | 1443            | 1443                   |
|             |                                | 17:15-17:30  | 1179            | 1179                   |
|             |                                | 17:30-17:45  | 987             | 987                    |
|             | D - M62 Northbound Off-Ramp    | 16:15-16:30  | 871             | 871                    |
|             |                                | 16:30-16:45  | 1040            | 1040                   |
|             |                                | 16:45-17:00  | 1274            | 1274                   |
|             |                                | 17:00-17:15  | 1274            | 1274                   |
|             |                                | 17:15-17:30  | 1040            | 1040                   |
|             |                                | 17:30-17:45  | 871             | 871                    |

## Results

### Results Summary for whole modelled period

| Junction    | Arm                            | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-------------|--------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 3E - Site 3 | A - Link                       | 0.68    | 5.49          | 2.3             | A       | 1453                    | 2179                          |
|             | B - M62 Southbound Off-Ramp    | 0.73    | 22.06         | 3.0             | C       | 430                     | 644                           |
|             | C - A614 Rawcliffe Road (East) | 0.61    | 5.62          | 1.6             | A       | 882                     | 1323                          |
|             | D - A161                       | 0.69    | 12.23         | 2.4             | B       | 1208                    | 906                           |
|             | E - M62 Southbound On-Ramp     |         |               |                 |         |                         |                               |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1.28    | 440.49        | 153.9           | F       | 1110                    | 1664                          |
|             | B - M62 Northbound On-Ramp     |         |               |                 |         |                         |                               |
|             | C - Link                       | 0.89    | 20.23         | 7.7             | C       | 1202                    | 1803                          |
|             | D - M62 Northbound Off-Ramp    | 0.67    | 6.73          | 2.3             | A       | 1062                    | 1593                          |

### Main Results for each time segment

#### 16:15 - 16:30

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1202                  | 1202                     | 301                     | 0                      | 0                         | 85                        | 2303              | 0.522 | 1197                | 982                             | 0.0               |
|             | B - M62 Southbound Off-Ramp    | 352                   | 352                      | 88                      | 0                      | 0                         | 1283                      | 879               | 0.401 | 349                 | 0                               | 0.0               |
|             | C - A614 Rawcliffe Road (East) | 723                   | 723                      | 181                     | 0                      | 0                         | 941                       | 1936              | 0.374 | 721                 | 691                             | 0.0               |
|             | D - A161                       | 991                   | 495                      | 124                     | 495                    | 0                         | 1110                      | 1303              | 0.380 | 493                 | 552                             | 0.0               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1067                      |                   |       |                     | 535                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 910                   |                          | 228                     |                        |                           | 867                       | 1278              | 0.712 | 900                 | 977                             | 0.0               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1202                      |                   |       |                     | 565                             |                   |
|             | C - Link                       | 982                   |                          | 245                     |                        |                           | 0                         | 1622              | 0.605 | 976                 | 1202                            | 0.0               |
|             | D - M62 Northbound Off-Ramp    | 871                   |                          | 218                     |                        |                           | 976                       | 2235              | 0.390 | 868                 | 0                               | 0.0               |

#### 16:30 - 16:45

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1426                  | 1426                     | 357                     | 0                      | 0                         | 102                       | 2293              | 0.622 | 1424                | 1175                            | 1.2               |
|             | B - M62 Southbound Off-Ramp    | 421                   | 421                      | 105                     | 0                      | 0                         | 1526                      | 769               | 0.547 | 418                 | 0                               | 0.8               |
|             | C - A614 Rawcliffe Road (East) | 864                   | 864                      | 216                     | 0                      | 0                         | 1121                      | 1822              | 0.474 | 863                 | 823                             | 0.6               |
|             | D - A161                       | 1183                  | 592                      | 148                     | 592                    | 0                         | 1326                      | 1185              | 0.499 | 590                 | 658                             | 0.7               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1278                      |                   |       |                     | 639                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1087                  |                          | 272                     |                        |                           | 1038                      | 1178              | 0.923 | 1062                | 1171                            | 2.5               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1426                      |                   |       |                     | 673                             |                   |
|             | C - Link                       | 1175                  |                          | 294                     |                        |                           | 0                         | 1622              | 0.725 | 1171                | 1426                            | 1.6               |
|             | D - M62 Northbound Off-Ramp    | 1040                  |                          | 260                     |                        |                           | 1171                      | 2091              | 0.497 | 1039                | 0                               | 0.7               |

**16:45 - 17:00**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1551                  | 1551                     | 388                     | 0                      | 0                         | 125                       | 2279              | 0.680 | 1548                | 1435                            | 1.8               |
|             | B - M62 Southbound Off-Ramp    | 515                   | 515                      | 129                     | 0                      | 0                         | 1673                      | 703               | 0.733 | 509                 | 0                               | 1.4               |
|             | C - A614 Rawcliffe Road (East) | 1058                  | 1058                     | 285                     | 0                      | 0                         | 1284                      | 1732              | 0.611 | 1055                | 919                             | 0.9               |
|             | D - A161                       | 1449                  | 724                      | 181                     | 724                    | 0                         | 1576                      | 1049              | 0.690 | 719                 | 743                             | 1.1               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1559                      |                   |       |                     | 736                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1331                  |                          | 333                     |                        |                           | 1284                      | 1047              | 1.272 | 1042                | 1423                            | 8.9               |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1551                      |                   |       |                     | 756                             |                   |
|             | C - Link                       | 1435                  |                          | 359                     |                        |                           | 0                         | 1622              | 0.884 | 1418                | 1551                            | 2.7               |
|             | D - M62 Northbound Off-Ramp    | 1274                  |                          | 318                     |                        |                           | 1418                      | 1911              | 0.667 | 1269                | 0                               | 1.1               |

**17:00 - 17:15**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1552                  | 1552                     | 388                     | 0                      | 0                         | 125                       | 2279              | 0.681 | 1552                | 1443                            | 2.3               |
|             | B - M62 Southbound Off-Ramp    | 515                   | 515                      | 129                     | 0                      | 0                         | 1677                      | 701               | 0.735 | 515                 | 0                               | 2.9               |
|             | C - A614 Rawcliffe Road (East) | 1058                  | 1058                     | 285                     | 0                      | 0                         | 1270                      | 1729              | 0.612 | 1058                | 922                             | 1.6               |
|             | D - A161                       | 1449                  | 724                      | 181                     | 724                    | 0                         | 1582                      | 1046              | 0.693 | 724                 | 746                             | 2.3               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1568                      |                   |       |                     | 738                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1331                  |                          | 333                     |                        |                           | 1275                      | 1041              | 1.279 | 1041                | 1439                            | 81.2              |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1552                      |                   |       |                     | 764                             |                   |
|             | C - Link                       | 1443                  |                          | 361                     |                        |                           | 0                         | 1622              | 0.889 | 1440                | 1552                            | 6.9               |
|             | D - M62 Northbound Off-Ramp    | 1274                  |                          | 318                     |                        |                           | 1440                      | 1894              | 0.673 | 1274                | 0                               | 2.3               |

**17:15 - 17:30**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1505                  | 1505                     | 376                     | 0                      | 0                         | 103                       | 2293              | 0.657 | 1506                | 1187                            | 2.3               |
|             | B - M62 Southbound Off-Ramp    | 421                   | 421                      | 105                     | 0                      | 0                         | 1609                      | 732               | 0.575 | 427                 | 0                               | 3.0               |
|             | C - A614 Rawcliffe Road (East) | 864                   | 864                      | 216                     | 0                      | 0                         | 1173                      | 1790              | 0.483 | 867                 | 863                             | 1.6               |
|             | D - A161                       | 1183                  | 592                      | 148                     | 592                    | 0                         | 1353                      | 1171              | 0.505 | 597                 | 686                             | 2.4               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1290                      |                   |       |                     | 659                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 1087                  |                          | 272                     |                        |                           | 1054                      | 1169              | 0.930 | 1161                | 1196                            | 153.9             |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1505                      |                   |       |                     | 710                             |                   |
|             | C - Link                       | 1187                  |                          | 297                     |                        |                           | 0                         | 1622              | 0.732 | 1206                | 1505                            | 7.7               |
|             | D - M62 Northbound Off-Ramp    | 1040                  |                          | 260                     |                        |                           | 1206                      | 2066              | 0.504 | 1045                | 0                               | 2.3               |

**17:30 - 17:45**

| Junction    | Arm                            | Total Demand (PCU/hr) | Junction demand (PCU/hr) | Junction Arrivals (PCU) | Bypass demand (PCU/hr) | Bypass exit flow (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) |
|-------------|--------------------------------|-----------------------|--------------------------|-------------------------|------------------------|---------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|
| 3E - Site 3 | A - Link                       | 1479                  | 1479                     | 370                     | 0                      | 0                         | 86                        | 2303              | 0.642 | 1479                | 990                             | 2.2               |
|             | B - M62 Southbound Off-Ramp    | 352                   | 352                      | 88                      | 0                      | 0                         | 1565                      | 751               | 0.469 | 355                 | 0                               | 1.6               |
|             | C - A614 Rawcliffe Road (East) | 723                   | 723                      | 181                     | 0                      | 0                         | 1099                      | 1836              | 0.394 | 725                 | 821                             | 1.0               |
|             | D - A161                       | 991                   | 495                      | 124                     | 495                    | 0                         | 1182                      | 1264              | 0.392 | 497                 | 642                             | 1.1               |
|             | E - M62 Southbound On-Ramp     |                       |                          |                         |                        |                           | 1076                      |                   |       |                     | 603                             |                   |
| 3W - Site 3 | A - A614 Rawcliffe Road (West) | 910                   |                          | 228                     |                        |                           | 877                       | 1272              | 0.716 | 1262                | 992                             | 135.4             |
|             | B - M62 Northbound On-Ramp     |                       |                          |                         |                        |                           | 1479                      |                   |       |                     | 660                             |                   |
|             | C - Link                       | 990                   |                          | 248                     |                        |                           | 0                         | 1622              | 0.610 | 995                 | 1479                            | 3.0               |
|             | D - M62 Northbound Off-Ramp    | 871                   |                          | 218                     |                        |                           | 995                       | 2220              | 0.392 | 873                 | 0                               | 1.2               |

| Junctions 10                                                                                                                                                     |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| ARCADY 10 - Roundabout Module                                                                                                                                    |  |  |  |  |
| Version: 10.0.4.1693                                                                                                                                             |  |  |  |  |
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Filename: J5.j10

Path: \\uk.wspgroup.com\Central Data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\8 - Traffic Flow Analysis and Models\05 - Models and Outputs\Models

Report generation date: 18/03/2022 10:14:14

- »2018 Baseline, AM
- »2018 Baseline, PM
- »2022 Future Baseline , AM
- »2022 Future Baseline , PM
- »2026 Future Baseline, AM
- »2026 Future Baseline, PM
- »2026 Do Minimum, AM
- »2026 Do Minimum, PM
- »2026 Do Something, AM
- »2026 Do Something, PM

### Summary of junction performance

|                        | AM                   |             |           |      |     | PM     |             |           |      |     |
|------------------------|----------------------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|
|                        | Set ID               | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS |
|                        | 2018 Baseline        |             |           |      |     |        |             |           |      |     |
| A - A1041              | D1                   | 1.1         | 5.24      | 0.52 | A   | D2     | 0.9         | 4.54      | 0.46 | A   |
| B - A645               |                      | 0.7         | 5.07      | 0.40 | A   |        | 1.2         | 6.58      | 0.53 | A   |
| C - A1041 Station Road |                      | 0.6         | 4.41      | 0.38 | A   |        | 0.5         | 4.38      | 0.35 | A   |
|                        | 2022 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A1041              | D3                   | 1.2         | 5.47      | 0.54 | A   | D4     | 0.9         | 4.69      | 0.47 | A   |
| B - A645               |                      | 0.7         | 5.23      | 0.41 | A   |        | 1.3         | 6.93      | 0.55 | A   |
| C - A1041 Station Road |                      | 0.7         | 4.55      | 0.39 | A   |        | 0.6         | 4.51      | 0.36 | A   |
|                        | 2026 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A1041              | D5                   | 1.3         | 5.69      | 0.55 | A   | D6     | 1.0         | 4.82      | 0.49 | A   |
| B - A645               |                      | 0.8         | 5.39      | 0.43 | A   |        | 1.4         | 7.28      | 0.57 | A   |
| C - A1041 Station Road |                      | 0.7         | 4.67      | 0.41 | A   |        | 0.6         | 4.63      | 0.37 | A   |
|                        | 2026 Do Minimum      |             |           |      |     |        |             |           |      |     |
| A - A1041              | D7                   | 1.4         | 5.92      | 0.57 | A   | D8     | 1.0         | 4.98      | 0.50 | A   |
| B - A645               |                      | 0.8         | 5.59      | 0.45 | A   |        | 1.5         | 7.83      | 0.60 | A   |
| C - A1041 Station Road |                      | 0.7         | 4.79      | 0.41 | A   |        | 0.6         | 4.77      | 0.38 | A   |
|                        | 2026 Do Something    |             |           |      |     |        |             |           |      |     |
| A - A1041              | D9                   | 1.4         | 6.06      | 0.58 | A   | D10    | 1.0         | 4.98      | 0.50 | A   |
| B - A645               |                      | 0.8         | 5.59      | 0.45 | A   |        | 1.7         | 8.20      | 0.62 | A   |
| C - A1041 Station Road |                      | 0.7         | 4.79      | 0.41 | A   |        | 0.6         | 4.85      | 0.39 | 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.

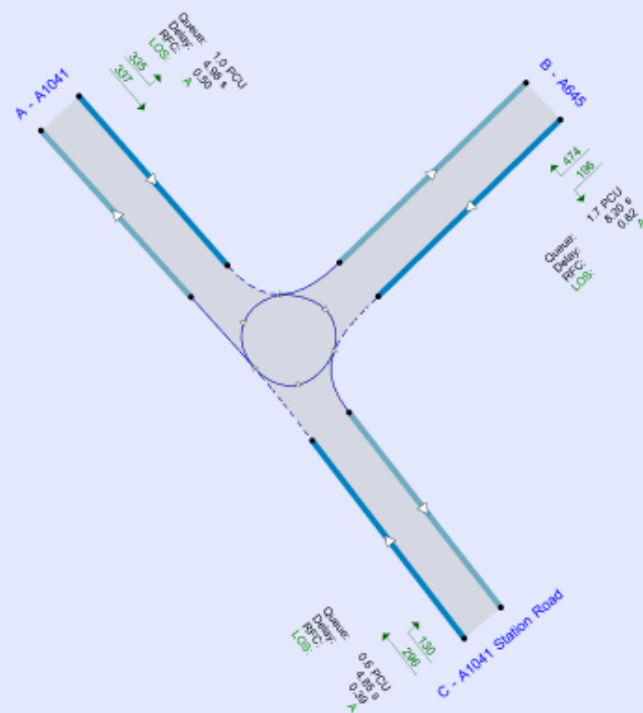
## File summary

### File Description

|             |                |
|-------------|----------------|
| Title       | Site 5         |
| Location    |                |
| Site number |                |
| Date        | 28/03/2018     |
| Version     |                |
| Status      |                |
| Identifier  |                |
| Client      |                |
| Jobnumber   |                |
| Enumerator  | CORP\INTW00749 |
| 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              |



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

## Analysis Options

| Vehicle length (m) | Calculate Queue Percentiles | Calculate detailed queueing delay | Show lane queues in feet / metres | Show all PICADY stream intercepts | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) | Use iterations with HCM roundabouts | Max number of iterations for roundabouts |
|--------------------|-----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------|---------------|-----------------------------|-----------------------|-------------------------------------|------------------------------------------|
| 5.75               |                             |                                   |                                   |                                   |                             | 0.85          | 38.00                       | 20.00                 |                                     | 500                                      |

## Demand Set Summary

| ID  | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1  | 2018 Baseline        | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D2  | 2018 Baseline        | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D3  | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D4  | 2022 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D5  | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D6  | 2026 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D7  | 2026 Do Minimum      | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D8  | 2026 Do Minimum      | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D9  | 2026 Do Something    | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D10 | 2026 Do Something    | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

## Analysis Set Details

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

# 2018 Baseline, AM

## Data Errors and Warnings

| Severity | Area     | Item                                         | Description                                                                                                      |
|----------|----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A1041 Station Road - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | A - A1041 - Roundabout Geometry              | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 5        | Site 5 | Standard Roundabout |                       | B, C, A   | 4.95               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 4.95              | A           |

## Arms

### Arms

| Arm | Name               | Description | No give-way line |
|-----|--------------------|-------------|------------------|
| A   | A1041              |             |                  |
| B   | A645               |             |                  |
| C   | A1041 Station Road |             |                  |

### Roundabout Geometry

| Arm                    | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Entry only | Exit only |
|------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|------------|-----------|
| A - A1041              | 3.20                             | 5.70                | 73.2                            | 18.0                 | 30.0                              | 43.0                               |            |           |
| B - A645               | 4.00                             | 5.00                | 4.2                             | 29.0                 | 30.0                              | 28.0                               |            |           |
| C - A1041 Station Road | 3.33                             | 5.40                | 70.9                            | 14.5                 | 30.0                              | 32.0                               |            |           |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm                    | Final slope | Final intercept (PCU/hr) |
|------------------------|-------------|--------------------------|
| A - A1041              | 0.615       | 1569                     |
| B - A645               | 0.606       | 1414                     |
| C - A1041 Station Road | 0.618       | 1542                     |

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2018 Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A1041              |            | ONE HOUR     | ✓            | 689                     | 100.000            |
| B - A645               |            | ONE HOUR     | ✓            | 444                     | 100.000            |
| C - A1041 Station Road |            | ONE HOUR     | ✓            | 454                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0         | 425      | 265                    |
| B - A645               |    | 316       | 0        | 128                    |
| C - A1041 Station Road |    | 311       | 141      | 1                      |

### Proportions

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0.00      | 0.62     | 0.38                   |
| B - A645               |    | 0.71      | 0.00     | 0.29                   |
| C - A1041 Station Road |    | 0.69      | 0.31     | 0.00                   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0         | 5        | 2                      |
| B - A645               |    | 5         | 0        | 5                      |
| C - A1041 Station Road |    | 0         | 4        | 0                      |

### Average PCU Per Veh

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 1.000     | 1.053    | 1.016                  |
| B - A645               |    | 1.055     | 1.000    | 1.050                  |
| C - A1041 Station Road |    | 1.003     | 1.037    | 1.000                  |

## Detailed Demand Data

### Demand for each time segment

| Arm                    | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|------------------------|--------------|-----------------|------------------------|
| A - A1041              | 07:15-07:30  | 519             | 519                    |
|                        | 07:30-07:45  | 620             | 620                    |
|                        | 07:45-08:00  | 759             | 759                    |
|                        | 08:00-08:15  | 759             | 759                    |
|                        | 08:15-08:30  | 620             | 620                    |
|                        | 08:30-08:45  | 519             | 519                    |
| B - A645               | 07:15-07:30  | 334             | 334                    |
|                        | 07:30-07:45  | 399             | 399                    |
|                        | 07:45-08:00  | 489             | 489                    |
|                        | 08:00-08:15  | 489             | 489                    |
|                        | 08:15-08:30  | 399             | 399                    |
|                        | 08:30-08:45  | 334             | 334                    |
| C - A1041 Station Road | 07:15-07:30  | 341             | 341                    |
|                        | 07:30-07:45  | 408             | 408                    |
|                        | 07:45-08:00  | 499             | 499                    |
|                        | 08:00-08:15  | 499             | 499                    |
|                        | 08:15-08:30  | 408             | 408                    |
|                        | 08:30-08:45  | 341             | 341                    |



## 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) |
|------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A1041              | 0.52    | 5.24          | 1.1             | A       | 633                     | 949                           |
| B - A645               | 0.40    | 5.07          | 0.7             | A       | 407                     | 611                           |
| C - A1041 Station Road | 0.38    | 4.41          | 0.6             | A       | 416                     | 624                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 519                   | 130                     | 107                       | 1503              | 0.345 | 517                 | 471                             | 0.0               | 0.5             | 3.781     | A                             |
| B - A645               | 334                   | 84                      | 199                       | 1293              | 0.258 | 333                 | 424                             | 0.0               | 0.4             | 3.943     | A                             |
| C - A1041 Station Road | 341                   | 85                      | 237                       | 1396              | 0.245 | 340                 | 295                             | 0.0               | 0.3             | 3.451     | A                             |

#### 07:30 - 07:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 620                   | 155                     | 128                       | 1490              | 0.416 | 619                 | 564                             | 0.5               | 0.7             | 4.286     | A                             |
| B - A645               | 399                   | 100                     | 239                       | 1289              | 0.314 | 399                 | 508                             | 0.4               | 0.5             | 4.354     | A                             |
| C - A1041 Station Road | 408                   | 102                     | 284                       | 1367              | 0.298 | 407                 | 353                             | 0.3               | 0.4             | 3.800     | A                             |

#### 07:45 - 08:00

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 759                   | 190                     | 156                       | 1473              | 0.515 | 758                 | 690                             | 0.7               | 1.1             | 5.216     | A                             |
| B - A645               | 489                   | 122                     | 292                       | 1237              | 0.395 | 488                 | 622                             | 0.5               | 0.7             | 5.058     | A                             |
| C - A1041 Station Road | 499                   | 125                     | 348                       | 1328              | 0.376 | 499                 | 432                             | 0.4               | 0.6             | 4.398     | A                             |

#### 08:00 - 08:15

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 759                   | 190                     | 157                       | 1473              | 0.515 | 759                 | 691                             | 1.1               | 1.1             | 5.238     | A                             |
| B - A645               | 489                   | 122                     | 293                       | 1236              | 0.395 | 489                 | 623                             | 0.7               | 0.7             | 5.070     | A                             |
| C - A1041 Station Road | 499                   | 125                     | 348                       | 1327              | 0.376 | 499                 | 433                             | 0.6               | 0.6             | 4.407     | A                             |

#### 08:15 - 08:30

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 620                   | 155                     | 128                       | 1490              | 0.416 | 621                 | 565                             | 1.1               | 0.7             | 4.308     | A                             |
| B - A645               | 399                   | 100                     | 239                       | 1289              | 0.315 | 400                 | 510                             | 0.7               | 0.5             | 4.367     | A                             |
| C - A1041 Station Road | 408                   | 102                     | 285                       | 1366              | 0.298 | 408                 | 354                             | 0.6               | 0.4             | 3.813     | A                             |

## 08:30 - 08:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 519                   | 130                     | 107                       | 1503              | 0.345 | 520                 | 473                             | 0.7               | 0.6             | 3.807     | A                             |
| B - A645               | 334                   | 84                      | 200                       | 1292              | 0.259 | 335                 | 427                             | 0.5               | 0.4             | 3.962     | A                             |
| C - A1041 Station Road | 341                   | 85                      | 238                       | 1395              | 0.245 | 342                 | 297                             | 0.4               | 0.3             | 3.467     | A                             |

# 2018 Baseline, PM

## Data Errors and Warnings

| Severity | Area     | Item                                         | Description                                                                                                      |
|----------|----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A1041 Station Road - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | A - A1041 - Roundabout Geometry              | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 5        | Site 5 | Standard Roundabout |                       | B, C, A   | 5.24               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.24              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2018 Baseline | PM               | ONE HOUR             | 18:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                    | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A1041              |            | ONE HOUR     | ✓            | 616                     | 100.000            |
| B - A645               |            | ONE HOUR     | ✓            | 581                     | 100.000            |
| C - A1041 Station Road |            | ONE HOUR     | ✓            | 398                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                        | To        |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0         | 299      | 317                    |
|      | B - A645               | 406       | 0        | 175                    |
|      | C - A1041 Station Road | 279       | 116      | 3                      |

### Proportions

|      |                        | To        |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0.00      | 0.48     | 0.52                   |
|      | B - A645               | 0.70      | 0.00     | 0.30                   |
|      | C - A1041 Station Road | 0.70      | 0.29     | 0.01                   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0         | 4        | 0                      |
| B - A645               |    | 3         | 0        | 1                      |
| C - A1041 Station Road |    | 0         | 2        | 0                      |

### Average PCU Per Veh

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 1.000     | 1.042    | 1.003                  |
| B - A645               |    | 1.031     | 1.000    | 1.012                  |
| C - A1041 Station Road |    | 1.004     | 1.018    | 1.000                  |

## Detailed Demand Data

### Demand for each time segment

| Arm                    | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|------------------------|--------------|-----------------|------------------------|
| A - A1041              | 16:30-16:45  | 464             | 464                    |
|                        | 16:45-17:00  | 554             | 554                    |
|                        | 17:00-17:15  | 678             | 678                    |
|                        | 17:15-17:30  | 678             | 678                    |
|                        | 17:30-17:45  | 554             | 554                    |
|                        | 17:45-18:00  | 464             | 464                    |
| B - A645               | 16:30-16:45  | 437             | 437                    |
|                        | 16:45-17:00  | 522             | 522                    |
|                        | 17:00-17:15  | 639             | 639                    |
|                        | 17:15-17:30  | 639             | 639                    |
|                        | 17:30-17:45  | 522             | 522                    |
|                        | 17:45-18:00  | 437             | 437                    |
| C - A1041 Station Road | 16:30-16:45  | 300             | 300                    |
|                        | 16:45-17:00  | 358             | 358                    |
|                        | 17:00-17:15  | 438             | 438                    |
|                        | 17:15-17:30  | 438             | 438                    |
|                        | 17:30-17:45  | 358             | 358                    |
|                        | 17:45-18:00  | 300             | 300                    |

## 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) |
|------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A1041              | 0.46    | 4.54          | 0.9             | A       | 565                     | 848                           |
| B - A645               | 0.53    | 6.58          | 1.2             | A       | 533                     | 799                           |
| C - A1041 Station Road | 0.35    | 4.38          | 0.5             | A       | 365                     | 548                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 464                   | 116                     | 89                        | 1514              | 0.308 | 462                 | 513                             | 0.0               | 0.4             | 3.489     | A                             |
| B - A645               | 437                   | 109                     | 240                       | 1268              | 0.345 | 435                 | 311                             | 0.0               | 0.5             | 4.417     | A                             |
| C - A1041 Station Road | 300                   | 75                      | 304                       | 1355              | 0.221 | 298                 | 371                             | 0.0               | 0.3             | 3.432     | A                             |

**16:45 - 17:00**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 554                   | 138                     | 107                       | 1503              | 0.388 | 553                 | 615                             | 0.4               | 0.6             | 3.888     | A                             |
| B - A645               | 522                   | 131                     | 288                       | 1239              | 0.421 | 521                 | 372                             | 0.5               | 0.7             | 5.133     | A                             |
| C - A1041 Station Road | 358                   | 89                      | 364                       | 1317              | 0.272 | 357                 | 445                             | 0.3               | 0.4             | 3.779     | A                             |

**17:00 - 17:15**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 678                   | 170                     | 131                       | 1488              | 0.456 | 677                 | 752                             | 0.6               | 0.8             | 4.527     | A                             |
| B - A645               | 639                   | 160                     | 352                       | 1200              | 0.533 | 638                 | 456                             | 0.7               | 1.2             | 6.538     | A                             |
| C - A1041 Station Road | 438                   | 110                     | 446                       | 1267              | 0.346 | 437                 | 544                             | 0.4               | 0.5             | 4.370     | A                             |

**17:15 - 17:30**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 678                   | 170                     | 131                       | 1488              | 0.456 | 678                 | 754                             | 0.8               | 0.9             | 4.538     | A                             |
| B - A645               | 639                   | 160                     | 353                       | 1200              | 0.533 | 639                 | 456                             | 1.2               | 1.2             | 6.581     | A                             |
| C - A1041 Station Road | 438                   | 110                     | 447                       | 1266              | 0.346 | 438                 | 545                             | 0.5               | 0.5             | 4.379     | A                             |

**17:30 - 17:45**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 554                   | 138                     | 107                       | 1503              | 0.388 | 555                 | 617                             | 0.9               | 0.6             | 3.881     | A                             |
| B - A645               | 522                   | 131                     | 288                       | 1239              | 0.421 | 524                 | 373                             | 1.2               | 0.8             | 5.170     | A                             |
| C - A1041 Station Road | 358                   | 89                      | 366                       | 1316              | 0.272 | 358                 | 446                             | 0.5               | 0.4             | 3.791     | A                             |

**17:45 - 18:00**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 464                   | 116                     | 90                        | 1514              | 0.306 | 464                 | 516                             | 0.6               | 0.5             | 3.505     | A                             |
| B - A645               | 437                   | 109                     | 241                       | 1267              | 0.345 | 438                 | 313                             | 0.8               | 0.5             | 4.454     | A                             |
| C - A1041 Station Road | 300                   | 75                      | 306                       | 1353              | 0.221 | 300                 | 373                             | 0.4               | 0.3             | 3.446     | A                             |

# 2022 Future Baseline , AM

## Data Errors and Warnings

| Severity | Area     | Item                                         | Description                                                                                                      |
|----------|----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A1041 Station Road - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | A - A1041 - Roundabout Geometry              | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 5        | Site 5 | Standard Roundabout |                       | B, C, A   | 5.14               | A            |

### Junction Network

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D3 | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A1041              |            | ONE HOUR     | ✓            | 714                     | 100.000            |
| B - A645               |            | ONE HOUR     | ✓            | 480                     | 100.000            |
| C - A1041 Station Road |            | ONE HOUR     | ✓            | 470                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                        | To        |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0         | 440      | 274                    |
|      | B - A645               | 327       | 0        | 132                    |
|      | C - A1041 Station Road | 322       | 146      | 1                      |

### Proportions

|      |                        | To        |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0.00      | 0.62     | 0.38                   |
|      | B - A645               | 0.71      | 0.00     | 0.29                   |
|      | C - A1041 Station Road | 0.69      | 0.31     | 0.00                   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0         | 5        | 2                      |
| B - A645               |    | 5         | 0        | 5                      |
| C - A1041 Station Road |    | 0         | 4        | 0                      |

### Average PCU Per Veh

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 1.000     | 1.053    | 1.018                  |
| B - A645               |    | 1.055     | 1.000    | 1.050                  |
| C - A1041 Station Road |    | 1.003     | 1.037    | 1.000                  |

## Detailed Demand Data

### Demand for each time segment

| Arm                    | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|------------------------|--------------|-----------------|------------------------|
| A - A1041              | 07:15-07:30  | 538             | 538                    |
|                        | 07:30-07:45  | 642             | 642                    |
|                        | 07:45-08:00  | 788             | 788                    |
|                        | 08:00-08:15  | 788             | 788                    |
|                        | 08:15-08:30  | 642             | 642                    |
|                        | 08:30-08:45  | 538             | 538                    |
| B - A645               | 07:15-07:30  | 346             | 346                    |
|                        | 07:30-07:45  | 413             | 413                    |
|                        | 07:45-08:00  | 506             | 506                    |
|                        | 08:00-08:15  | 506             | 506                    |
|                        | 08:15-08:30  | 413             | 413                    |
|                        | 08:30-08:45  | 346             | 346                    |
| C - A1041 Station Road | 07:15-07:30  | 354             | 354                    |
|                        | 07:30-07:45  | 422             | 422                    |
|                        | 07:45-08:00  | 517             | 517                    |
|                        | 08:00-08:15  | 517             | 517                    |
|                        | 08:15-08:30  | 422             | 422                    |
|                        | 08:30-08:45  | 354             | 354                    |

## 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) |
|------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A1041              | 0.54    | 5.47          | 1.2             | A       | 655                     | 983                           |
| B - A645               | 0.41    | 5.23          | 0.7             | A       | 422                     | 633                           |
| C - A1041 Station Road | 0.39    | 4.55          | 0.7             | A       | 431                     | 646                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 538                   | 134                     | 110                       | 1501              | 0.358 | 535                 | 487                             | 0.0               | 0.6             | 3.881     | A                             |
| B - A645               | 346                   | 87                      | 206                       | 1289              | 0.268 | 344                 | 440                             | 0.0               | 0.4             | 4.008     | A                             |
| C - A1041 Station Road | 354                   | 88                      | 245                       | 1391              | 0.254 | 352                 | 305                             | 0.0               | 0.3             | 3.508     | A                             |

**07:30 - 07:45**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 642                   | 160                     | 132                       | 1488              | 0.432 | 641                 | 584                             | 0.6               | 0.8             | 4.411     | A                             |
| B - A645               | 413                   | 103                     | 247                       | 1264              | 0.327 | 413                 | 526                             | 0.4               | 0.5             | 4.450     | A                             |
| C - A1041 Station Road | 422                   | 106                     | 294                       | 1361              | 0.310 | 422                 | 366                             | 0.3               | 0.5             | 3.884     | A                             |

**07:45 - 08:00**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 786                   | 197                     | 162                       | 1469              | 0.535 | 785                 | 714                             | 0.8               | 1.2             | 5.442     | A                             |
| B - A645               | 506                   | 127                     | 302                       | 1231              | 0.411 | 505                 | 644                             | 0.5               | 0.7             | 5.220     | A                             |
| C - A1041 Station Road | 517                   | 129                     | 360                       | 1320              | 0.392 | 516                 | 447                             | 0.5               | 0.6             | 4.536     | A                             |

**08:00 - 08:15**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 786                   | 197                     | 162                       | 1469              | 0.535 | 786                 | 715                             | 1.2               | 1.2             | 5.472     | A                             |
| B - A645               | 506                   | 127                     | 303                       | 1230              | 0.411 | 506                 | 646                             | 0.7               | 0.7             | 5.235     | A                             |
| C - A1041 Station Road | 517                   | 129                     | 361                       | 1320              | 0.392 | 517                 | 448                             | 0.6               | 0.7             | 4.546     | A                             |

**08:15 - 08:30**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 642                   | 160                     | 133                       | 1487              | 0.432 | 643                 | 585                             | 1.2               | 0.8             | 4.439     | A                             |
| B - A645               | 413                   | 103                     | 248                       | 1264              | 0.327 | 414                 | 528                             | 0.7               | 0.5             | 4.469     | A                             |
| C - A1041 Station Road | 422                   | 106                     | 295                       | 1360              | 0.310 | 423                 | 367                             | 0.7               | 0.5             | 3.897     | A                             |

**08:30 - 08:45**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 538                   | 134                     | 111                       | 1501              | 0.358 | 538                 | 490                             | 0.8               | 0.6             | 3.889     | A                             |
| B - A645               | 346                   | 87                      | 207                       | 1288              | 0.269 | 347                 | 442                             | 0.5               | 0.4             | 4.028     | A                             |
| C - A1041 Station Road | 354                   | 88                      | 247                       | 1390              | 0.254 | 354                 | 307                             | 0.5               | 0.3             | 3.525     | A                             |



# 2022 Future Baseline , PM

## Data Errors and Warnings

| Severity | Area     | Item                                         | Description                                                                                                      |
|----------|----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A1041 Station Road - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | A - A1041 - Roundabout Geometry              | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 5        | Site 5 | Standard Roundabout |                       | B, C, A   | 5.46               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.46              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D4 | 2022 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                    | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A1041              |            | ONE HOUR     | ✓            | 637                     | 100.000            |
| B - A645               |            | ONE HOUR     | ✓            | 600                     | 100.000            |
| C - A1041 Station Road |            | ONE HOUR     | ✓            | 411                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                        | To        |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0         | 309      | 328                    |
|      | B - A645               | 419       | 0        | 181                    |
|      | C - A1041 Station Road | 288       | 120      | 3                      |

### Proportions

|      |                        | To        |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0.00      | 0.49     | 0.51                   |
|      | B - A645               | 0.70      | 0.00     | 0.30                   |
|      | C - A1041 Station Road | 0.70      | 0.29     | 0.01                   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0         | 4        | 0                      |
| B - A645               |    | 3         | 0        | 1                      |
| C - A1041 Station Road |    | 0         | 2        | 0                      |

### Average PCU Per Veh

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 1.000     | 1.042    | 1.003                  |
| B - A645               |    | 1.031     | 1.000    | 1.012                  |
| C - A1041 Station Road |    | 1.004     | 1.018    | 1.000                  |

## Detailed Demand Data

### Demand for each time segment

| Arm                    | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|------------------------|--------------|-----------------|------------------------|
| A - A1041              | 16:30-16:45  | 480             | 480                    |
|                        | 16:45-17:00  | 573             | 573                    |
|                        | 17:00-17:15  | 701             | 701                    |
|                        | 17:15-17:30  | 701             | 701                    |
|                        | 17:30-17:45  | 573             | 573                    |
|                        | 17:45-18:00  | 480             | 480                    |
| B - A645               | 16:30-16:45  | 452             | 452                    |
|                        | 16:45-17:00  | 540             | 540                    |
|                        | 17:00-17:15  | 661             | 661                    |
|                        | 17:15-17:30  | 661             | 661                    |
|                        | 17:30-17:45  | 540             | 540                    |
|                        | 17:45-18:00  | 452             | 452                    |
| C - A1041 Station Road | 16:30-16:45  | 310             | 310                    |
|                        | 16:45-17:00  | 370             | 370                    |
|                        | 17:00-17:15  | 453             | 453                    |
|                        | 17:15-17:30  | 453             | 453                    |
|                        | 17:30-17:45  | 370             | 370                    |
|                        | 17:45-18:00  | 310             | 310                    |

## 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) |
|------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A1041              | 0.47    | 4.69          | 0.9             | A       | 585                     | 877                           |
| B - A645               | 0.55    | 6.93          | 1.3             | A       | 551                     | 826                           |
| C - A1041 Station Road | 0.36    | 4.51          | 0.6             | A       | 377                     | 566                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 480                   | 120                     | 92                        | 1512              | 0.317 | 478                 | 530                             | 0.0               | 0.5             | 3.549     | A                             |
| B - A645               | 452                   | 113                     | 248                       | 1263              | 0.358 | 450                 | 322                             | 0.0               | 0.6             | 4.521     | A                             |
| C - A1041 Station Road | 310                   | 77                      | 314                       | 1348              | 0.230 | 308                 | 384                             | 0.0               | 0.3             | 3.485     | A                             |

**16:45 - 17:00**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 573                   | 143                     | 110                       | 1501              | 0.382 | 572                 | 635                             | 0.5               | 0.6             | 3.956     | A                             |
| B - A645               | 540                   | 135                     | 297                       | 1234              | 0.437 | 539                 | 385                             | 0.6               | 0.8             | 5.303     | A                             |
| C - A1041 Station Road | 370                   | 92                      | 376                       | 1310              | 0.282 | 369                 | 460                             | 0.3               | 0.4             | 3.854     | A                             |

**17:00 - 17:15**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 701                   | 175                     | 135                       | 1488              | 0.472 | 700                 | 777                             | 0.6               | 0.9             | 4.675     | A                             |
| B - A645               | 661                   | 165                     | 364                       | 1193              | 0.554 | 659                 | 471                             | 0.8               | 1.3             | 6.883     | A                             |
| C - A1041 Station Road | 453                   | 113                     | 460                       | 1258              | 0.360 | 452                 | 563                             | 0.4               | 0.6             | 4.497     | A                             |

**17:15 - 17:30**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 701                   | 175                     | 135                       | 1488              | 0.472 | 701                 | 779                             | 0.9               | 0.9             | 4.688     | A                             |
| B - A645               | 661                   | 165                     | 365                       | 1193              | 0.554 | 661                 | 472                             | 1.3               | 1.3             | 6.934     | A                             |
| C - A1041 Station Road | 453                   | 113                     | 462                       | 1257              | 0.360 | 453                 | 564                             | 0.6               | 0.6             | 4.509     | A                             |

**17:30 - 17:45**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 573                   | 143                     | 111                       | 1501              | 0.382 | 574                 | 638                             | 0.9               | 0.6             | 3.972     | A                             |
| B - A645               | 540                   | 135                     | 298                       | 1233              | 0.438 | 541                 | 386                             | 1.3               | 0.8             | 5.350     | A                             |
| C - A1041 Station Road | 370                   | 92                      | 378                       | 1309              | 0.282 | 370                 | 461                             | 0.6               | 0.4             | 3.869     | A                             |

**17:45 - 18:00**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 480                   | 120                     | 93                        | 1512              | 0.317 | 480                 | 534                             | 0.6               | 0.5             | 3.565     | A                             |
| B - A645               | 452                   | 113                     | 250                       | 1263              | 0.358 | 453                 | 323                             | 0.8               | 0.6             | 4.561     | A                             |
| C - A1041 Station Road | 310                   | 77                      | 316                       | 1347              | 0.230 | 310                 | 386                             | 0.4               | 0.3             | 3.498     | A                             |

# 2026 Future Baseline, AM

## Data Errors and Warnings

| Severity | Area     | Item                                         | Description                                                                                                      |
|----------|----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A1041 Station Road - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | A - A1041 - Roundabout Geometry              | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 5        | Site 5 | Standard Roundabout |                       | B, C, A   | 5.31               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.31              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A1041              |            | ONE HOUR     | ✓            | 735                     | 100.000            |
| B - A645               |            | ONE HOUR     | ✓            | 473                     | 100.000            |
| C - A1041 Station Road |            | ONE HOUR     | ✓            | 484                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                     |           |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0         | 453      | 282                    |
|      | B - A645               | 337       | 0        | 136                    |
|      | C - A1041 Station Road | 332       | 151      | 1                      |

### Proportions

|      | To                     |           |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0.00      | 0.62     | 0.38                   |
|      | B - A645               | 0.71      | 0.00     | 0.29                   |
|      | C - A1041 Station Road | 0.69      | 0.31     | 0.00                   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0         | 5        | 2                      |
| B - A645               |    | 5         | 0        | 5                      |
| C - A1041 Station Road |    | 0         | 4        | 0                      |

### Average PCU Per Veh

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 1.000     | 1.053    | 1.018                  |
| B - A645               |    | 1.055     | 1.000    | 1.050                  |
| C - A1041 Station Road |    | 1.003     | 1.037    | 1.000                  |

## Detailed Demand Data

### Demand for each time segment

| Arm                    | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|------------------------|--------------|-----------------|------------------------|
| A - A1041              | 07:15-07:30  | 553             | 553                    |
|                        | 07:30-07:45  | 661             | 661                    |
|                        | 07:45-08:00  | 809             | 809                    |
|                        | 08:00-08:15  | 809             | 809                    |
|                        | 08:15-08:30  | 661             | 661                    |
|                        | 08:30-08:45  | 553             | 553                    |
| B - A645               | 07:15-07:30  | 356             | 356                    |
|                        | 07:30-07:45  | 425             | 425                    |
|                        | 07:45-08:00  | 521             | 521                    |
|                        | 08:00-08:15  | 521             | 521                    |
|                        | 08:15-08:30  | 425             | 425                    |
|                        | 08:30-08:45  | 356             | 356                    |
| C - A1041 Station Road | 07:15-07:30  | 364             | 364                    |
|                        | 07:30-07:45  | 435             | 435                    |
|                        | 07:45-08:00  | 532             | 532                    |
|                        | 08:00-08:15  | 532             | 532                    |
|                        | 08:15-08:30  | 435             | 435                    |
|                        | 08:30-08:45  | 364             | 364                    |

## 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) |
|------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A1041              | 0.55    | 5.69          | 1.3             | A       | 674                     | 1012                          |
| B - A645               | 0.43    | 5.39          | 0.8             | A       | 434                     | 651                           |
| C - A1041 Station Road | 0.41    | 4.67          | 0.7             | A       | 444                     | 666                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 553                   | 138                     | 114                       | 1499              | 0.369 | 551                 | 502                             | 0.0               | 0.6             | 3.934     | A                             |
| B - A645               | 356                   | 89                      | 212                       | 1285              | 0.277 | 355                 | 453                             | 0.0               | 0.4             | 4.068     | A                             |
| C - A1041 Station Road | 364                   | 91                      | 253                       | 1388              | 0.263 | 363                 | 314                             | 0.0               | 0.4             | 3.560     | A                             |

### 07:30 - 07:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 661                   | 165                     | 136                       | 1485              | 0.445 | 660                 | 601                             | 0.6               | 0.8             | 4.525     | A                             |
| B - A645               | 425                   | 106                     | 254                       | 1280              | 0.338 | 425                 | 542                             | 0.4               | 0.5             | 4.538     | A                             |
| C - A1041 Station Road | 435                   | 109                     | 303                       | 1355              | 0.321 | 434                 | 376                             | 0.4               | 0.5             | 3.960     | A                             |

### 07:45 - 08:00

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 809                   | 202                     | 167                       | 1466              | 0.552 | 808                 | 735                             | 0.8               | 1.3             | 5.659     | A                             |
| B - A645               | 521                   | 130                     | 311                       | 1225              | 0.425 | 520                 | 663                             | 0.5               | 0.8             | 5.370     | A                             |
| C - A1041 Station Road | 532                   | 133                     | 371                       | 1313              | 0.405 | 532                 | 460                             | 0.5               | 0.7             | 4.662     | A                             |

### 08:00 - 08:15

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 809                   | 202                     | 167                       | 1466              | 0.552 | 809                 | 737                             | 1.3               | 1.3             | 5.690     | A                             |
| B - A645               | 521                   | 130                     | 312                       | 1225              | 0.425 | 521                 | 665                             | 0.8               | 0.8             | 5.386     | A                             |
| C - A1041 Station Road | 532                   | 133                     | 371                       | 1313              | 0.406 | 532                 | 461                             | 0.7               | 0.7             | 4.674     | A                             |

### 08:15 - 08:30

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 661                   | 165                     | 137                       | 1485              | 0.445 | 662                 | 603                             | 1.3               | 0.8             | 4.554     | A                             |
| B - A645               | 425                   | 106                     | 255                       | 1259              | 0.338 | 426                 | 544                             | 0.8               | 0.5             | 4.559     | A                             |
| C - A1041 Station Road | 435                   | 109                     | 304                       | 1355              | 0.321 | 436                 | 378                             | 0.7               | 0.5             | 3.974     | A                             |

### 08:30 - 08:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 553                   | 138                     | 114                       | 1499              | 0.369 | 554                 | 504                             | 0.8               | 0.6             | 3.962     | A                             |
| B - A645               | 356                   | 89                      | 213                       | 1284              | 0.277 | 357                 | 455                             | 0.5               | 0.4             | 4.089     | A                             |
| C - A1041 Station Road | 364                   | 91                      | 254                       | 1385              | 0.283 | 365                 | 316                             | 0.5               | 0.4             | 3.578     | A                             |

# 2026 Future Baseline, PM

## Data Errors and Warnings

| Severity | Area     | Item                                         | Description                                                                                                      |
|----------|----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A1041 Station Road - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | A - A1041 - Roundabout Geometry              | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 5        | Site 5 | Standard Roundabout |                       | B, C, A   | 5.67               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.67              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2026 Future Baseline | PM               | ONE HOUR             | 18:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                    | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A1041              |            | ONE HOUR     | ✓            | 654                     | 100.000            |
| B - A645               |            | ONE HOUR     | ✓            | 617                     | 100.000            |
| C - A1041 Station Road |            | ONE HOUR     | ✓            | 423                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                     |           |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0         | 317      | 337                    |
|      | B - A645               | 431       | 0        | 188                    |
|      | C - A1041 Station Road | 296       | 123      | 3                      |

### Proportions

|      | To                     |           |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0.00      | 0.48     | 0.52                   |
|      | B - A645               | 0.70      | 0.00     | 0.30                   |
|      | C - A1041 Station Road | 0.70      | 0.29     | 0.01                   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0         | 4        | 0                      |
| B - A645               |    | 3         | 0        | 1                      |
| C - A1041 Station Road |    | 0         | 2        | 0                      |

### Average PCU Per Veh

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 1.000     | 1.042    | 1.003                  |
| B - A645               |    | 1.031     | 1.000    | 1.012                  |
| C - A1041 Station Road |    | 1.004     | 1.018    | 1.000                  |

## Detailed Demand Data

### Demand for each time segment

| Arm                    | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|------------------------|--------------|-----------------|------------------------|
| A - A1041              | 16:30-16:45  | 492             | 492                    |
|                        | 16:45-17:00  | 588             | 588                    |
|                        | 17:00-17:15  | 720             | 720                    |
|                        | 17:15-17:30  | 720             | 720                    |
|                        | 17:30-17:45  | 588             | 588                    |
|                        | 17:45-18:00  | 492             | 492                    |
| B - A645               | 16:30-16:45  | 465             | 465                    |
|                        | 16:45-17:00  | 555             | 555                    |
|                        | 17:00-17:15  | 680             | 680                    |
|                        | 17:15-17:30  | 680             | 680                    |
|                        | 17:30-17:45  | 555             | 555                    |
|                        | 17:45-18:00  | 465             | 465                    |
| C - A1041 Station Road | 16:30-16:45  | 318             | 318                    |
|                        | 16:45-17:00  | 380             | 380                    |
|                        | 17:00-17:15  | 466             | 466                    |
|                        | 17:15-17:30  | 466             | 466                    |
|                        | 17:30-17:45  | 380             | 380                    |
|                        | 17:45-18:00  | 318             | 318                    |

## 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) |
|------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A1041              | 0.49    | 4.82          | 1.0             | A       | 600                     | 900                           |
| B - A645               | 0.57    | 7.28          | 1.4             | A       | 567                     | 850                           |
| C - A1041 Station Road | 0.37    | 4.63          | 0.6             | A       | 388                     | 582                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 492                   | 123                     | 95                        | 1511              | 0.326 | 490                 | 545                             | 0.0               | 0.5             | 3.599     | A                             |
| B - A645               | 465                   | 116                     | 255                       | 1259              | 0.369 | 462                 | 330                             | 0.0               | 0.6             | 4.617     | A                             |
| C - A1041 Station Road | 318                   | 80                      | 323                       | 1343              | 0.237 | 317                 | 394                             | 0.0               | 0.3             | 3.532     | A                             |



### 16:45 - 17:00

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 588                   | 147                     | 114                       | 1499              | 0.392 | 587                 | 653                             | 0.5               | 0.7             | 4.031     | A                             |
| B - A645               | 555                   | 139                     | 305                       | 1229              | 0.452 | 554                 | 395                             | 0.6               | 0.8             | 5.461     | A                             |
| C - A1041 Station Road | 380                   | 95                      | 387                       | 1303              | 0.292 | 380                 | 472                             | 0.3               | 0.4             | 3.926     | A                             |

### 17:00 - 17:15

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 720                   | 180                     | 139                       | 1483              | 0.485 | 719                 | 799                             | 0.7               | 1.0             | 4.802     | A                             |
| B - A645               | 680                   | 170                     | 374                       | 1187              | 0.573 | 678                 | 484                             | 0.8               | 1.3             | 7.213     | A                             |
| C - A1041 Station Road | 466                   | 116                     | 473                       | 1250              | 0.373 | 465                 | 578                             | 0.4               | 0.6             | 4.618     | A                             |

### 17:15 - 17:30

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 720                   | 180                     | 139                       | 1483              | 0.485 | 720                 | 801                             | 1.0               | 1.0             | 4.818     | A                             |
| B - A645               | 680                   | 170                     | 375                       | 1187              | 0.573 | 680                 | 485                             | 1.3               | 1.4             | 7.275     | A                             |
| C - A1041 Station Road | 466                   | 116                     | 475                       | 1249              | 0.373 | 466                 | 579                             | 0.6               | 0.6             | 4.630     | A                             |

### 17:30 - 17:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 588                   | 147                     | 114                       | 1499              | 0.392 | 589                 | 656                             | 1.0               | 0.7             | 4.047     | A                             |
| B - A645               | 555                   | 139                     | 306                       | 1228              | 0.452 | 557                 | 397                             | 1.4               | 0.9             | 5.514     | A                             |
| C - A1041 Station Road | 380                   | 95                      | 389                       | 1302              | 0.292 | 381                 | 474                             | 0.6               | 0.4             | 3.941     | A                             |

### 17:45 - 18:00

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 492                   | 123                     | 95                        | 1510              | 0.326 | 493                 | 549                             | 0.7               | 0.5             | 3.619     | A                             |
| B - A645               | 465                   | 116                     | 256                       | 1258              | 0.369 | 466                 | 332                             | 0.9               | 0.6             | 4.660     | A                             |
| C - A1041 Station Road | 318                   | 80                      | 325                       | 1341              | 0.237 | 319                 | 397                             | 0.4               | 0.3             | 3.548     | A                             |

# 2026 Do Minimum, AM

## Data Errors and Warnings

| Severity | Area     | Item                                         | Description                                                                                                      |
|----------|----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A1041 Station Road - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | A - A1041 - Roundabout Geometry              | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 5        | Site 5 | Standard Roundabout |                       | B, C, A   | 5.51               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.51              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name   | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D7 | 2026 Do Minimum | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A1041              |            | ONE HOUR     | ✓            | 754                     | 100.000            |
| B - A645               |            | ONE HOUR     | ✓            | 497                     | 100.000            |
| C - A1041 Station Road |            | ONE HOUR     | ✓            | 490                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      |                        | To        |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0         | 472      | 282                    |
|      | B - A645               | 354       | 0        | 143                    |
|      | C - A1041 Station Road | 332       | 157      | 1                      |

### Proportions

|      |                        | To        |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0.00      | 0.63     | 0.37                   |
|      | B - A645               | 0.71      | 0.00     | 0.29                   |
|      | C - A1041 Station Road | 0.68      | 0.32     | 0.00                   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0         | 5        | 2                      |
| B - A645               |    | 5         | 0        | 5                      |
| C - A1041 Station Road |    | 0         | 4        | 0                      |

### Average PCU Per Veh

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 1.000     | 1.053    | 1.018                  |
| B - A645               |    | 1.055     | 1.000    | 1.050                  |
| C - A1041 Station Road |    | 1.003     | 1.037    | 1.000                  |

## Detailed Demand Data

### Demand for each time segment

| Arm                    | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|------------------------|--------------|-----------------|------------------------|
| A - A1041              | 07:15-07:30  | 568             | 568                    |
|                        | 07:30-07:45  | 678             | 678                    |
|                        | 07:45-08:00  | 830             | 830                    |
|                        | 08:00-08:15  | 830             | 830                    |
|                        | 08:15-08:30  | 678             | 678                    |
|                        | 08:30-08:45  | 568             | 568                    |
| B - A645               | 07:15-07:30  | 374             | 374                    |
|                        | 07:30-07:45  | 446             | 446                    |
|                        | 07:45-08:00  | 547             | 547                    |
|                        | 08:00-08:15  | 547             | 547                    |
|                        | 08:15-08:30  | 446             | 446                    |
|                        | 08:30-08:45  | 374             | 374                    |
| C - A1041 Station Road | 07:15-07:30  | 369             | 369                    |
|                        | 07:30-07:45  | 440             | 440                    |
|                        | 07:45-08:00  | 539             | 539                    |
|                        | 08:00-08:15  | 539             | 539                    |
|                        | 08:15-08:30  | 440             | 440                    |
|                        | 08:30-08:45  | 369             | 369                    |

## 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) |
|------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A1041              | 0.57    | 5.92          | 1.4             | A       | 692                     | 1038                          |
| B - A645               | 0.45    | 5.59          | 0.8             | A       | 456                     | 683                           |
| C - A1041 Station Road | 0.41    | 4.79          | 0.7             | A       | 450                     | 674                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 568                   | 142                     | 119                       | 1496              | 0.379 | 565                 | 514                             | 0.0               | 0.6             | 4.007     | A                             |
| B - A645               | 374                   | 93                      | 212                       | 1285              | 0.291 | 372                 | 472                             | 0.0               | 0.4             | 4.145     | A                             |
| C - A1041 Station Road | 369                   | 92                      | 265                       | 1379              | 0.268 | 367                 | 319                             | 0.0               | 0.4             | 3.605     | A                             |

**07:30 - 07:45**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 678                   | 169                     | 142                       | 1482              | 0.458 | 677                 | 616                             | 0.6               | 0.9             | 4.641     | A                             |
| B - A645               | 446                   | 112                     | 254                       | 1280              | 0.354 | 446                 | 565                             | 0.4               | 0.6             | 4.655     | A                             |
| C - A1041 Station Road | 440                   | 110                     | 318                       | 1346              | 0.327 | 440                 | 382                             | 0.4               | 0.5             | 4.026     | A                             |

**07:45 - 08:00**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 830                   | 208                     | 174                       | 1462              | 0.568 | 828                 | 754                             | 0.9               | 1.3             | 5.883     | A                             |
| B - A645               | 547                   | 137                     | 311                       | 1225              | 0.446 | 546                 | 691                             | 0.6               | 0.8             | 5.569     | A                             |
| C - A1041 Station Road | 539                   | 135                     | 389                       | 1302              | 0.414 | 539                 | 468                             | 0.5               | 0.7             | 4.776     | A                             |

**08:00 - 08:15**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 830                   | 208                     | 174                       | 1462              | 0.568 | 830                 | 755                             | 1.3               | 1.4             | 5.919     | A                             |
| B - A645               | 547                   | 137                     | 312                       | 1225              | 0.446 | 547                 | 693                             | 0.8               | 0.8             | 5.589     | A                             |
| C - A1041 Station Road | 539                   | 135                     | 390                       | 1302              | 0.414 | 539                 | 469                             | 0.7               | 0.7             | 4.787     | A                             |

**08:15 - 08:30**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 678                   | 169                     | 142                       | 1481              | 0.458 | 680                 | 618                             | 1.4               | 0.9             | 4.677     | A                             |
| B - A645               | 446                   | 112                     | 255                       | 1259              | 0.354 | 447                 | 567                             | 0.8               | 0.6             | 4.678     | A                             |
| C - A1041 Station Road | 440                   | 110                     | 319                       | 1345              | 0.327 | 441                 | 384                             | 0.7               | 0.5             | 4.040     | A                             |

**08:30 - 08:45**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 568                   | 142                     | 119                       | 1496              | 0.380 | 569                 | 517                             | 0.9               | 0.6             | 4.038     | A                             |
| B - A645               | 374                   | 93                      | 213                       | 1284              | 0.291 | 374                 | 474                             | 0.6               | 0.4             | 4.169     | A                             |
| C - A1041 Station Road | 389                   | 92                      | 267                       | 1378              | 0.288 | 389                 | 321                             | 0.5               | 0.4             | 3.620     | A                             |

# 2026 Do Minimum, PM

## Data Errors and Warnings

| Severity | Area     | Item                                         | Description                                                                                                      |
|----------|----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A1041 Station Road - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | A - A1041 - Roundabout Geometry              | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 5        | Site 5 | Standard Roundabout |                       | B, C, A   | 5.99               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.99              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name   | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D8 | 2026 Do Minimum | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                    | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A1041              |            | ONE HOUR     | ✓            | 672                     | 100.000            |
| B - A645               |            | ONE HOUR     | ✓            | 650                     | 100.000            |
| C - A1041 Station Road |            | ONE HOUR     | ✓            | 429                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                     |           |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0         | 335      | 337                    |
|      | B - A645               | 454       | 0        | 196                    |
|      | C - A1041 Station Road | 296       | 130      | 3                      |

### Proportions

|      | To                     |           |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0.00      | 0.50     | 0.50                   |
|      | B - A645               | 0.70      | 0.00     | 0.30                   |
|      | C - A1041 Station Road | 0.69      | 0.30     | 0.01                   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0         | 4        | 0                      |
| B - A645               |    | 3         | 0        | 1                      |
| C - A1041 Station Road |    | 0         | 2        | 0                      |

### Average PCU Per Veh

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 1.000     | 1.042    | 1.003                  |
| B - A645               |    | 1.031     | 1.000    | 1.012                  |
| C - A1041 Station Road |    | 1.004     | 1.018    | 1.000                  |

## Detailed Demand Data

### Demand for each time segment

| Arm                    | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|------------------------|--------------|-----------------|------------------------|
| A - A1041              | 16:30-16:45  | 508             | 508                    |
|                        | 16:45-17:00  | 604             | 604                    |
|                        | 17:00-17:15  | 740             | 740                    |
|                        | 17:15-17:30  | 740             | 740                    |
|                        | 17:30-17:45  | 604             | 604                    |
|                        | 17:45-18:00  | 508             | 508                    |
| B - A645               | 16:30-16:45  | 490             | 490                    |
|                        | 16:45-17:00  | 585             | 585                    |
|                        | 17:00-17:15  | 716             | 716                    |
|                        | 17:15-17:30  | 716             | 716                    |
|                        | 17:30-17:45  | 585             | 585                    |
|                        | 17:45-18:00  | 490             | 490                    |
| C - A1041 Station Road | 16:30-16:45  | 323             | 323                    |
|                        | 16:45-17:00  | 386             | 386                    |
|                        | 17:00-17:15  | 473             | 473                    |
|                        | 17:15-17:30  | 473             | 473                    |
|                        | 17:30-17:45  | 386             | 386                    |
|                        | 17:45-18:00  | 323             | 323                    |

## 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) |
|------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A1041              | 0.50    | 4.98          | 1.0             | A       | 617                     | 925                           |
| B - A645               | 0.60    | 7.83          | 1.5             | A       | 597                     | 895                           |
| C - A1041 Station Road | 0.38    | 4.77          | 0.6             | A       | 394                     | 591                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 508                   | 128                     | 100                       | 1508              | 0.336 | 504                 | 563                             | 0.0               | 0.5             | 3.658     | A                             |
| B - A645               | 490                   | 122                     | 255                       | 1259              | 0.389 | 487                 | 348                             | 0.0               | 0.6             | 4.763     | A                             |
| C - A1041 Station Road | 323                   | 81                      | 340                       | 1332              | 0.243 | 322                 | 402                             | 0.0               | 0.3             | 3.586     | A                             |

**16:45 - 17:00**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 604                   | 151                     | 119                       | 1495              | 0.404 | 603                 | 674                             | 0.5               | 0.7             | 4.121     | A                             |
| B - A645               | 585                   | 146                     | 305                       | 1229              | 0.476 | 583                 | 417                             | 0.6               | 0.9             | 5.710     | A                             |
| C - A1041 Station Road | 386                   | 97                      | 408                       | 1290              | 0.299 | 386                 | 481                             | 0.3               | 0.4             | 4.007     | A                             |

**17:00 - 17:15**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 740                   | 185                     | 146                       | 1479              | 0.500 | 739                 | 824                             | 0.7               | 1.0             | 4.960     | A                             |
| B - A645               | 716                   | 179                     | 374                       | 1187              | 0.603 | 714                 | 511                             | 0.9               | 1.5             | 7.750     | A                             |
| C - A1041 Station Road | 473                   | 118                     | 499                       | 1234              | 0.383 | 472                 | 589                             | 0.4               | 0.6             | 4.754     | A                             |

**17:15 - 17:30**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 740                   | 185                     | 146                       | 1479              | 0.500 | 740                 | 827                             | 1.0               | 1.0             | 4.978     | A                             |
| B - A645               | 716                   | 179                     | 375                       | 1187              | 0.603 | 716                 | 512                             | 1.5               | 1.5             | 7.833     | A                             |
| C - A1041 Station Road | 473                   | 118                     | 500                       | 1233              | 0.383 | 473                 | 590                             | 0.6               | 0.6             | 4.769     | A                             |

**17:30 - 17:45**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 604                   | 151                     | 120                       | 1495              | 0.404 | 605                 | 677                             | 1.0               | 0.7             | 4.142     | A                             |
| B - A645               | 585                   | 146                     | 306                       | 1228              | 0.476 | 587                 | 419                             | 1.5               | 0.9             | 5.776     | A                             |
| C - A1041 Station Road | 386                   | 97                      | 410                       | 1289              | 0.300 | 387                 | 483                             | 0.6               | 0.4             | 4.025     | A                             |

**17:45 - 18:00**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 506                   | 126                     | 100                       | 1507              | 0.336 | 507                 | 566                             | 0.7               | 0.5             | 3.681     | A                             |
| B - A645               | 490                   | 122                     | 256                       | 1258              | 0.389 | 491                 | 350                             | 0.9               | 0.7             | 4.815     | A                             |
| C - A1041 Station Road | 323                   | 81                      | 343                       | 1331              | 0.243 | 324                 | 404                             | 0.4               | 0.3             | 3.604     | A                             |

# 2026 Do Something, AM

## Data Errors and Warnings

| Severity | Area     | Item                                         | Description                                                                                                      |
|----------|----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A1041 Station Road - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | A - A1041 - Roundabout Geometry              | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 5        | Site 5 | Standard Roundabout |                       | B, C, A   | 5.57               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.57              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name     | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D9 | 2026 Do Something | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A1041              |            | ONE HOUR     | ✓            | 787                     | 100.000            |
| B - A645               |            | ONE HOUR     | ✓            | 497                     | 100.000            |
| C - A1041 Station Road |            | ONE HOUR     | ✓            | 490                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                     |           |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0         | 485      | 282                    |
|      | B - A645               | 354       | 0        | 143                    |
|      | C - A1041 Station Road | 332       | 157      | 1                      |

### Proportions

|      | To                     |           |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0.00      | 0.63     | 0.37                   |
|      | B - A645               | 0.71      | 0.00     | 0.29                   |
|      | C - A1041 Station Road | 0.68      | 0.32     | 0.00                   |

## Vehicle Mix



### Heavy Vehicle Percentages

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0         | 5        | 2                      |
| B - A645               |    | 5         | 0        | 5                      |
| C - A1041 Station Road |    | 0         | 4        | 0                      |

### Average PCU Per Veh

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 1.000     | 1.053    | 1.018                  |
| B - A645               |    | 1.055     | 1.000    | 1.050                  |
| C - A1041 Station Road |    | 1.003     | 1.037    | 1.000                  |

## Detailed Demand Data

### Demand for each time segment

| Arm                    | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|------------------------|--------------|-----------------|------------------------|
| A - A1041              | 07:15-07:30  | 577             | 577                    |
|                        | 07:30-07:45  | 690             | 690                    |
|                        | 07:45-08:00  | 844             | 844                    |
|                        | 08:00-08:15  | 844             | 844                    |
|                        | 08:15-08:30  | 690             | 690                    |
|                        | 08:30-08:45  | 577             | 577                    |
| B - A645               | 07:15-07:30  | 374             | 374                    |
|                        | 07:30-07:45  | 446             | 446                    |
|                        | 07:45-08:00  | 547             | 547                    |
|                        | 08:00-08:15  | 547             | 547                    |
|                        | 08:15-08:30  | 446             | 446                    |
|                        | 08:30-08:45  | 374             | 374                    |
| C - A1041 Station Road | 07:15-07:30  | 369             | 369                    |
|                        | 07:30-07:45  | 440             | 440                    |
|                        | 07:45-08:00  | 539             | 539                    |
|                        | 08:00-08:15  | 539             | 539                    |
|                        | 08:15-08:30  | 440             | 440                    |
|                        | 08:30-08:45  | 369             | 369                    |

## 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) |
|------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A1041              | 0.58    | 6.06          | 1.4             | A       | 704                     | 1056                          |
| B - A645               | 0.45    | 5.59          | 0.8             | A       | 456                     | 683                           |
| C - A1041 Station Road | 0.41    | 4.79          | 0.7             | A       | 450                     | 674                           |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 577                   | 144                     | 119                       | 1496              | 0.388 | 575                 | 514                             | 0.0               | 0.6             | 4.049     | A                             |
| B - A645               | 374                   | 93                      | 212                       | 1285              | 0.291 | 372                 | 481                             | 0.0               | 0.4             | 4.145     | A                             |
| C - A1041 Station Road | 369                   | 92                      | 265                       | 1379              | 0.268 | 367                 | 319                             | 0.0               | 0.4             | 3.605     | A                             |

### 07:30 - 07:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 690                   | 172                     | 142                       | 1482              | 0.465 | 689                 | 616                             | 0.6               | 0.9             | 4.710     | A                             |
| B - A645               | 446                   | 112                     | 254                       | 1280              | 0.354 | 446                 | 576                             | 0.4               | 0.6             | 4.655     | A                             |
| C - A1041 Station Road | 440                   | 110                     | 318                       | 1346              | 0.327 | 440                 | 382                             | 0.4               | 0.5             | 4.026     | A                             |

### 07:45 - 08:00

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 844                   | 211                     | 174                       | 1462              | 0.578 | 842                 | 754                             | 0.9               | 1.4             | 6.018     | A                             |
| B - A645               | 547                   | 137                     | 311                       | 1225              | 0.446 | 546                 | 705                             | 0.6               | 0.8             | 5.568     | A                             |
| C - A1041 Station Road | 539                   | 135                     | 389                       | 1302              | 0.414 | 539                 | 468                             | 0.5               | 0.7             | 4.776     | A                             |

### 08:00 - 08:15

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 844                   | 211                     | 174                       | 1462              | 0.578 | 844                 | 755                             | 1.4               | 1.4             | 6.058     | A                             |
| B - A645               | 547                   | 137                     | 312                       | 1225              | 0.446 | 547                 | 707                             | 0.8               | 0.8             | 5.589     | A                             |
| C - A1041 Station Road | 539                   | 135                     | 390                       | 1302              | 0.414 | 539                 | 469                             | 0.7               | 0.7             | 4.787     | A                             |

### 08:15 - 08:30

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 690                   | 172                     | 142                       | 1481              | 0.465 | 692                 | 618                             | 1.4               | 0.9             | 4.749     | A                             |
| B - A645               | 446                   | 112                     | 255                       | 1259              | 0.355 | 447                 | 579                             | 0.8               | 0.6             | 4.676     | A                             |
| C - A1041 Station Road | 440                   | 110                     | 319                       | 1345              | 0.327 | 441                 | 384                             | 0.7               | 0.5             | 4.040     | A                             |

### 08:30 - 08:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 577                   | 144                     | 119                       | 1496              | 0.388 | 578                 | 517                             | 0.9               | 0.7             | 4.082     | A                             |
| B - A645               | 374                   | 93                      | 213                       | 1284              | 0.291 | 374                 | 484                             | 0.6               | 0.4             | 4.170     | A                             |
| C - A1041 Station Road | 389                   | 92                      | 267                       | 1378              | 0.288 | 389                 | 321                             | 0.5               | 0.4             | 3.623     | A                             |

# 2026 Do Something, PM

## Data Errors and Warnings

| Severity | Area     | Item                                         | Description                                                                                                      |
|----------|----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | C - A1041 Station Road - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | A - A1041 - Roundabout Geometry              | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|-----------|--------------------|--------------|
| 5        | Site 5 | Standard Roundabout |                       | B, C, A   | 6.17               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 6.17              | A           |

## Traffic Demand

### Demand Set Details

| ID  | Scenario name     | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|-------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D10 | 2026 Do Something | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                    | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A1041              |            | ONE HOUR     | ✓            | 672                     | 100.000            |
| B - A645               |            | ONE HOUR     | ✓            | 670                     | 100.000            |
| C - A1041 Station Road |            | ONE HOUR     | ✓            | 429                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                     |           |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0         | 335      | 337                    |
|      | B - A645               | 474       | 0        | 196                    |
|      | C - A1041 Station Road | 296       | 130      | 3                      |

### Proportions

|      | To                     |           |          |                        |
|------|------------------------|-----------|----------|------------------------|
|      |                        | A - A1041 | B - A645 | C - A1041 Station Road |
| From | A - A1041              | 0.00      | 0.50     | 0.50                   |
|      | B - A645               | 0.71      | 0.00     | 0.29                   |
|      | C - A1041 Station Road | 0.69      | 0.30     | 0.01                   |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 0         | 4        | 0                      |
| B - A645               |    | 3         | 0        | 1                      |
| C - A1041 Station Road |    | 0         | 2        | 0                      |

### Average PCU Per Veh

| From                   | To |           |          |                        |
|------------------------|----|-----------|----------|------------------------|
|                        |    | A - A1041 | B - A645 | C - A1041 Station Road |
| A - A1041              |    | 1.000     | 1.042    | 1.003                  |
| B - A645               |    | 1.031     | 1.000    | 1.012                  |
| C - A1041 Station Road |    | 1.004     | 1.018    | 1.000                  |

## Detailed Demand Data

### Demand for each time segment

| Arm                    | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|------------------------|--------------|-----------------|------------------------|
| A - A1041              | 16:30-16:45  | 508             | 508                    |
|                        | 16:45-17:00  | 604             | 604                    |
|                        | 17:00-17:15  | 740             | 740                    |
|                        | 17:15-17:30  | 740             | 740                    |
|                        | 17:30-17:45  | 604             | 604                    |
|                        | 17:45-18:00  | 508             | 508                    |
| B - A645               | 16:30-16:45  | 504             | 504                    |
|                        | 16:45-17:00  | 602             | 602                    |
|                        | 17:00-17:15  | 737             | 737                    |
|                        | 17:15-17:30  | 737             | 737                    |
|                        | 17:30-17:45  | 602             | 602                    |
|                        | 17:45-18:00  | 504             | 504                    |
| C - A1041 Station Road | 16:30-16:45  | 323             | 323                    |
|                        | 16:45-17:00  | 386             | 386                    |
|                        | 17:00-17:15  | 473             | 473                    |
|                        | 17:15-17:30  | 473             | 473                    |
|                        | 17:30-17:45  | 386             | 386                    |
|                        | 17:45-18:00  | 323             | 323                    |

## 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) |
|------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A1041              | 0.50    | 4.98          | 1.0             | A       | 617                     | 925                           |
| B - A645               | 0.62    | 8.20          | 1.7             | A       | 614                     | 922                           |
| C - A1041 Station Road | 0.39    | 4.85          | 0.6             | A       | 394                     | 591                           |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 508                   | 128                     | 100                       | 1508              | 0.336 | 504                 | 577                             | 0.0               | 0.5             | 3.658     | A                             |
| B - A645               | 504                   | 128                     | 255                       | 1259              | 0.400 | 501                 | 348                             | 0.0               | 0.7             | 4.852     | A                             |
| C - A1041 Station Road | 323                   | 81                      | 355                       | 1323              | 0.244 | 322                 | 402                             | 0.0               | 0.3             | 3.618     | A                             |

**16:45 - 17:00**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 604                   | 151                     | 119                       | 1495              | 0.404 | 603                 | 691                             | 0.5               | 0.7             | 4.121     | A                             |
| B - A645               | 602                   | 150                     | 305                       | 1229              | 0.490 | 601                 | 417                             | 0.7               | 1.0             | 5.886     | A                             |
| C - A1041 Station Road | 386                   | 97                      | 425                       | 1280              | 0.302 | 386                 | 481                             | 0.3               | 0.4             | 4.055     | A                             |

**17:00 - 17:15**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 740                   | 185                     | 146                       | 1479              | 0.500 | 739                 | 845                             | 0.7               | 1.0             | 4.960     | A                             |
| B - A645               | 737                   | 184                     | 374                       | 1187              | 0.621 | 735                 | 511                             | 1.0               | 1.6             | 8.104     | A                             |
| C - A1041 Station Road | 473                   | 118                     | 520                       | 1221              | 0.387 | 472                 | 589                             | 0.4               | 0.6             | 4.836     | A                             |

**17:15 - 17:30**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 740                   | 185                     | 146                       | 1479              | 0.500 | 740                 | 848                             | 1.0               | 1.0             | 4.978     | A                             |
| B - A645               | 737                   | 184                     | 375                       | 1187              | 0.621 | 737                 | 512                             | 1.6               | 1.7             | 8.202     | A                             |
| C - A1041 Station Road | 473                   | 118                     | 521                       | 1220              | 0.387 | 473                 | 590                             | 0.6               | 0.6             | 4.853     | A                             |

**17:30 - 17:45**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 604                   | 151                     | 120                       | 1495              | 0.404 | 605                 | 695                             | 1.0               | 0.7             | 4.140     | A                             |
| B - A645               | 602                   | 150                     | 306                       | 1228              | 0.490 | 605                 | 419                             | 1.7               | 1.0             | 5.945     | A                             |
| C - A1041 Station Road | 386                   | 97                      | 428                       | 1278              | 0.302 | 387                 | 483                             | 0.6               | 0.4             | 4.073     | A                             |

**17:45 - 18:00**

| Arm                    | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A1041              | 506                   | 126                     | 100                       | 1507              | 0.336 | 507                 | 581                             | 0.7               | 0.5             | 3.678     | A                             |
| B - A645               | 504                   | 126                     | 256                       | 1258              | 0.401 | 505                 | 350                             | 1.0               | 0.7             | 4.909     | A                             |
| C - A1041 Station Road | 323                   | 81                      | 357                       | 1322              | 0.245 | 324                 | 404                             | 0.4               | 0.3             | 3.639     | A                             |

| <b>Junctions 10</b>                                                                                                                                              |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>ARCADY 10 - Roundabout Module</b>                                                                                                                             |  |
| Version: 10.0.4.1693                                                                                                                                             |  |
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**Filename:** J6.j10

**Path:** \\uk.wspgroup.com\Central Data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\8 - Traffic Flow Analysis and Models\05 - Models and Outputs\Models

**Report generation date:** 18/03/2022 10:42:39

- 
- »2018 Baseline, AM
  - »2018 Baseline, PM
  - »2022 Future Baseline , AM
  - »2022 Future Baseline , PM
  - »2026 Future Baseline, AM
  - »2026 Future Baseline, PM
  - »2026 Do Nothing, AM
  - »2026 Do Nothing, PM
  - »2026 Do Something, AM
  - »2026 Do Something, PM

## Summary of junction performance

|                               | AM                   |             |           |      |     | PM     |             |           |      |     |
|-------------------------------|----------------------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|
|                               | Set ID               | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS |
|                               | 2018 Baseline        |             |           |      |     |        |             |           |      |     |
| A - A63 (West)                | D1                   | 0.7         | 3.29      | 0.41 | A   | D2     | 0.6         | 3.02      | 0.38 | A   |
| B - A1041 Bawdry Road (North) |                      | 0.8         | 4.00      | 0.44 | A   |        | 1.9         | 6.24      | 0.65 | A   |
| C - A63 (East)                |                      | 0.6         | 3.38      | 0.34 | A   |        | 0.7         | 4.02      | 0.41 | A   |
| D - A1041 Bawdry Road (South) |                      | 1.2         | 4.41      | 0.53 | A   |        | 1.1         | 4.64      | 0.52 | A   |
|                               | 2022 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A63 (West)                | D3                   | 0.8         | 3.43      | 0.43 | A   | D4     | 0.7         | 3.13      | 0.40 | A   |
| B - A1041 Bawdry Road (North) |                      | 0.9         | 4.18      | 0.46 | A   |        | 2.1         | 6.80      | 0.68 | A   |
| C - A63 (East)                |                      | 0.6         | 3.49      | 0.36 | A   |        | 0.8         | 4.22      | 0.43 | A   |
| D - A1041 Bawdry Road (South) |                      | 1.3         | 4.66      | 0.55 | A   |        | 1.2         | 4.91      | 0.55 | A   |
|                               | 2026 Future Baseline |             |           |      |     |        |             |           |      |     |
| A - A63 (West)                | D5                   | 0.9         | 3.57      | 0.45 | A   | D6     | 0.7         | 3.23      | 0.41 | A   |
| B - A1041 Bawdry Road (North) |                      | 0.9         | 4.34      | 0.48 | A   |        | 2.4         | 7.39      | 0.70 | A   |
| C - A63 (East)                |                      | 0.6         | 3.60      | 0.37 | A   |        | 0.8         | 4.40      | 0.45 | A   |
| D - A1041 Bawdry Road (South) |                      | 1.4         | 4.90      | 0.57 | A   |        | 1.3         | 5.17      | 0.57 | A   |
|                               | 2026 Do Nothing      |             |           |      |     |        |             |           |      |     |
| A - A63 (West)                | D7                   | 0.9         | 3.66      | 0.46 | A   | D8     | 0.8         | 3.37      | 0.43 | A   |
| B - A1041 Bawdry Road (North) |                      | 1.0         | 4.44      | 0.48 | A   |        | 2.5         | 7.87      | 0.72 | A   |
| C - A63 (East)                |                      | 0.7         | 3.77      | 0.40 | A   |        | 0.9         | 4.53      | 0.46 | A   |
| D - A1041 Bawdry Road (South) |                      | 1.5         | 5.16      | 0.59 | A   |        | 1.4         | 5.41      | 0.58 | A   |
|                               | 2026 Do Something    |             |           |      |     |        |             |           |      |     |
| A - A63 (West)                | D9                   | 0.9         | 3.67      | 0.46 | A   | D10    | 0.8         | 3.41      | 0.43 | A   |
| B - A1041 Bawdry Road (North) |                      | 1.0         | 4.50      | 0.49 | A   |        | 2.6         | 7.92      | 0.72 | A   |
| C - A63 (East)                |                      | 0.7         | 3.81      | 0.40 | A   |        | 0.9         | 4.53      | 0.46 | A   |
| D - A1041 Bawdry Road (South) |                      | 1.5         | 5.16      | 0.59 | A   |        | 1.5         | 5.59      | 0.60 | 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.

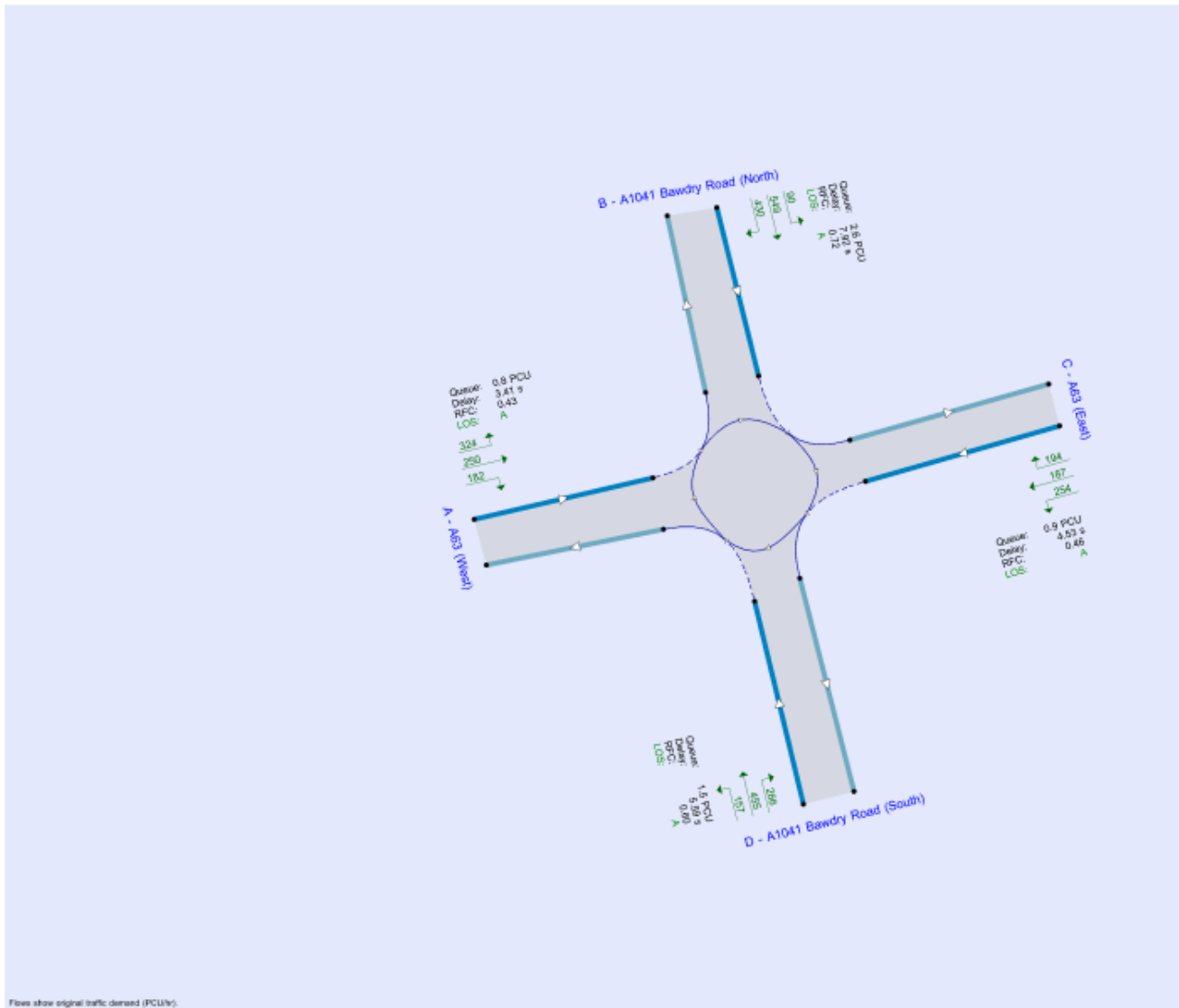
## File summary

### File Description

|             |                |
|-------------|----------------|
| Title       | Site 6         |
| Location    |                |
| Site number |                |
| Date        | 28/03/2018     |
| Version     |                |
| Status      |                |
| Identifier  |                |
| Client      |                |
| Jobnumber   |                |
| Enumerator  | CORP\INTW00749 |
| 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              |



The junction diagram reflects the last run of Junctions.

## Analysis Options

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

## Demand Set Summary

| ID  | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1  | 2018 Baseline        | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D2  | 2018 Baseline        | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D3  | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D4  | 2022 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D5  | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D6  | 2026 Future Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D7  | 2026 Do Nothing      | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D8  | 2026 Do Nothing      | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |
| D9  | 2026 Do Something    | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D10 | 2026 Do Something    | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |



## Analysis Set Details

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

---

# 2018 Baseline, AM

## Data Errors and Warnings

| Severity | Area     | Item                                                | Description                                                                                                      |
|----------|----------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | A - A63 (West) - Roundabout Geometry                | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | B - A1041 Bawdry Road (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|------------|--------------------|--------------|
| 6        | Site 6 | Standard Roundabout |                       | C, D, A, B | 3.82               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 3.82              | A           |

## Arms

### Arms

| Arm | Name                      | Description | No give-way line |
|-----|---------------------------|-------------|------------------|
| A   | A63 (West)                |             |                  |
| B   | A1041 Bawdry Road (North) |             |                  |
| C   | A63 (East)                |             |                  |
| D   | A1041 Bawdry Road (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) | Entry only | Exit only |
|-------------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|------------|-----------|
| A - A63 (West)                | 4.40                             | 10.20               | 46.9                            | 29.7                 | 79.7                              | 43.0                               |            |           |
| B - A1041 Bawdry Road (North) | 3.40                             | 9.00                | 34.8                            | 18.5                 | 79.7                              | 45.0                               |            |           |
| C - A63 (East)                | 4.00                             | 10.50               | 27.3                            | 29.5                 | 79.7                              | 49.0                               |            |           |
| D - A1041 Bawdry Road (South) | 4.50                             | 9.20                | 17.8                            | 30.2                 | 79.7                              | 40.0                               |            |           |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm                           | Final slope | Final intercept (PCU/hr) |
|-------------------------------|-------------|--------------------------|
| A - A63 (West)                | 0.587       | 2517                     |
| B - A1041 Bawdry Road (North) | 0.509       | 2030                     |
| C - A63 (East)                | 0.537       | 2213                     |
| D - A1041 Bawdry Road (South) | 0.527       | 2097                     |

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2018 Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A63 (West)                |            | ONE HOUR     | ✓            | 737                     | 100.000            |
| B - A1041 Bawdry Road (North) |            | ONE HOUR     | ✓            | 655                     | 100.000            |
| C - A63 (East)                |            | ONE HOUR     | ✓            | 547                     | 100.000            |
| D - A1041 Bawdry Road (South) |            | ONE HOUR     | ✓            | 858                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0              | 303                           | 208            | 227                           |
|      | B - A1041 Bawdry Road (North) | 231            | 0                             | 100            | 325                           |
|      | C - A63 (East)                | 222            | 90                            | 0              | 234                           |
|      | D - A1041 Bawdry Road (South) | 98             | 504                           | 254            | 2                             |

### Proportions

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0.00           | 0.41                          | 0.28           | 0.31                          |
|      | B - A1041 Bawdry Road (North) | 0.35           | 0.00                          | 0.15           | 0.50                          |
|      | C - A63 (East)                | 0.41           | 0.17                          | 0.00           | 0.42                          |
|      | D - A1041 Bawdry Road (South) | 0.11           | 0.59                          | 0.30           | 0.01                          |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0              | 2                             | 14             | 4                             |
|      | B - A1041 Bawdry Road (North) | 3              | 0                             | 1              | 3                             |
|      | C - A63 (East)                | 12             | 1                             | 0              | 7                             |
|      | D - A1041 Bawdry Road (South) | 4              | 1                             | 5              | 100                           |

### Average PCU Per Veh

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 1.000          | 1.021                         | 1.135          | 1.0                           |
|      | B - A1041 Bawdry Road (North) | 1.027          | 1.000                         | 1.011          | 1.0                           |
|      | C - A63 (East)                | 1.121          | 1.011                         | 1.000          | 1.0                           |
|      | D - A1041 Bawdry Road (South) | 1.043          | 1.006                         | 1.055          | 2.0                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                           | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------------------------|--------------|-----------------|------------------------|
| A - A63 (West)                | 07:15-07:30  | 555             | 555                    |
|                               | 07:30-07:45  | 663             | 663                    |
|                               | 07:45-08:00  | 812             | 812                    |
|                               | 08:00-08:15  | 812             | 812                    |
|                               | 08:15-08:30  | 663             | 663                    |
|                               | 08:30-08:45  | 555             | 555                    |
| B - A1041 Bawdry Road (North) | 07:15-07:30  | 493             | 493                    |
|                               | 07:30-07:45  | 589             | 589                    |
|                               | 07:45-08:00  | 721             | 721                    |
|                               | 08:00-08:15  | 721             | 721                    |
|                               | 08:15-08:30  | 589             | 589                    |
|                               | 08:30-08:45  | 493             | 493                    |
| C - A63 (East)                | 07:15-07:30  | 412             | 412                    |
|                               | 07:30-07:45  | 492             | 492                    |
|                               | 07:45-08:00  | 602             | 602                    |
|                               | 08:00-08:15  | 602             | 602                    |
|                               | 08:15-08:30  | 492             | 492                    |
|                               | 08:30-08:45  | 412             | 412                    |
| D - A1041 Bawdry Road (South) | 07:15-07:30  | 646             | 646                    |
|                               | 07:30-07:45  | 771             | 771                    |
|                               | 07:45-08:00  | 945             | 945                    |
|                               | 08:00-08:15  | 945             | 945                    |
|                               | 08:15-08:30  | 771             | 771                    |
|                               | 08:30-08:45  | 646             | 646                    |

## 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) |
|-------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A63 (West)                | 0.41    | 3.29          | 0.7             | A       | 676                     | 1015                          |
| B - A1041 Bawdry Road (North) | 0.44    | 4.00          | 0.8             | A       | 601                     | 901                           |
| C - A63 (East)                | 0.34    | 3.38          | 0.6             | A       | 502                     | 753                           |
| D - A1041 Bawdry Road (South) | 0.53    | 4.41          | 1.2             | A       | 787                     | 1181                          |

### Main Results for each time segment

#### 07:15 - 07:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 555                   | 139                     | 638                       | 2142              | 0.259 | 553                 | 414                             | 0.0               | 0.4             | 2.390     | A                             |
| B - A1041 Bawdry Road (North) | 493                   | 123                     | 518                       | 1766              | 0.279 | 491                 | 673                             | 0.0               | 0.4             | 2.888     | A                             |
| C - A63 (East)                | 412                   | 103                     | 588                       | 1897              | 0.217 | 411                 | 421                             | 0.0               | 0.3             | 2.607     | A                             |
| D - A1041 Bawdry Road (South) | 646                   | 162                     | 408                       | 1882              | 0.343 | 644                 | 591                             | 0.0               | 0.5             | 2.977     | A                             |

**07:30 - 07:45**

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 663                   | 166                     | 764                       | 2069              | 0.320 | 662                 | 495                             | 0.4               | 0.5             | 2.702     | A                             |
| B - A1041 Bawdry Road (North) | 589                   | 147                     | 620                       | 1714              | 0.343 | 588                 | 806                             | 0.4               | 0.5             | 3.271     | A                             |
| C - A63 (East)                | 492                   | 123                     | 704                       | 1835              | 0.268 | 491                 | 504                             | 0.3               | 0.4             | 2.888     | A                             |
| D - A1041 Bawdry Road (South) | 771                   | 193                     | 488                       | 1839              | 0.419 | 771                 | 707                             | 0.5               | 0.7             | 3.453     | A                             |

**07:45 - 08:00**

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 812                   | 203                     | 935                       | 1968              | 0.412 | 811                 | 606                             | 0.5               | 0.7             | 3.279     | A                             |
| B - A1041 Bawdry Road (North) | 721                   | 180                     | 759                       | 1643              | 0.439 | 720                 | 988                             | 0.5               | 0.8             | 3.987     | A                             |
| C - A63 (East)                | 602                   | 151                     | 862                       | 1750              | 0.344 | 601                 | 617                             | 0.4               | 0.6             | 3.376     | A                             |
| D - A1041 Bawdry Road (South) | 945                   | 236                     | 598                       | 1782              | 0.530 | 943                 | 866                             | 0.7               | 1.1             | 4.394     | A                             |

**08:00 - 08:15**

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 812                   | 203                     | 936                       | 1968              | 0.412 | 812                 | 607                             | 0.7               | 0.7             | 3.287     | A                             |
| B - A1041 Bawdry Road (North) | 721                   | 180                     | 760                       | 1643              | 0.439 | 721                 | 988                             | 0.8               | 0.8             | 3.998     | A                             |
| C - A63 (East)                | 602                   | 151                     | 863                       | 1749              | 0.344 | 602                 | 618                             | 0.6               | 0.6             | 3.381     | A                             |
| D - A1041 Bawdry Road (South) | 945                   | 236                     | 598                       | 1781              | 0.530 | 945                 | 867                             | 1.1               | 1.2             | 4.413     | A                             |

**08:15 - 08:30**

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 663                   | 166                     | 766                       | 2067              | 0.321 | 664                 | 496                             | 0.7               | 0.5             | 2.710     | A                             |
| B - A1041 Bawdry Road (North) | 589                   | 147                     | 622                       | 1713              | 0.344 | 590                 | 808                             | 0.8               | 0.5             | 3.282     | A                             |
| C - A63 (East)                | 492                   | 123                     | 706                       | 1834              | 0.268 | 492                 | 506                             | 0.6               | 0.4             | 2.893     | A                             |
| D - A1041 Bawdry Road (South) | 771                   | 193                     | 489                       | 1839              | 0.420 | 773                 | 709                             | 1.2               | 0.7             | 3.471     | A                             |

**08:30 - 08:45**

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 555                   | 139                     | 641                       | 2141              | 0.259 | 555                 | 415                             | 0.5               | 0.4             | 2.397     | A                             |
| B - A1041 Bawdry Road (North) | 493                   | 123                     | 520                       | 1765              | 0.279 | 494                 | 676                             | 0.5               | 0.4             | 2.899     | A                             |
| C - A63 (East)                | 412                   | 103                     | 591                       | 1896              | 0.217 | 412                 | 423                             | 0.4               | 0.3             | 2.617     | A                             |
| D - A1041 Bawdry Road (South) | 646                   | 162                     | 410                       | 1881              | 0.344 | 647                 | 593                             | 0.7               | 0.5             | 2.995     | A                             |

# 2018 Baseline, PM

## Data Errors and Warnings

| Severity | Area     | Item                                                | Description                                                                                                      |
|----------|----------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | A - A63 (West) - Roundabout Geometry                | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | B - A1041 Bawdry Road (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|------------|--------------------|--------------|
| 6        | Site 6 | Standard Roundabout |                       | C, D, A, B | 4.68               | A            |

### Junction Network

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2018 Baseline | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                           | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A63 (West)                |            | ONE HOUR     | ✓            | 683                     | 100.000            |
| B - A1041 Bawdry Road (North) |            | ONE HOUR     | ✓            | 1000                    | 100.000            |
| C - A63 (East)                |            | ONE HOUR     | ✓            | 584                     | 100.000            |
| D - A1041 Bawdry Road (South) |            | ONE HOUR     | ✓            | 788                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|                                    | To             |                               |                |                               |
|------------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                                    | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From A - A63 (West)                | 0              | 304                           | 211            | 168                           |
| From B - A1041 Bawdry Road (North) | 405            | 2                             | 85             | 508                           |
| From C - A63 (East)                | 167            | 183                           | 0              | 234                           |
| From D - A1041 Bawdry Road (South) | 142            | 404                           | 239            | 2                             |

### Proportions

|                                    | To             |                               |                |                               |
|------------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                                    | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From A - A63 (West)                | 0.00           | 0.45                          | 0.31           | 0.24                          |
| From B - A1041 Bawdry Road (North) | 0.40           | 0.00                          | 0.09           | 0.51                          |
| From C - A63 (East)                | 0.29           | 0.31                          | 0.00           | 0.40                          |
| From D - A1041 Bawdry Road (South) | 0.18           | 0.51                          | 0.30           | 0.01                          |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0              | 1                             | 9              | 1                             |
|      | B - A1041 Bawdry Road (North) | 0              | 100                           | 0              | 1                             |
|      | C - A63 (East)                | 9              | 1                             | 0              | 3                             |
|      | D - A1041 Bawdry Road (South) | 4              | 0                             | 2              | 100                           |

### Average PCU Per Veh

|      | To                            |                      |                                           |                      |                                 |
|------|-------------------------------|----------------------|-------------------------------------------|----------------------|---------------------------------|
| From |                               | A -<br>A63<br>(West) | B -<br>A1041<br>Bawdry<br>Road<br>(North) | C -<br>A63<br>(East) | D<br>A1041<br>Baw<br>Ro<br>(Sou |
|      | A - A63 (West)                | 1.000                | 1.007                                     | 1.091                | 1.0                             |
|      | B - A1041 Bawdry Road (North) | 1.002                | 2.000                                     | 1.000                | 1.0                             |
|      | C - A63 (East)                | 1.086                | 1.006                                     | 1.000                | 1.0                             |
|      | D - A1041 Bawdry Road (South) | 1.045                | 1.005                                     | 1.022                | 2.0                             |

## Detailed Demand Data

### Demand for each time segment

| Arm                           | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------------------------|--------------|-----------------|------------------------|
| A - A63 (West)                | 16:30-16:45  | 514             | 514                    |
|                               | 16:45-17:00  | 614             | 614                    |
|                               | 17:00-17:15  | 752             | 752                    |
|                               | 17:15-17:30  | 752             | 752                    |
|                               | 17:30-17:45  | 614             | 614                    |
|                               | 17:45-18:00  | 514             | 514                    |
| B - A1041 Bawdry Road (North) | 16:30-16:45  | 752             | 752                    |
|                               | 16:45-17:00  | 899             | 899                    |
|                               | 17:00-17:15  | 1100            | 1100                   |
|                               | 17:15-17:30  | 1100            | 1100                   |
|                               | 17:30-17:45  | 899             | 899                    |
|                               | 17:45-18:00  | 752             | 752                    |
| C - A63 (East)                | 16:30-16:45  | 440             | 440                    |
|                               | 16:45-17:00  | 525             | 525                    |
|                               | 17:00-17:15  | 643             | 643                    |
|                               | 17:15-17:30  | 643             | 643                    |
|                               | 17:30-17:45  | 525             | 525                    |
|                               | 17:45-18:00  | 440             | 440                    |
| D - A1041 Bawdry Road (South) | 16:30-16:45  | 593             | 593                    |
|                               | 16:45-17:00  | 708             | 708                    |
|                               | 17:00-17:15  | 867             | 867                    |
|                               | 17:15-17:30  | 867             | 867                    |
|                               | 17:30-17:45  | 708             | 708                    |
|                               | 17:45-18:00  | 593             | 593                    |

## 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) |
|-------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A63 (West)                | 0.38    | 3.02          | 0.6             | A       | 627                     | 941                           |
| B - A1041 Bawdry Road (North) | 0.65    | 6.24          | 1.9             | A       | 917                     | 1376                          |
| C - A63 (East)                | 0.41    | 4.02          | 0.7             | A       | 536                     | 804                           |
| D - A1041 Bawdry Road (South) | 0.52    | 4.64          | 1.1             | A       | 723                     | 1084                          |

## Main Results for each time segment

### 16:30 - 16:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 514                   | 129                     | 623                       | 2151              | 0.239 | 513                 | 535                             | 0.0               | 0.3             | 2.263     | A                             |
| B - A1041 Bawdry Road (North) | 752                   | 188                     | 465                       | 1793              | 0.420 | 750                 | 671                             | 0.0               | 0.7             | 3.471     | A                             |
| C - A63 (East)                | 440                   | 110                     | 813                       | 1776              | 0.247 | 438                 | 402                             | 0.0               | 0.3             | 2.790     | A                             |
| D - A1041 Bawdry Road (South) | 593                   | 148                     | 567                       | 1798              | 0.330 | 591                 | 684                             | 0.0               | 0.5             | 3.033     | A                             |

### 16:45 - 17:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 614                   | 154                     | 746                       | 2079              | 0.295 | 614                 | 641                             | 0.3               | 0.4             | 2.533     | A                             |
| B - A1041 Bawdry Road (North) | 899                   | 225                     | 557                       | 1746              | 0.515 | 897                 | 803                             | 0.7               | 1.1             | 4.270     | A                             |
| C - A63 (East)                | 525                   | 131                     | 973                       | 1690              | 0.311 | 524                 | 481                             | 0.3               | 0.5             | 3.203     | A                             |
| D - A1041 Bawdry Road (South) | 708                   | 177                     | 679                       | 1739              | 0.407 | 707                 | 819                             | 0.5               | 0.7             | 3.553     | A                             |

### 17:00 - 17:15

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 752                   | 188                     | 912                       | 1982              | 0.380 | 752                 | 784                             | 0.4               | 0.6             | 3.017     | A                             |
| B - A1041 Bawdry Road (North) | 1100                  | 275                     | 682                       | 1683              | 0.654 | 1097                | 982                             | 1.1               | 1.9             | 6.168     | A                             |
| C - A63 (East)                | 643                   | 161                     | 1191                      | 1573              | 0.409 | 642                 | 588                             | 0.5               | 0.7             | 4.006     | A                             |
| D - A1041 Bawdry Road (South) | 887                   | 217                     | 831                       | 1659              | 0.523 | 886                 | 1002                            | 0.7               | 1.1             | 4.613     | A                             |

### 17:15 - 17:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 752                   | 188                     | 914                       | 1981              | 0.380 | 752                 | 786                             | 0.6               | 0.6             | 3.021     | A                             |
| B - A1041 Bawdry Road (North) | 1100                  | 275                     | 683                       | 1682              | 0.654 | 1100                | 984                             | 1.9               | 1.9             | 6.238     | A                             |
| C - A63 (East)                | 643                   | 161                     | 1194                      | 1572              | 0.409 | 643                 | 589                             | 0.7               | 0.7             | 4.021     | A                             |
| D - A1041 Bawdry Road (South) | 887                   | 217                     | 832                       | 1658              | 0.523 | 887                 | 1004                            | 1.1               | 1.1             | 4.637     | A                             |

### 17:30 - 17:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 614                   | 154                     | 748                       | 2078              | 0.296 | 615                 | 643                             | 0.6               | 0.4             | 2.540     | A                             |
| B - A1041 Bawdry Road (North) | 899                   | 225                     | 558                       | 1746              | 0.515 | 902                 | 805                             | 1.9               | 1.1             | 4.322     | A                             |
| C - A63 (East)                | 525                   | 131                     | 978                       | 1688              | 0.311 | 526                 | 482                             | 0.7               | 0.5             | 3.220     | A                             |
| D - A1041 Bawdry Road (South) | 708                   | 177                     | 682                       | 1737              | 0.408 | 710                 | 822                             | 1.1               | 0.7             | 3.572     | A                             |

### 17:45 - 18:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 514                   | 129                     | 626                       | 2150              | 0.239 | 515                 | 538                             | 0.4               | 0.3             | 2.271     | A                             |
| B - A1041 Bawdry Road (North) | 752                   | 188                     | 467                       | 1792              | 0.420 | 754                 | 674                             | 1.1               | 0.7             | 3.502     | A                             |
| C - A63 (East)                | 440                   | 110                     | 818                       | 1774              | 0.248 | 440                 | 403                             | 0.5               | 0.3             | 2.801     | A                             |
| D - A1041 Bawdry Road (South) | 593                   | 148                     | 570                       | 1796              | 0.330 | 594                 | 688                             | 0.7               | 0.5             | 3.050     | A                             |



# 2022 Future Baseline , AM

## Data Errors and Warnings

| Severity | Area     | Item                                                | Description                                                                                                      |
|----------|----------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | A - A63 (West) - Roundabout Geometry                | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | B - A1041 Bawdry Road (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|------------|--------------------|--------------|
| 6        | Site 6 | Standard Roundabout |                       | C, D, A, B | 3.99               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 3.99              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D3 | 2022 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A63 (West)                |            | ONE HOUR     | ✓            | 764                     | 100.000            |
| B - A1041 Bawdry Road (North) |            | ONE HOUR     | ✓            | 678                     | 100.000            |
| C - A63 (East)                |            | ONE HOUR     | ✓            | 565                     | 100.000            |
| D - A1041 Bawdry Road (South) |            | ONE HOUR     | ✓            | 888                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|                                    | To             |                               |                |                               |
|------------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                                    | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From A - A63 (West)                | 0              | 314                           | 215            | 235                           |
| From B - A1041 Bawdry Road (North) | 239            | 0                             | 103            | 336                           |
| From C - A63 (East)                | 230            | 93                            | 0              | 242                           |
| From D - A1041 Bawdry Road (South) | 101            | 522                           | 263            | 2                             |

### Proportions

|                                    | To             |                               |                |                               |
|------------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                                    | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From A - A63 (West)                | 0.00           | 0.41                          | 0.28           | 0.31                          |
| From B - A1041 Bawdry Road (North) | 0.35           | 0.00                          | 0.15           | 0.50                          |
| From C - A63 (East)                | 0.41           | 0.16                          | 0.00           | 0.43                          |
| From D - A1041 Bawdry Road (South) | 0.11           | 0.59                          | 0.30           | 0.01                          |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0              | 2                             | 14             | 4                             |
|      | B - A1041 Bawdry Road (North) | 3              | 0                             | 1              | 3                             |
|      | C - A63 (East)                | 12             | 1                             | 0              | 7                             |
|      | D - A1041 Bawdry Road (South) | 4              | 1                             | 5              | 100                           |

### Average PCU Per Veh

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 1.000          | 1.021                         | 1.135          | 1.0                           |
|      | B - A1041 Bawdry Road (North) | 1.027          | 1.000                         | 1.011          | 1.0                           |
|      | C - A63 (East)                | 1.121          | 1.011                         | 1.000          | 1.0                           |
|      | D - A1041 Bawdry Road (South) | 1.043          | 1.008                         | 1.055          | 2.0                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                           | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------------------------|--------------|-----------------|------------------------|
| A - A63 (West)                | 07:15-07:30  | 575             | 575                    |
|                               | 07:30-07:45  | 688             | 688                    |
|                               | 07:45-08:00  | 841             | 841                    |
|                               | 08:00-08:15  | 841             | 841                    |
|                               | 08:15-08:30  | 688             | 688                    |
|                               | 08:30-08:45  | 575             | 575                    |
| B - A1041 Bawdry Road (North) | 07:15-07:30  | 511             | 511                    |
|                               | 07:30-07:45  | 610             | 610                    |
|                               | 07:45-08:00  | 747             | 747                    |
|                               | 08:00-08:15  | 747             | 747                    |
|                               | 08:15-08:30  | 610             | 610                    |
|                               | 08:30-08:45  | 511             | 511                    |
| C - A63 (East)                | 07:15-07:30  | 426             | 426                    |
|                               | 07:30-07:45  | 508             | 508                    |
|                               | 07:45-08:00  | 623             | 623                    |
|                               | 08:00-08:15  | 623             | 623                    |
|                               | 08:15-08:30  | 508             | 508                    |
|                               | 08:30-08:45  | 426             | 426                    |
| D - A1041 Bawdry Road (South) | 07:15-07:30  | 669             | 669                    |
|                               | 07:30-07:45  | 798             | 798                    |
|                               | 07:45-08:00  | 978             | 978                    |
|                               | 08:00-08:15  | 978             | 978                    |
|                               | 08:15-08:30  | 798             | 798                    |
|                               | 08:30-08:45  | 669             | 669                    |

## 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) |
|-------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A63 (West)                | 0.43    | 3.43          | 0.8             | A       | 701                     | 1051                          |
| B - A1041 Bawdry Road (North) | 0.46    | 4.18          | 0.9             | A       | 622                     | 934                           |
| C - A63 (East)                | 0.38    | 3.49          | 0.6             | A       | 519                     | 778                           |
| D - A1041 Bawdry Road (South) | 0.55    | 4.66          | 1.3             | A       | 815                     | 1223                          |

## Main Results for each time segment

### 07:15 - 07:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 575                   | 144                     | 660                       | 2129              | 0.270 | 573                 | 428                             | 0.0               | 0.4             | 2.440     | A                             |
| B - A1041 Bawdry Road (North) | 511                   | 128                     | 536                       | 1757              | 0.291 | 509                 | 697                             | 0.0               | 0.4             | 2.950     | A                             |
| C - A63 (East)                | 426                   | 106                     | 609                       | 1886              | 0.226 | 424                 | 436                             | 0.0               | 0.3             | 2.653     | A                             |
| D - A1041 Bawdry Road (South) | 669                   | 167                     | 422                       | 1874              | 0.357 | 666                 | 612                             | 0.0               | 0.6             | 3.052     | A                             |

### 07:30 - 07:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 686                   | 172                     | 790                       | 2053              | 0.334 | 686                 | 512                             | 0.4               | 0.5             | 2.778     | A                             |
| B - A1041 Bawdry Road (North) | 610                   | 152                     | 642                       | 1703              | 0.358 | 609                 | 834                             | 0.4               | 0.6             | 3.367     | A                             |
| C - A63 (East)                | 508                   | 127                     | 729                       | 1821              | 0.279 | 508                 | 522                             | 0.3               | 0.4             | 2.954     | A                             |
| D - A1041 Bawdry Road (South) | 798                   | 200                     | 505                       | 1830              | 0.436 | 798                 | 732                             | 0.6               | 0.8             | 3.571     | A                             |

### 07:45 - 08:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 841                   | 210                     | 967                       | 1949              | 0.431 | 840                 | 627                             | 0.5               | 0.8             | 3.421     | A                             |
| B - A1041 Bawdry Road (North) | 747                   | 187                     | 786                       | 1630              | 0.458 | 746                 | 1021                            | 0.6               | 0.9             | 4.163     | A                             |
| C - A63 (East)                | 623                   | 156                     | 892                       | 1733              | 0.359 | 622                 | 639                             | 0.4               | 0.6             | 3.489     | A                             |
| D - A1041 Bawdry Road (South) | 978                   | 244                     | 618                       | 1771              | 0.552 | 976                 | 896                             | 0.8               | 1.3             | 4.638     | A                             |

### 08:00 - 08:15

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 841                   | 210                     | 969                       | 1948              | 0.431 | 841                 | 628                             | 0.8               | 0.8             | 3.430     | A                             |
| B - A1041 Bawdry Road (North) | 747                   | 187                     | 787                       | 1629              | 0.458 | 747                 | 1023                            | 0.9               | 0.9             | 4.176     | A                             |
| C - A63 (East)                | 623                   | 156                     | 894                       | 1733              | 0.359 | 623                 | 640                             | 0.6               | 0.6             | 3.494     | A                             |
| D - A1041 Bawdry Road (South) | 978                   | 244                     | 619                       | 1770              | 0.552 | 978                 | 898                             | 1.3               | 1.3             | 4.658     | A                             |

### 08:15 - 08:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 686                   | 172                     | 793                       | 2052              | 0.335 | 687                 | 513                             | 0.8               | 0.5             | 2.787     | A                             |
| B - A1041 Bawdry Road (North) | 610                   | 152                     | 644                       | 1702              | 0.358 | 611                 | 837                             | 0.9               | 0.6             | 3.380     | A                             |
| C - A63 (East)                | 508                   | 127                     | 731                       | 1820              | 0.279 | 509                 | 523                             | 0.6               | 0.4             | 2.962     | A                             |
| D - A1041 Bawdry Road (South) | 798                   | 200                     | 506                       | 1830              | 0.436 | 800                 | 734                             | 1.3               | 0.8             | 3.594     | A                             |

### 08:30 - 08:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 575                   | 144                     | 664                       | 2128              | 0.270 | 575                 | 430                             | 0.5               | 0.4             | 2.449     | A                             |
| B - A1041 Bawdry Road (North) | 511                   | 128                     | 539                       | 1756              | 0.291 | 511                 | 700                             | 0.6               | 0.4             | 2.962     | A                             |
| C - A63 (East)                | 426                   | 106                     | 612                       | 1884              | 0.226 | 426                 | 438                             | 0.4               | 0.3             | 2.663     | A                             |
| D - A1041 Bawdry Road (South) | 669                   | 167                     | 424                       | 1873              | 0.357 | 670                 | 614                             | 0.8               | 0.6             | 3.068     | A                             |

# 2022 Future Baseline , PM

## Data Errors and Warnings

| Severity | Area     | Item                                                | Description                                                                                                      |
|----------|----------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | A - A63 (West) - Roundabout Geometry                | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | B - A1041 Bawdry Road (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|------------|--------------------|--------------|
| 6        | Site 6 | Standard Roundabout |                       | C, D, A, B | 5.00               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.00              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D4 | 2022 Future Baseline | PM               | ONE HOUR             | 18:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                           | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A63 (West)                |            | ONE HOUR     | ✓            | 706                     | 100.000            |
| B - A1041 Bawdry Road (North) |            | ONE HOUR     | ✓            | 1033                    | 100.000            |
| C - A63 (East)                |            | ONE HOUR     | ✓            | 603                     | 100.000            |
| D - A1041 Bawdry Road (South) |            | ONE HOUR     | ✓            | 814                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|      |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From | A - A63 (West)                | 0              | 315                           | 218            | 173                           |
|      | B - A1041 Bawdry Road (North) | 418            | 2                             | 88             | 525                           |
|      | C - A63 (East)                | 172            | 189                           | 0              | 242                           |
|      | D - A1041 Bawdry Road (South) | 147            | 418                           | 247            | 2                             |

### Proportions

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|      |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From | A - A63 (West)                | 0.00           | 0.45                          | 0.31           | 0.24                          |
|      | B - A1041 Bawdry Road (North) | 0.40           | 0.00                          | 0.09           | 0.51                          |
|      | C - A63 (East)                | 0.29           | 0.31                          | 0.00           | 0.40                          |
|      | D - A1041 Bawdry Road (South) | 0.18           | 0.51                          | 0.30           | 0.01                          |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0              | 1                             | 9              | 1                             |
|      | B - A1041 Bawdry Road (North) | 0              | 100                           | 0              | 1                             |
|      | C - A63 (East)                | 9              | 1                             | 0              | 3                             |
|      | D - A1041 Bawdry Road (South) | 4              | 0                             | 2              | 100                           |

### Average PCU Per Veh

|      | To                            |                |                               |                |                     |
|------|-------------------------------|----------------|-------------------------------|----------------|---------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D A1041 Baw Ro (Sou |
|      | A - A63 (West)                | 1.000          | 1.007                         | 1.091          | 1.0                 |
|      | B - A1041 Bawdry Road (North) | 1.002          | 2.000                         | 1.000          | 1.0                 |
|      | C - A63 (East)                | 1.088          | 1.008                         | 1.000          | 1.0                 |
|      | D - A1041 Bawdry Road (South) | 1.045          | 1.005                         | 1.022          | 2.0                 |

## Detailed Demand Data

### Demand for each time segment

| Arm                           | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------------------------|--------------|-----------------|------------------------|
| A - A63 (West)                | 16:30-16:45  | 532             | 532                    |
|                               | 16:45-17:00  | 635             | 635                    |
|                               | 17:00-17:15  | 778             | 778                    |
|                               | 17:15-17:30  | 778             | 778                    |
|                               | 17:30-17:45  | 635             | 635                    |
|                               | 17:45-18:00  | 532             | 532                    |
| B - A1041 Bawdry Road (North) | 16:30-16:45  | 777             | 777                    |
|                               | 16:45-17:00  | 928             | 928                    |
|                               | 17:00-17:15  | 1137            | 1137                   |
|                               | 17:15-17:30  | 1137            | 1137                   |
|                               | 17:30-17:45  | 928             | 928                    |
|                               | 17:45-18:00  | 777             | 777                    |
| C - A63 (East)                | 16:30-16:45  | 454             | 454                    |
|                               | 16:45-17:00  | 542             | 542                    |
|                               | 17:00-17:15  | 664             | 664                    |
|                               | 17:15-17:30  | 664             | 664                    |
|                               | 17:30-17:45  | 542             | 542                    |
|                               | 17:45-18:00  | 454             | 454                    |
| D - A1041 Bawdry Road (South) | 16:30-16:45  | 613             | 613                    |
|                               | 16:45-17:00  | 732             | 732                    |
|                               | 17:00-17:15  | 896             | 896                    |
|                               | 17:15-17:30  | 896             | 896                    |
|                               | 17:30-17:45  | 732             | 732                    |
|                               | 17:45-18:00  | 613             | 613                    |

## 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) |
|-------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A63 (West)                | 0.40    | 3.13          | 0.7             | A       | 648                     | 972                           |
| B - A1041 Bawdry Road (North) | 0.68    | 6.80          | 2.1             | A       | 948                     | 1421                          |
| C - A63 (East)                | 0.43    | 4.22          | 0.8             | A       | 554                     | 830                           |
| D - A1041 Bawdry Road (South) | 0.55    | 4.91          | 1.2             | A       | 747                     | 1121                          |

## Main Results for each time segment

### 16:30 - 16:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 532                   | 133                     | 644                       | 2139              | 0.249 | 530                 | 553                             | 0.0               | 0.3             | 2.305     | A                             |
| B - A1041 Bawdry Road (North) | 777                   | 194                     | 481                       | 1785              | 0.436 | 774                 | 694                             | 0.0               | 0.8             | 3.584     | A                             |
| C - A63 (East)                | 454                   | 114                     | 840                       | 1761              | 0.258 | 453                 | 415                             | 0.0               | 0.4             | 2.852     | A                             |
| D - A1041 Bawdry Road (South) | 613                   | 153                     | 586                       | 1788              | 0.343 | 611                 | 707                             | 0.0               | 0.5             | 3.110     | A                             |

### 16:45 - 17:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 635                   | 159                     | 771                       | 2065              | 0.308 | 635                 | 662                             | 0.3               | 0.5             | 2.596     | A                             |
| B - A1041 Bawdry Road (North) | 928                   | 232                     | 575                       | 1737              | 0.534 | 927                 | 830                             | 0.8               | 1.1             | 4.476     | A                             |
| C - A63 (East)                | 542                   | 136                     | 1006                      | 1673              | 0.324 | 542                 | 496                             | 0.4               | 0.5             | 3.301     | A                             |
| D - A1041 Bawdry Road (South) | 732                   | 183                     | 701                       | 1727              | 0.424 | 731                 | 846                             | 0.5               | 0.7             | 3.678     | A                             |

### 17:00 - 17:15

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 778                   | 194                     | 943                       | 1964              | 0.396 | 777                 | 809                             | 0.5               | 0.7             | 3.127     | A                             |
| B - A1041 Bawdry Road (North) | 1137                  | 284                     | 704                       | 1671              | 0.680 | 1133                | 1016                            | 1.1               | 2.1             | 6.701     | A                             |
| C - A63 (East)                | 664                   | 166                     | 1230                      | 1552              | 0.428 | 663                 | 608                             | 0.5               | 0.8             | 4.196     | A                             |
| D - A1041 Bawdry Road (South) | 896                   | 224                     | 858                       | 1644              | 0.545 | 895                 | 1035                            | 0.7               | 1.2             | 4.878     | A                             |

### 17:15 - 17:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 778                   | 194                     | 945                       | 1963              | 0.396 | 778                 | 811                             | 0.7               | 0.7             | 3.132     | A                             |
| B - A1041 Bawdry Road (North) | 1137                  | 284                     | 705                       | 1671              | 0.680 | 1137                | 1017                            | 2.1               | 2.1             | 6.801     | A                             |
| C - A63 (East)                | 664                   | 166                     | 1234                      | 1550              | 0.428 | 664                 | 609                             | 0.8               | 0.8             | 4.215     | A                             |
| D - A1041 Bawdry Road (South) | 896                   | 224                     | 880                       | 1643              | 0.546 | 896                 | 1038                            | 1.2               | 1.2             | 4.908     | A                             |

### 17:30 - 17:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 635                   | 159                     | 773                       | 2063              | 0.308 | 636                 | 665                             | 0.7               | 0.5             | 2.604     | A                             |
| B - A1041 Bawdry Road (North) | 928                   | 232                     | 577                       | 1736              | 0.535 | 932                 | 832                             | 2.1               | 1.2             | 4.540     | A                             |
| C - A63 (East)                | 542                   | 136                     | 1011                      | 1670              | 0.325 | 543                 | 498                             | 0.8               | 0.5             | 3.321     | A                             |
| D - A1041 Bawdry Road (South) | 732                   | 183                     | 704                       | 1725              | 0.424 | 734                 | 850                             | 1.2               | 0.8             | 3.703     | A                             |

### 17:45 - 18:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 532                   | 133                     | 647                       | 2137              | 0.249 | 532                 | 556                             | 0.5               | 0.3             | 2.313     | A                             |
| B - A1041 Bawdry Road (North) | 777                   | 194                     | 483                       | 1784              | 0.436 | 779                 | 697                             | 1.2               | 0.8             | 3.618     | A                             |
| C - A63 (East)                | 454                   | 114                     | 845                       | 1759              | 0.258 | 455                 | 417                             | 0.5               | 0.4             | 2.865     | A                             |
| D - A1041 Bawdry Road (South) | 613                   | 153                     | 589                       | 1786              | 0.343 | 614                 | 711                             | 0.8               | 0.5             | 3.129     | A                             |



# 2026 Future Baseline, AM

## Data Errors and Warnings

| Severity | Area     | Item                                                | Description                                                                                                      |
|----------|----------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | A - A63 (West) - Roundabout Geometry                | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | B - A1041 Bawdry Road (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|------------|--------------------|--------------|
| 6        | Site 6 | Standard Roundabout |                       | C, D, A, B | 4.16               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 4.16              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2026 Future Baseline | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A63 (West)                |            | ONE HOUR     | ✓            | 786                     | 100.000            |
| B - A1041 Bawdry Road (North) |            | ONE HOUR     | ✓            | 698                     | 100.000            |
| C - A63 (East)                |            | ONE HOUR     | ✓            | 583                     | 100.000            |
| D - A1041 Bawdry Road (South) |            | ONE HOUR     | ✓            | 914                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|                                    | To             |                               |                |                               |
|------------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                                    | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From A - A63 (West)                | 0              | 323                           | 222            | 241                           |
| From B - A1041 Bawdry Road (North) | 246            | 0                             | 106            | 346                           |
| From C - A63 (East)                | 237            | 96                            | 0              | 250                           |
| From D - A1041 Bawdry Road (South) | 104            | 537                           | 271            | 2                             |

### Proportions

|                                    | To             |                               |                |                               |
|------------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                                    | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From A - A63 (West)                | 0.00           | 0.41                          | 0.28           | 0.31                          |
| From B - A1041 Bawdry Road (North) | 0.35           | 0.00                          | 0.15           | 0.50                          |
| From C - A63 (East)                | 0.41           | 0.16                          | 0.00           | 0.43                          |
| From D - A1041 Bawdry Road (South) | 0.11           | 0.59                          | 0.30           | 0.00                          |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0              | 2                             | 14             | 4                             |
|      | B - A1041 Bawdry Road (North) | 3              | 0                             | 1              | 3                             |
|      | C - A63 (East)                | 12             | 1                             | 0              | 7                             |
|      | D - A1041 Bawdry Road (South) | 4              | 1                             | 5              | 100                           |

### Average PCU Per Veh

|      | To                            |                |                               |                |                     |
|------|-------------------------------|----------------|-------------------------------|----------------|---------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D A1041 Baw Ro (Sou |
|      | A - A63 (West)                | 1.000          | 1.021                         | 1.135          | 1.0                 |
|      | B - A1041 Bawdry Road (North) | 1.027          | 1.000                         | 1.011          | 1.0                 |
|      | C - A63 (East)                | 1.121          | 1.011                         | 1.000          | 1.0                 |
|      | D - A1041 Bawdry Road (South) | 1.043          | 1.008                         | 1.055          | 2.0                 |

## Detailed Demand Data

### Demand for each time segment

| Arm                           | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------------------------|--------------|-----------------|------------------------|
| A - A63 (West)                | 07:15-07:30  | 592             | 592                    |
|                               | 07:30-07:45  | 707             | 707                    |
|                               | 07:45-08:00  | 868             | 868                    |
|                               | 08:00-08:15  | 868             | 868                    |
|                               | 08:15-08:30  | 707             | 707                    |
|                               | 08:30-08:45  | 592             | 592                    |
| B - A1041 Bawdry Road (North) | 07:15-07:30  | 528             | 528                    |
|                               | 07:30-07:45  | 628             | 628                    |
|                               | 07:45-08:00  | 769             | 769                    |
|                               | 08:00-08:15  | 769             | 769                    |
|                               | 08:15-08:30  | 628             | 628                    |
|                               | 08:30-08:45  | 528             | 528                    |
| C - A63 (East)                | 07:15-07:30  | 439             | 439                    |
|                               | 07:30-07:45  | 524             | 524                    |
|                               | 07:45-08:00  | 642             | 642                    |
|                               | 08:00-08:15  | 642             | 642                    |
|                               | 08:15-08:30  | 524             | 524                    |
|                               | 08:30-08:45  | 439             | 439                    |
| D - A1041 Bawdry Road (South) | 07:15-07:30  | 688             | 688                    |
|                               | 07:30-07:45  | 822             | 822                    |
|                               | 07:45-08:00  | 1007            | 1007                   |
|                               | 08:00-08:15  | 1007            | 1007                   |
|                               | 08:15-08:30  | 822             | 822                    |
|                               | 08:30-08:45  | 688             | 688                    |

## 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) |
|-------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A63 (West)                | 0.45    | 3.57          | 0.9             | A       | 722                     | 1083                          |
| B - A1041 Bawdry Road (North) | 0.48    | 4.34          | 0.9             | A       | 641                     | 981                           |
| C - A63 (East)                | 0.37    | 3.80          | 0.8             | A       | 535                     | 802                           |
| D - A1041 Bawdry Road (South) | 0.57    | 4.90          | 1.4             | A       | 839                     | 1258                          |



## Main Results for each time segment

### 07:15 - 07:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 592                   | 148                     | 680                       | 2118              | 0.280 | 590                 | 441                             | 0.0               | 0.4             | 2.486     | A                             |
| B - A1041 Bawdry Road (North) | 526                   | 131                     | 553                       | 1748              | 0.301 | 524                 | 717                             | 0.0               | 0.4             | 3.006     | A                             |
| C - A63 (East)                | 439                   | 110                     | 627                       | 1876              | 0.234 | 437                 | 450                             | 0.0               | 0.3             | 2.894     | A                             |
| D - A1041 Bawdry Road (South) | 688                   | 172                     | 435                       | 1867              | 0.389 | 686                 | 630                             | 0.0               | 0.6             | 3.117     | A                             |

### 07:30 - 07:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 707                   | 177                     | 814                       | 2039              | 0.347 | 706                 | 527                             | 0.4               | 0.6             | 2.849     | A                             |
| B - A1041 Bawdry Road (North) | 628                   | 157                     | 662                       | 1693              | 0.371 | 627                 | 859                             | 0.4               | 0.6             | 3.456     | A                             |
| C - A63 (East)                | 524                   | 131                     | 751                       | 1810              | 0.289 | 523                 | 538                             | 0.3               | 0.4             | 3.016     | A                             |
| D - A1041 Bawdry Road (South) | 822                   | 205                     | 520                       | 1822              | 0.451 | 821                 | 754                             | 0.6               | 0.8             | 3.683     | A                             |

### 07:45 - 08:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 866                   | 216                     | 996                       | 1933              | 0.448 | 865                 | 645                             | 0.6               | 0.9             | 3.556     | A                             |
| B - A1041 Bawdry Road (North) | 789                   | 192                     | 810                       | 1618              | 0.475 | 788                 | 1051                            | 0.6               | 0.9             | 4.330     | A                             |
| C - A63 (East)                | 642                   | 160                     | 919                       | 1719              | 0.373 | 641                 | 659                             | 0.4               | 0.6             | 3.596     | A                             |
| D - A1041 Bawdry Road (South) | 1007                  | 252                     | 637                       | 1761              | 0.572 | 1005                | 923                             | 0.8               | 1.4             | 4.885     | A                             |

### 08:00 - 08:15

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 866                   | 216                     | 998                       | 1932              | 0.448 | 866                 | 646                             | 0.9               | 0.9             | 3.566     | A                             |
| B - A1041 Bawdry Road (North) | 789                   | 192                     | 811                       | 1617              | 0.475 | 789                 | 1053                            | 0.9               | 0.9             | 4.345     | A                             |
| C - A63 (East)                | 642                   | 160                     | 920                       | 1719              | 0.373 | 642                 | 660                             | 0.6               | 0.6             | 3.601     | A                             |
| D - A1041 Bawdry Road (South) | 1007                  | 252                     | 637                       | 1760              | 0.572 | 1007                | 924                             | 1.4               | 1.4             | 4.896     | A                             |

### 08:15 - 08:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 707                   | 177                     | 817                       | 2038              | 0.347 | 708                 | 529                             | 0.9               | 0.6             | 2.860     | A                             |
| B - A1041 Bawdry Road (North) | 628                   | 157                     | 664                       | 1692              | 0.371 | 629                 | 861                             | 0.9               | 0.6             | 3.473     | A                             |
| C - A63 (East)                | 524                   | 131                     | 753                       | 1809              | 0.290 | 525                 | 540                             | 0.6               | 0.4             | 3.025     | A                             |
| D - A1041 Bawdry Road (South) | 822                   | 205                     | 521                       | 1822              | 0.451 | 824                 | 756                             | 1.4               | 0.8             | 3.706     | A                             |

### 08:30 - 08:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 592                   | 148                     | 683                       | 2116              | 0.280 | 593                 | 442                             | 0.6               | 0.4             | 2.497     | A                             |
| B - A1041 Bawdry Road (North) | 526                   | 131                     | 555                       | 1747              | 0.301 | 526                 | 721                             | 0.6               | 0.4             | 3.022     | A                             |
| C - A63 (East)                | 439                   | 110                     | 630                       | 1875              | 0.234 | 439                 | 452                             | 0.4               | 0.3             | 2.705     | A                             |
| D - A1041 Bawdry Road (South) | 688                   | 172                     | 436                       | 1866              | 0.389 | 689                 | 633                             | 0.8               | 0.6             | 3.137     | A                             |

# 2026 Future Baseline, PM

## Data Errors and Warnings

| Severity | Area     | Item                                                | Description                                                                                                      |
|----------|----------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | A - A63 (West) - Roundabout Geometry                | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | B - A1041 Bawdry Road (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|------------|--------------------|--------------|
| 6        | Site 6 | Standard Roundabout |                       | C, D, A, B | 5.32               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.32              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name        | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2026 Future Baseline | PM               | ONE HOUR             | 18:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                           | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A63 (West)                |            | ONE HOUR     | ✓            | 726                     | 100.000            |
| B - A1041 Bawdry Road (North) |            | ONE HOUR     | ✓            | 1062                    | 100.000            |
| C - A63 (East)                |            | ONE HOUR     | ✓            | 620                     | 100.000            |
| D - A1041 Bawdry Road (South) |            | ONE HOUR     | ✓            | 837                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0              | 324                           | 224            | 178                           |
|      | B - A1041 Bawdry Road (North) | 430            | 2                             | 90             | 540                           |
|      | C - A63 (East)                | 177            | 194                           | 0              | 249                           |
|      | D - A1041 Bawdry Road (South) | 151            | 430                           | 254            | 2                             |

### Proportions

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0.00           | 0.45                          | 0.31           | 0.24                          |
|      | B - A1041 Bawdry Road (North) | 0.40           | 0.00                          | 0.09           | 0.51                          |
|      | C - A63 (East)                | 0.29           | 0.31                          | 0.00           | 0.40                          |
|      | D - A1041 Bawdry Road (South) | 0.18           | 0.51                          | 0.30           | 0.01                          |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                          | To             |                               |                |                               |
|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| A - A63 (West)                | 0              | 1                             | 9              | 1                             |
| B - A1041 Bawdry Road (North) | 0              | 100                           | 0              | 1                             |
| C - A63 (East)                | 9              | 1                             | 0              | 3                             |
| D - A1041 Bawdry Road (South) | 4              | 0                             | 2              | 100                           |

### Average PCU Per Veh

| From                          | To             |                               |                |                               |
|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| A - A63 (West)                | 1.000          | 1.007                         | 1.091          | 1.0                           |
| B - A1041 Bawdry Road (North) | 1.002          | 2.000                         | 1.000          | 1.0                           |
| C - A63 (East)                | 1.086          | 1.006                         | 1.000          | 1.0                           |
| D - A1041 Bawdry Road (South) | 1.045          | 1.005                         | 1.022          | 2.0                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                           | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------------------------|--------------|-----------------|------------------------|
| A - A63 (West)                | 16:30-16:45  | 547             | 547                    |
|                               | 16:45-17:00  | 653             | 653                    |
|                               | 17:00-17:15  | 800             | 800                    |
|                               | 17:15-17:30  | 800             | 800                    |
|                               | 17:30-17:45  | 653             | 653                    |
|                               | 17:45-18:00  | 547             | 547                    |
| B - A1041 Bawdry Road (North) | 16:30-16:45  | 800             | 800                    |
|                               | 16:45-17:00  | 955             | 955                    |
|                               | 17:00-17:15  | 1170            | 1170                   |
|                               | 17:15-17:30  | 1170            | 1170                   |
|                               | 17:30-17:45  | 955             | 955                    |
|                               | 17:45-18:00  | 800             | 800                    |
| C - A63 (East)                | 16:30-16:45  | 467             | 467                    |
|                               | 16:45-17:00  | 558             | 558                    |
|                               | 17:00-17:15  | 683             | 683                    |
|                               | 17:15-17:30  | 683             | 683                    |
|                               | 17:30-17:45  | 558             | 558                    |
|                               | 17:45-18:00  | 467             | 467                    |
| D - A1041 Bawdry Road (South) | 16:30-16:45  | 630             | 630                    |
|                               | 16:45-17:00  | 753             | 753                    |
|                               | 17:00-17:15  | 922             | 922                    |
|                               | 17:15-17:30  | 922             | 922                    |
|                               | 17:30-17:45  | 753             | 753                    |
|                               | 17:45-18:00  | 630             | 630                    |

## 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) |
|-------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A63 (West)                | 0.41    | 3.23          | 0.7             | A       | 667                     | 1000                          |
| B - A1041 Bawdry Road (North) | 0.70    | 7.39          | 2.4             | A       | 975                     | 1462                          |
| C - A63 (East)                | 0.45    | 4.40          | 0.8             | A       | 569                     | 854                           |
| D - A1041 Bawdry Road (South) | 0.57    | 5.17          | 1.3             | A       | 768                     | 1152                          |

## Main Results for each time segment

### 16:30 - 16:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 547                   | 137                     | 662                       | 2128              | 0.257 | 545                 | 589                             | 0.0               | 0.4             | 2.343     | A                             |
| B - A1041 Bawdry Road (North) | 800                   | 200                     | 494                       | 1778              | 0.450 | 796                 | 713                             | 0.0               | 0.8             | 3.888     | A                             |
| C - A63 (East)                | 467                   | 117                     | 864                       | 1749              | 0.267 | 465                 | 426                             | 0.0               | 0.4             | 2.909     | A                             |
| D - A1041 Bawdry Road (South) | 630                   | 158                     | 602                       | 1779              | 0.354 | 628                 | 727                             | 0.0               | 0.6             | 3.180     | A                             |

### 16:45 - 17:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 653                   | 163                     | 792                       | 2052              | 0.318 | 652                 | 680                             | 0.4               | 0.5             | 2.652     | A                             |
| B - A1041 Bawdry Road (North) | 955                   | 239                     | 591                       | 1729              | 0.552 | 953                 | 853                             | 0.8               | 1.2             | 4.675     | A                             |
| C - A63 (East)                | 558                   | 139                     | 1034                      | 1657              | 0.336 | 557                 | 510                             | 0.4               | 0.5             | 3.393     | A                             |
| D - A1041 Bawdry Road (South) | 753                   | 188                     | 721                       | 1716              | 0.438 | 752                 | 870                             | 0.6               | 0.8             | 3.796     | A                             |

### 17:00 - 17:15

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 800                   | 200                     | 969                       | 1948              | 0.411 | 799                 | 832                             | 0.5               | 0.7             | 3.226     | A                             |
| B - A1041 Bawdry Road (North) | 1170                  | 292                     | 724                       | 1661              | 0.704 | 1165                | 1044                            | 1.2               | 2.3             | 7.255     | A                             |
| C - A63 (East)                | 683                   | 171                     | 1265                      | 1534              | 0.445 | 682                 | 624                             | 0.5               | 0.8             | 4.378     | A                             |
| D - A1041 Bawdry Road (South) | 922                   | 230                     | 882                       | 1632              | 0.565 | 920                 | 1064                            | 0.8               | 1.3             | 5.135     | A                             |

### 17:15 - 17:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 800                   | 200                     | 971                       | 1947              | 0.411 | 800                 | 835                             | 0.7               | 0.7             | 3.235     | A                             |
| B - A1041 Bawdry Road (North) | 1170                  | 292                     | 725                       | 1661              | 0.704 | 1169                | 1046                            | 2.3               | 2.4             | 7.388     | A                             |
| C - A63 (East)                | 683                   | 171                     | 1269                      | 1531              | 0.446 | 683                 | 626                             | 0.8               | 0.8             | 4.402     | A                             |
| D - A1041 Bawdry Road (South) | 922                   | 230                     | 884                       | 1630              | 0.565 | 922                 | 1067                            | 1.3               | 1.3             | 5.172     | A                             |

### 17:30 - 17:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 653                   | 163                     | 795                       | 2050              | 0.318 | 654                 | 684                             | 0.7               | 0.5             | 2.661     | A                             |
| B - A1041 Bawdry Road (North) | 955                   | 239                     | 593                       | 1728              | 0.553 | 959                 | 856                             | 2.4               | 1.3             | 4.755     | A                             |
| C - A63 (East)                | 558                   | 139                     | 1040                      | 1654              | 0.337 | 559                 | 512                             | 0.8               | 0.5             | 3.413     | A                             |
| D - A1041 Bawdry Road (South) | 753                   | 188                     | 725                       | 1715              | 0.439 | 755                 | 875                             | 1.3               | 0.8             | 3.829     | A                             |

### 17:45 - 18:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 547                   | 137                     | 665                       | 2127              | 0.257 | 547                 | 572                             | 0.5               | 0.4             | 2.352     | A                             |
| B - A1041 Bawdry Road (North) | 800                   | 200                     | 496                       | 1777              | 0.450 | 801                 | 716                             | 1.3               | 0.8             | 3.731     | A                             |
| C - A63 (East)                | 467                   | 117                     | 869                       | 1746              | 0.267 | 467                 | 428                             | 0.5               | 0.4             | 2.923     | A                             |
| D - A1041 Bawdry Road (South) | 630                   | 158                     | 606                       | 1777              | 0.355 | 631                 | 731                             | 0.8               | 0.6             | 3.200     | A                             |

# 2026 Do Nothing, AM

## Data Errors and Warnings

| Severity | Area     | Item                                                | Description                                                                                                      |
|----------|----------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | A - A63 (West) - Roundabout Geometry                | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | B - A1041 Bawdry Road (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|------------|--------------------|--------------|
| 6        | Site 6 | Standard Roundabout |                       | C, D, A, B | 4.32               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 4.32              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name   | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D7 | 2026 Do Nothing | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A63 (West)                |            | ONE HOUR     | ✓            | 802                     | 100.000            |
| B - A1041 Bawdry Road (North) |            | ONE HOUR     | ✓            | 705                     | 100.000            |
| C - A63 (East)                |            | ONE HOUR     | ✓            | 620                     | 100.000            |
| D - A1041 Bawdry Road (South) |            | ONE HOUR     | ✓            | 932                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|                                    | To             |                               |                |                               |
|------------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                                    | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From A - A63 (West)                | 0              | 323                           | 233            | 246                           |
| From B - A1041 Bawdry Road (North) | 246            | 0                             | 106            | 353                           |
| From C - A63 (East)                | 269            | 96                            | 0              | 255                           |
| From D - A1041 Bawdry Road (South) | 106            | 548                           | 276            | 2                             |

### Proportions

|                                    | To             |                               |                |                               |
|------------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                                    | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From A - A63 (West)                | 0.00           | 0.40                          | 0.29           | 0.31                          |
| From B - A1041 Bawdry Road (North) | 0.35           | 0.00                          | 0.15           | 0.50                          |
| From C - A63 (East)                | 0.43           | 0.15                          | 0.00           | 0.42                          |
| From D - A1041 Bawdry Road (South) | 0.11           | 0.59                          | 0.30           | 0.01                          |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0              | 2                             | 14             | 4                             |
|      | B - A1041 Bawdry Road (North) | 3              | 0                             | 1              | 3                             |
|      | C - A63 (East)                | 12             | 1                             | 0              | 7                             |
|      | D - A1041 Bawdry Road (South) | 4              | 1                             | 5              | 100                           |

### Average PCU Per Veh

|      | To                            |                |                               |                |                     |
|------|-------------------------------|----------------|-------------------------------|----------------|---------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D A1041 Baw Ro (Sou |
|      | A - A63 (West)                | 1.000          | 1.021                         | 1.135          | 1.0                 |
|      | B - A1041 Bawdry Road (North) | 1.027          | 1.000                         | 1.011          | 1.0                 |
|      | C - A63 (East)                | 1.121          | 1.011                         | 1.000          | 1.0                 |
|      | D - A1041 Bawdry Road (South) | 1.043          | 1.008                         | 1.055          | 2.0                 |

## Detailed Demand Data

### Demand for each time segment

| Arm                           | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------------------------|--------------|-----------------|------------------------|
| A - A63 (West)                | 07:15-07:30  | 604             | 604                    |
|                               | 07:30-07:45  | 721             | 721                    |
|                               | 07:45-08:00  | 883             | 883                    |
|                               | 08:00-08:15  | 883             | 883                    |
|                               | 08:15-08:30  | 721             | 721                    |
|                               | 08:30-08:45  | 604             | 604                    |
| B - A1041 Bawdry Road (North) | 07:15-07:30  | 531             | 531                    |
|                               | 07:30-07:45  | 634             | 634                    |
|                               | 07:45-08:00  | 776             | 776                    |
|                               | 08:00-08:15  | 776             | 776                    |
|                               | 08:15-08:30  | 634             | 634                    |
|                               | 08:30-08:45  | 531             | 531                    |
| C - A63 (East)                | 07:15-07:30  | 466             | 466                    |
|                               | 07:30-07:45  | 557             | 557                    |
|                               | 07:45-08:00  | 682             | 682                    |
|                               | 08:00-08:15  | 682             | 682                    |
|                               | 08:15-08:30  | 557             | 557                    |
|                               | 08:30-08:45  | 466             | 466                    |
| D - A1041 Bawdry Road (South) | 07:15-07:30  | 702             | 702                    |
|                               | 07:30-07:45  | 838             | 838                    |
|                               | 07:45-08:00  | 1026            | 1026                   |
|                               | 08:00-08:15  | 1026            | 1026                   |
|                               | 08:15-08:30  | 838             | 838                    |
|                               | 08:30-08:45  | 702             | 702                    |

## 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) |
|-------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A63 (West)                | 0.46    | 3.66          | 0.9             | A       | 736                     | 1104                          |
| B - A1041 Bawdry Road (North) | 0.48    | 4.44          | 1.0             | A       | 647                     | 970                           |
| C - A63 (East)                | 0.40    | 3.77          | 0.7             | A       | 569                     | 853                           |
| D - A1041 Bawdry Road (South) | 0.59    | 5.16          | 1.5             | A       | 855                     | 1283                          |



## Main Results for each time segment

### 07:15 - 07:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 604                   | 151                     | 692                       | 2111              | 0.286 | 602                 | 466                             | 0.0               | 0.4             | 2.519     | A                             |
| B - A1041 Bawdry Road (North) | 531                   | 133                     | 568                       | 1740              | 0.305 | 529                 | 726                             | 0.0               | 0.4             | 3.039     | A                             |
| C - A63 (East)                | 466                   | 117                     | 636                       | 1871              | 0.249 | 465                 | 462                             | 0.0               | 0.4             | 2.762     | A                             |
| D - A1041 Bawdry Road (South) | 702                   | 175                     | 459                       | 1855              | 0.378 | 699                 | 642                             | 0.0               | 0.6             | 3.188     | A                             |

### 07:30 - 07:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 721                   | 180                     | 828                       | 2031              | 0.355 | 721                 | 558                             | 0.4               | 0.6             | 2.901     | A                             |
| B - A1041 Bawdry Road (North) | 634                   | 158                     | 680                       | 1684              | 0.376 | 633                 | 868                             | 0.4               | 0.6             | 3.507     | A                             |
| C - A63 (East)                | 557                   | 139                     | 761                       | 1804              | 0.309 | 556                 | 552                             | 0.4               | 0.5             | 3.113     | A                             |
| D - A1041 Bawdry Road (South) | 838                   | 210                     | 549                       | 1807              | 0.464 | 837                 | 769                             | 0.6               | 0.9             | 3.802     | A                             |

### 07:45 - 08:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 883                   | 221                     | 1013                      | 1922              | 0.459 | 882                 | 683                             | 0.6               | 0.9             | 3.651     | A                             |
| B - A1041 Bawdry Road (North) | 776                   | 194                     | 833                       | 1606              | 0.483 | 775                 | 1063                            | 0.6               | 0.9             | 4.427     | A                             |
| C - A63 (East)                | 682                   | 171                     | 931                       | 1713              | 0.398 | 681                 | 676                             | 0.5               | 0.7             | 3.765     | A                             |
| D - A1041 Bawdry Road (South) | 1026                  | 257                     | 672                       | 1742              | 0.589 | 1024                | 941                             | 0.9               | 1.5             | 5.123     | A                             |

### 08:00 - 08:15

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 883                   | 221                     | 1015                      | 1921              | 0.460 | 883                 | 684                             | 0.9               | 0.9             | 3.664     | A                             |
| B - A1041 Bawdry Road (North) | 776                   | 194                     | 834                       | 1605              | 0.484 | 776                 | 1065                            | 0.9               | 1.0             | 4.445     | A                             |
| C - A63 (East)                | 682                   | 171                     | 933                       | 1712              | 0.399 | 682                 | 677                             | 0.7               | 0.7             | 3.774     | A                             |
| D - A1041 Bawdry Road (South) | 1026                  | 257                     | 673                       | 1742              | 0.589 | 1026                | 942                             | 1.5               | 1.5             | 5.159     | A                             |

### 08:15 - 08:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 721                   | 180                     | 831                       | 2029              | 0.355 | 722                 | 559                             | 0.9               | 0.6             | 2.915     | A                             |
| B - A1041 Bawdry Road (North) | 634                   | 158                     | 682                       | 1683              | 0.377 | 635                 | 871                             | 1.0               | 0.6             | 3.525     | A                             |
| C - A63 (East)                | 557                   | 139                     | 763                       | 1803              | 0.309 | 558                 | 554                             | 0.7               | 0.5             | 3.126     | A                             |
| D - A1041 Bawdry Road (South) | 838                   | 210                     | 550                       | 1806              | 0.464 | 840                 | 771                             | 1.5               | 0.9             | 3.832     | A                             |

### 08:30 - 08:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 604                   | 151                     | 695                       | 2109              | 0.286 | 605                 | 468                             | 0.6               | 0.4             | 2.529     | A                             |
| B - A1041 Bawdry Road (North) | 531                   | 133                     | 571                       | 1739              | 0.305 | 531                 | 729                             | 0.6               | 0.5             | 3.053     | A                             |
| C - A63 (East)                | 466                   | 117                     | 639                       | 1870              | 0.249 | 467                 | 464                             | 0.5               | 0.4             | 2.773     | A                             |
| D - A1041 Bawdry Road (South) | 702                   | 175                     | 461                       | 1854              | 0.379 | 703                 | 645                             | 0.9               | 0.6             | 3.212     | A                             |

# 2026 Do Nothing, PM

## Data Errors and Warnings

| Severity | Area     | Item                                                | Description                                                                                                      |
|----------|----------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | A - A63 (West) - Roundabout Geometry                | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | B - A1041 Bawdry Road (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|------------|--------------------|--------------|
| 6        | Site 6 | Standard Roundabout |                       | C, D, A, B | 5.57               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.57              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name   | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D8 | 2026 Do Nothing | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                           | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A63 (West)                |            | ONE HOUR     | ✓            | 756                     | 100.000            |
| B - A1041 Bawdry Road (North) |            | ONE HOUR     | ✓            | 1071                    | 100.000            |
| C - A63 (East)                |            | ONE HOUR     | ✓            | 635                     | 100.000            |
| D - A1041 Bawdry Road (South) |            | ONE HOUR     | ✓            | 860                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|                                    | To             |                               |                |                               |
|------------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                                    | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From A - A63 (West)                | 0              | 324                           | 250            | 182                           |
| From B - A1041 Bawdry Road (North) | 430            | 2                             | 90             | 549                           |
| From C - A63 (East)                | 187            | 194                           | 0              | 254                           |
| From D - A1041 Bawdry Road (South) | 155            | 442                           | 281            | 2                             |

### Proportions

|                                    | To             |                               |                |                               |
|------------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                                    | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From A - A63 (West)                | 0.00           | 0.43                          | 0.33           | 0.2                           |
| From B - A1041 Bawdry Road (North) | 0.40           | 0.00                          | 0.08           | 0.5                           |
| From C - A63 (East)                | 0.29           | 0.31                          | 0.00           | 0.4                           |
| From D - A1041 Bawdry Road (South) | 0.18           | 0.51                          | 0.30           | 0.0                           |

## Vehicle Mix



### Heavy Vehicle Percentages

| From                          | To             |                               |                |                               |
|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| A - A63 (West)                | 0              | 1                             | 9              | 1                             |
| B - A1041 Bawdry Road (North) | 0              | 100                           | 0              | 1                             |
| C - A63 (East)                | 9              | 1                             | 0              | 3                             |
| D - A1041 Bawdry Road (South) | 4              | 0                             | 2              | 100                           |

### Average PCU Per Veh

| From                          | To             |                               |                |                               |
|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| A - A63 (West)                | 1.000          | 1.007                         | 1.091          | 1.0                           |
| B - A1041 Bawdry Road (North) | 1.002          | 2.000                         | 1.000          | 1.0                           |
| C - A63 (East)                | 1.086          | 1.006                         | 1.000          | 1.0                           |
| D - A1041 Bawdry Road (South) | 1.045          | 1.005                         | 1.022          | 2.0                           |

## Detailed Demand Data

### Demand for each time segment

| Arm                           | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------------------------|--------------|-----------------|------------------------|
| A - A63 (West)                | 16:30-16:45  | 569             | 569                    |
|                               | 16:45-17:00  | 680             | 680                    |
|                               | 17:00-17:15  | 833             | 833                    |
|                               | 17:15-17:30  | 833             | 833                    |
|                               | 17:30-17:45  | 680             | 680                    |
|                               | 17:45-18:00  | 569             | 569                    |
| B - A1041 Bawdry Road (North) | 16:30-16:45  | 806             | 806                    |
|                               | 16:45-17:00  | 963             | 963                    |
|                               | 17:00-17:15  | 1179            | 1179                   |
|                               | 17:15-17:30  | 1179            | 1179                   |
|                               | 17:30-17:45  | 963             | 963                    |
|                               | 17:45-18:00  | 806             | 806                    |
| C - A63 (East)                | 16:30-16:45  | 478             | 478                    |
|                               | 16:45-17:00  | 571             | 571                    |
|                               | 17:00-17:15  | 699             | 699                    |
|                               | 17:15-17:30  | 699             | 699                    |
|                               | 17:30-17:45  | 571             | 571                    |
|                               | 17:45-18:00  | 478             | 478                    |
| D - A1041 Bawdry Road (South) | 16:30-16:45  | 648             | 648                    |
|                               | 16:45-17:00  | 773             | 773                    |
|                               | 17:00-17:15  | 947             | 947                    |
|                               | 17:15-17:30  | 947             | 947                    |
|                               | 17:30-17:45  | 773             | 773                    |
|                               | 17:45-18:00  | 648             | 648                    |

## 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) |
|-------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A63 (West)                | 0.43    | 3.37          | 0.8             | A       | 694                     | 1041                          |
| B - A1041 Bawdry Road (North) | 0.72    | 7.87          | 2.5             | A       | 983                     | 1474                          |
| C - A63 (East)                | 0.46    | 4.53          | 0.9             | A       | 583                     | 874                           |
| D - A1041 Bawdry Road (South) | 0.58    | 5.41          | 1.4             | A       | 789                     | 1184                          |

## Main Results for each time segment

### 16:30 - 16:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 569                   | 142                     | 676                       | 2120              | 0.269 | 568                 | 579                             | 0.0               | 0.4             | 2.393     | A                             |
| B - A1041 Bawdry Road (North) | 806                   | 202                     | 522                       | 1764              | 0.457 | 803                 | 722                             | 0.0               | 0.8             | 3.768     | A                             |
| C - A63 (East)                | 478                   | 120                     | 874                       | 1744              | 0.274 | 476                 | 451                             | 0.0               | 0.4             | 2.946     | A                             |
| D - A1041 Bawdry Road (South) | 648                   | 162                     | 610                       | 1775              | 0.365 | 645                 | 740                             | 0.0               | 0.6             | 3.238     | A                             |

### 16:45 - 17:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 680                   | 170                     | 809                       | 2042              | 0.333 | 679                 | 693                             | 0.4               | 0.5             | 2.727     | A                             |
| B - A1041 Bawdry Road (North) | 963                   | 241                     | 625                       | 1712              | 0.562 | 961                 | 864                             | 0.8               | 1.3             | 4.827     | A                             |
| C - A63 (East)                | 571                   | 143                     | 1046                      | 1651              | 0.346 | 570                 | 540                             | 0.4               | 0.5             | 3.457     | A                             |
| D - A1041 Bawdry Road (South) | 773                   | 193                     | 730                       | 1712              | 0.452 | 772                 | 886                             | 0.6               | 0.8             | 3.898     | A                             |

### 17:00 - 17:15

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 833                   | 208                     | 990                       | 1936              | 0.430 | 832                 | 847                             | 0.5               | 0.8             | 3.364     | A                             |
| B - A1041 Bawdry Road (North) | 1179                  | 295                     | 764                       | 1641              | 0.719 | 1174                | 1057                            | 1.3               | 2.5             | 7.710     | A                             |
| C - A63 (East)                | 699                   | 175                     | 1278                      | 1526              | 0.458 | 698                 | 661                             | 0.5               | 0.9             | 4.505     | A                             |
| D - A1041 Bawdry Road (South) | 947                   | 237                     | 893                       | 1626              | 0.582 | 945                 | 1084                            | 0.8               | 1.4             | 5.363     | A                             |

### 17:15 - 17:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 833                   | 208                     | 992                       | 1935              | 0.430 | 833                 | 850                             | 0.8               | 0.8             | 3.373     | A                             |
| B - A1041 Bawdry Road (North) | 1179                  | 295                     | 766                       | 1640              | 0.719 | 1179                | 1059                            | 2.5               | 2.5             | 7.874     | A                             |
| C - A63 (East)                | 699                   | 175                     | 1283                      | 1524              | 0.459 | 699                 | 662                             | 0.9               | 0.9             | 4.632     | A                             |
| D - A1041 Bawdry Road (South) | 947                   | 237                     | 895                       | 1625              | 0.583 | 947                 | 1087                            | 1.4               | 1.4             | 5.410     | A                             |

### 17:30 - 17:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 680                   | 170                     | 813                       | 2040              | 0.333 | 681                 | 697                             | 0.8               | 0.5             | 2.739     | A                             |
| B - A1041 Bawdry Road (North) | 963                   | 241                     | 627                       | 1711              | 0.563 | 968                 | 867                             | 2.5               | 1.3             | 4.920     | A                             |
| C - A63 (East)                | 571                   | 143                     | 1052                      | 1648              | 0.346 | 572                 | 542                             | 0.9               | 0.6             | 3.482     | A                             |
| D - A1041 Bawdry Road (South) | 773                   | 193                     | 734                       | 1710              | 0.452 | 776                 | 891                             | 1.4               | 0.8             | 3.934     | A                             |

### 17:45 - 18:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 569                   | 142                     | 680                       | 2118              | 0.269 | 570                 | 582                             | 0.5               | 0.4             | 2.404     | A                             |
| B - A1041 Bawdry Road (North) | 806                   | 202                     | 524                       | 1763              | 0.457 | 808                 | 725                             | 1.3               | 0.9             | 3.814     | A                             |
| C - A63 (East)                | 478                   | 120                     | 879                       | 1741              | 0.275 | 479                 | 453                             | 0.6               | 0.4             | 2.963     | A                             |
| D - A1041 Bawdry Road (South) | 648                   | 162                     | 613                       | 1773              | 0.365 | 649                 | 744                             | 0.8               | 0.6             | 3.261     | A                             |

# 2026 Do Something, AM

## Data Errors and Warnings

| Severity | Area     | Item                                                | Description                                                                                                      |
|----------|----------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | A - A63 (West) - Roundabout Geometry                | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | B - A1041 Bawdry Road (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|------------|--------------------|--------------|
| 6        | Site 6 | Standard Roundabout |                       | C, D, A, B | 4.34               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 4.34              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name     | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D9 | 2026 Do Something | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | 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 - A63 (West)                |            | ONE HOUR     | ✓            | 803                     | 100.000            |
| B - A1041 Bawdry Road (North) |            | ONE HOUR     | ✓            | 714                     | 100.000            |
| C - A63 (East)                |            | ONE HOUR     | ✓            | 623                     | 100.000            |
| D - A1041 Bawdry Road (South) |            | ONE HOUR     | ✓            | 932                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                            | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From | A - A63 (West)                | 0              | 323                           | 233            | 247                           |
|      | B - A1041 Bawdry Road (North) | 246            | 0                             | 106            | 362                           |
|      | C - A63 (East)                | 269            | 96                            | 0              | 258                           |
|      | D - A1041 Bawdry Road (South) | 106            | 548                           | 276            | 2                             |

### Proportions

|      | To                            | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From | A - A63 (West)                | 0.00           | 0.40                          | 0.29           | 0.31                          |
|      | B - A1041 Bawdry Road (North) | 0.34           | 0.00                          | 0.15           | 0.51                          |
|      | C - A63 (East)                | 0.43           | 0.15                          | 0.00           | 0.42                          |
|      | D - A1041 Bawdry Road (South) | 0.11           | 0.59                          | 0.30           | 0.01                          |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0              | 2                             | 14             | 4                             |
|      | B - A1041 Bawdry Road (North) | 3              | 0                             | 1              | 3                             |
|      | C - A63 (East)                | 12             | 1                             | 0              | 7                             |
|      | D - A1041 Bawdry Road (South) | 4              | 1                             | 5              | 100                           |

### Average PCU Per Veh

|      | To                            |                |                               |                |                     |
|------|-------------------------------|----------------|-------------------------------|----------------|---------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D A1041 Baw Ro (Sou |
|      | A - A63 (West)                | 1.000          | 1.021                         | 1.135          | 1.0                 |
|      | B - A1041 Bawdry Road (North) | 1.027          | 1.000                         | 1.011          | 1.0                 |
|      | C - A63 (East)                | 1.121          | 1.011                         | 1.000          | 1.0                 |
|      | D - A1041 Bawdry Road (South) | 1.043          | 1.008                         | 1.055          | 2.0                 |

## Detailed Demand Data

### Demand for each time segment

| Arm                           | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------------------------|--------------|-----------------|------------------------|
| A - A63 (West)                | 07:15-07:30  | 605             | 605                    |
|                               | 07:30-07:45  | 722             | 722                    |
|                               | 07:45-08:00  | 884             | 884                    |
|                               | 08:00-08:15  | 884             | 884                    |
|                               | 08:15-08:30  | 722             | 722                    |
|                               | 08:30-08:45  | 605             | 605                    |
| B - A1041 Bawdry Road (North) | 07:15-07:30  | 538             | 538                    |
|                               | 07:30-07:45  | 642             | 642                    |
|                               | 07:45-08:00  | 788             | 788                    |
|                               | 08:00-08:15  | 788             | 788                    |
|                               | 08:15-08:30  | 642             | 642                    |
|                               | 08:30-08:45  | 538             | 538                    |
| C - A63 (East)                | 07:15-07:30  | 469             | 469                    |
|                               | 07:30-07:45  | 560             | 560                    |
|                               | 07:45-08:00  | 686             | 686                    |
|                               | 08:00-08:15  | 686             | 686                    |
|                               | 08:15-08:30  | 560             | 560                    |
|                               | 08:30-08:45  | 469             | 469                    |
| D - A1041 Bawdry Road (South) | 07:15-07:30  | 702             | 702                    |
|                               | 07:30-07:45  | 838             | 838                    |
|                               | 07:45-08:00  | 1026            | 1026                   |
|                               | 08:00-08:15  | 1026            | 1026                   |
|                               | 08:15-08:30  | 838             | 838                    |
|                               | 08:30-08:45  | 702             | 702                    |

## 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) |
|-------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A63 (West)                | 0.46    | 3.67          | 0.9             | A       | 737                     | 1105                          |
| B - A1041 Bawdry Road (North) | 0.49    | 4.50          | 1.0             | A       | 655                     | 983                           |
| C - A63 (East)                | 0.40    | 3.81          | 0.7             | A       | 572                     | 858                           |
| D - A1041 Bawdry Road (South) | 0.59    | 5.16          | 1.5             | A       | 855                     | 1283                          |

## Main Results for each time segment

### 07:15 - 07:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 605                   | 151                     | 692                       | 2111              | 0.286 | 603                 | 466                             | 0.0               | 0.4             | 2.520     | A                             |
| B - A1041 Bawdry Road (North) | 538                   | 134                     | 569                       | 1740              | 0.309 | 536                 | 726                             | 0.0               | 0.5             | 3.057     | A                             |
| C - A63 (East)                | 469                   | 117                     | 643                       | 1867              | 0.251 | 468                 | 462                             | 0.0               | 0.4             | 2.774     | A                             |
| D - A1041 Bawdry Road (South) | 702                   | 175                     | 459                       | 1855              | 0.378 | 699                 | 652                             | 0.0               | 0.6             | 3.188     | A                             |

### 07:30 - 07:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 722                   | 180                     | 828                       | 2031              | 0.355 | 721                 | 558                             | 0.4               | 0.6             | 2.902     | A                             |
| B - A1041 Bawdry Road (North) | 642                   | 160                     | 681                       | 1683              | 0.381 | 641                 | 868                             | 0.5               | 0.6             | 3.536     | A                             |
| C - A63 (East)                | 560                   | 140                     | 770                       | 1799              | 0.311 | 560                 | 552                             | 0.4               | 0.5             | 3.133     | A                             |
| D - A1041 Bawdry Road (South) | 838                   | 210                     | 549                       | 1807              | 0.464 | 837                 | 781                             | 0.6               | 0.9             | 3.802     | A                             |

### 07:45 - 08:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 884                   | 221                     | 1013                      | 1922              | 0.460 | 883                 | 683                             | 0.6               | 0.9             | 3.654     | A                             |
| B - A1041 Bawdry Road (North) | 786                   | 197                     | 833                       | 1606              | 0.490 | 785                 | 1063                            | 0.6               | 1.0             | 4.483     | A                             |
| C - A63 (East)                | 686                   | 171                     | 942                       | 1707              | 0.402 | 685                 | 676                             | 0.5               | 0.7             | 3.800     | A                             |
| D - A1041 Bawdry Road (South) | 1026                  | 257                     | 672                       | 1742              | 0.589 | 1024                | 955                             | 0.9               | 1.5             | 5.122     | A                             |

### 08:00 - 08:15

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 884                   | 221                     | 1015                      | 1921              | 0.460 | 884                 | 684                             | 0.9               | 0.9             | 3.667     | A                             |
| B - A1041 Bawdry Road (North) | 786                   | 197                     | 835                       | 1605              | 0.490 | 786                 | 1065                            | 1.0               | 1.0             | 4.501     | A                             |
| C - A63 (East)                | 686                   | 171                     | 944                       | 1706              | 0.402 | 686                 | 677                             | 0.7               | 0.7             | 3.809     | A                             |
| D - A1041 Bawdry Road (South) | 1026                  | 257                     | 673                       | 1742              | 0.589 | 1026                | 957                             | 1.5               | 1.5             | 5.159     | A                             |

### 08:15 - 08:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 722                   | 180                     | 831                       | 2029              | 0.356 | 723                 | 559                             | 0.9               | 0.6             | 2.914     | A                             |
| B - A1041 Bawdry Road (North) | 642                   | 160                     | 683                       | 1682              | 0.382 | 643                 | 871                             | 1.0               | 0.6             | 3.551     | A                             |
| C - A63 (East)                | 560                   | 140                     | 772                       | 1798              | 0.311 | 561                 | 554                             | 0.7               | 0.5             | 3.143     | A                             |
| D - A1041 Bawdry Road (South) | 838                   | 210                     | 550                       | 1806              | 0.464 | 840                 | 783                             | 1.5               | 0.9             | 3.832     | A                             |

### 08:30 - 08:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 605                   | 151                     | 695                       | 2109              | 0.287 | 605                 | 468                             | 0.6               | 0.4             | 2.532     | A                             |
| B - A1041 Bawdry Road (North) | 538                   | 134                     | 572                       | 1739              | 0.309 | 538                 | 729                             | 0.6               | 0.5             | 3.071     | A                             |
| C - A63 (East)                | 469                   | 117                     | 646                       | 1866              | 0.251 | 470                 | 464                             | 0.5               | 0.4             | 2.786     | A                             |
| D - A1041 Bawdry Road (South) | 702                   | 175                     | 461                       | 1854              | 0.379 | 703                 | 655                             | 0.9               | 0.6             | 3.209     | A                             |

# 2026 Do Something, PM

## Data Errors and Warnings

| Severity | Area     | Item                                                | Description                                                                                                      |
|----------|----------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | A - A63 (West) - Roundabout Geometry                | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning  | Geometry | B - A1041 Bawdry Road (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name   | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|--------|---------------------|-----------------------|------------|--------------------|--------------|
| 6        | Site 6 | Standard Roundabout |                       | C, D, A, B | 5.64               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.64              | A           |

## Traffic Demand

### Demand Set Details

| ID  | Scenario name     | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|-------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D10 | 2026 Do Something | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                           | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-------------------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - A63 (West)                |            | ONE HOUR     | ✓            | 756                     | 100.000            |
| B - A1041 Bawdry Road (North) |            | ONE HOUR     | ✓            | 1071                    | 100.000            |
| C - A63 (East)                |            | ONE HOUR     | ✓            | 635                     | 100.000            |
| D - A1041 Bawdry Road (South) |            | ONE HOUR     | ✓            | 880                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|      |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From | A - A63 (West)                | 0              | 324                           | 250            | 182                           |
|      | B - A1041 Bawdry Road (North) | 430            | 2                             | 90             | 549                           |
|      | C - A63 (East)                | 187            | 194                           | 0              | 254                           |
|      | D - A1041 Bawdry Road (South) | 157            | 455                           | 286            | 2                             |

### Proportions

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
|      |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
| From | A - A63 (West)                | 0.00           | 0.43                          | 0.33           | 0.2                           |
|      | B - A1041 Bawdry Road (North) | 0.40           | 0.00                          | 0.08           | 0.5                           |
|      | C - A63 (East)                | 0.29           | 0.31                          | 0.00           | 0.4                           |
|      | D - A1041 Bawdry Road (South) | 0.18           | 0.52                          | 0.30           | 0.0                           |

## Vehicle Mix



### Heavy Vehicle Percentages

|      | To                            |                |                               |                |                               |
|------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D - A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 0              | 1                             | 9              | 1                             |
|      | B - A1041 Bawdry Road (North) | 0              | 100                           | 0              | 1                             |
|      | C - A63 (East)                | 9              | 1                             | 0              | 3                             |
|      | D - A1041 Bawdry Road (South) | 4              | 0                             | 2              | 100                           |

### Average PCU Per Veh

|      | To                            |                |                               |                |                             |
|------|-------------------------------|----------------|-------------------------------|----------------|-----------------------------|
| From |                               | A - A63 (West) | B - A1041 Bawdry Road (North) | C - A63 (East) | D A1041 Bawdry Road (South) |
|      | A - A63 (West)                | 1.000          | 1.007                         | 1.091          | 1.0                         |
|      | B - A1041 Bawdry Road (North) | 1.002          | 2.000                         | 1.000          | 1.0                         |
|      | C - A63 (East)                | 1.088          | 1.008                         | 1.000          | 1.0                         |
|      | D - A1041 Bawdry Road (South) | 1.045          | 1.005                         | 1.022          | 2.0                         |

## Detailed Demand Data

### Demand for each time segment

| Arm                           | Time Segment | Demand (PCU/hr) | Demand in PCU (PCU/hr) |
|-------------------------------|--------------|-----------------|------------------------|
| A - A63 (West)                | 16:30-16:45  | 569             | 569                    |
|                               | 16:45-17:00  | 680             | 680                    |
|                               | 17:00-17:15  | 833             | 833                    |
|                               | 17:15-17:30  | 833             | 833                    |
|                               | 17:30-17:45  | 680             | 680                    |
|                               | 17:45-18:00  | 569             | 569                    |
| B - A1041 Bawdry Road (North) | 16:30-16:45  | 808             | 808                    |
|                               | 16:45-17:00  | 963             | 963                    |
|                               | 17:00-17:15  | 1179            | 1179                   |
|                               | 17:15-17:30  | 1179            | 1179                   |
|                               | 17:30-17:45  | 963             | 963                    |
|                               | 17:45-18:00  | 808             | 808                    |
| C - A63 (East)                | 16:30-16:45  | 478             | 478                    |
|                               | 16:45-17:00  | 571             | 571                    |
|                               | 17:00-17:15  | 699             | 699                    |
|                               | 17:15-17:30  | 699             | 699                    |
|                               | 17:30-17:45  | 571             | 571                    |
|                               | 17:45-18:00  | 478             | 478                    |
| D - A1041 Bawdry Road (South) | 16:30-16:45  | 663             | 663                    |
|                               | 16:45-17:00  | 791             | 791                    |
|                               | 17:00-17:15  | 969             | 969                    |
|                               | 17:15-17:30  | 969             | 969                    |
|                               | 17:30-17:45  | 791             | 791                    |
|                               | 17:45-18:00  | 663             | 663                    |

## 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) |
|-------------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| A - A63 (West)                | 0.43    | 3.41          | 0.8             | A       | 694                     | 1041                          |
| B - A1041 Bawdry Road (North) | 0.72    | 7.92          | 2.6             | A       | 983                     | 1474                          |
| C - A63 (East)                | 0.46    | 4.53          | 0.9             | A       | 583                     | 874                           |
| D - A1041 Bawdry Road (South) | 0.60    | 5.59          | 1.5             | A       | 808                     | 1212                          |

## Main Results for each time segment

### 16:30 - 16:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 569                   | 142                     | 690                       | 2112              | 0.270 | 568                 | 580                             | 0.0               | 0.4             | 2.406     | A                             |
| B - A1041 Bawdry Road (North) | 806                   | 202                     | 526                       | 1762              | 0.458 | 803                 | 732                             | 0.0               | 0.8             | 3.776     | A                             |
| C - A63 (East)                | 478                   | 120                     | 874                       | 1744              | 0.274 | 476                 | 455                             | 0.0               | 0.4             | 2.946     | A                             |
| D - A1041 Bawdry Road (South) | 663                   | 166                     | 610                       | 1775              | 0.373 | 660                 | 740                             | 0.0               | 0.6             | 3.281     | A                             |

### 16:45 - 17:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 680                   | 170                     | 825                       | 2033              | 0.335 | 679                 | 695                             | 0.4               | 0.5             | 2.746     | A                             |
| B - A1041 Bawdry Road (North) | 963                   | 241                     | 629                       | 1710              | 0.563 | 961                 | 876                             | 0.8               | 1.3             | 4.841     | A                             |
| C - A63 (East)                | 571                   | 143                     | 1046                      | 1651              | 0.346 | 570                 | 544                             | 0.4               | 0.5             | 3.457     | A                             |
| D - A1041 Bawdry Road (South) | 791                   | 198                     | 730                       | 1712              | 0.462 | 790                 | 886                             | 0.6               | 0.9             | 3.974     | A                             |

### 17:00 - 17:15

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 833                   | 208                     | 1010                      | 1924              | 0.433 | 832                 | 849                             | 0.5               | 0.8             | 3.400     | A                             |
| B - A1041 Bawdry Road (North) | 1179                  | 295                     | 770                       | 1638              | 0.720 | 1174                | 1072                            | 1.3               | 2.5             | 7.755     | A                             |
| C - A63 (East)                | 699                   | 175                     | 1278                      | 1526              | 0.458 | 698                 | 666                             | 0.5               | 0.9             | 4.505     | A                             |
| D - A1041 Bawdry Road (South) | 969                   | 242                     | 893                       | 1626              | 0.596 | 967                 | 1084                            | 0.9               | 1.5             | 5.537     | A                             |

### 17:15 - 17:30

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 833                   | 208                     | 1012                      | 1923              | 0.433 | 833                 | 852                             | 0.8               | 0.8             | 3.409     | A                             |
| B - A1041 Bawdry Road (North) | 1179                  | 295                     | 771                       | 1637              | 0.720 | 1179                | 1074                            | 2.5               | 2.6             | 7.923     | A                             |
| C - A63 (East)                | 699                   | 175                     | 1283                      | 1524              | 0.459 | 699                 | 668                             | 0.9               | 0.9             | 4.532     | A                             |
| D - A1041 Bawdry Road (South) | 969                   | 242                     | 895                       | 1625              | 0.597 | 969                 | 1087                            | 1.5               | 1.5             | 5.591     | A                             |

### 17:30 - 17:45

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 680                   | 170                     | 829                       | 2031              | 0.335 | 681                 | 699                             | 0.8               | 0.5             | 2.759     | A                             |
| B - A1041 Bawdry Road (North) | 963                   | 241                     | 631                       | 1709              | 0.564 | 968                 | 879                             | 2.6               | 1.3             | 4.938     | A                             |
| C - A63 (East)                | 571                   | 143                     | 1052                      | 1648              | 0.346 | 572                 | 547                             | 0.9               | 0.6             | 3.479     | A                             |
| D - A1041 Bawdry Road (South) | 791                   | 198                     | 734                       | 1710              | 0.463 | 794                 | 891                             | 1.5               | 0.9             | 4.011     | A                             |

### 17:45 - 18:00

| Arm                           | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-------------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| A - A63 (West)                | 569                   | 142                     | 693                       | 2110              | 0.270 | 570                 | 584                             | 0.5               | 0.4             | 2.414     | A                             |
| B - A1041 Bawdry Road (North) | 806                   | 202                     | 528                       | 1761              | 0.458 | 808                 | 735                             | 1.3               | 0.9             | 3.819     | A                             |
| C - A63 (East)                | 478                   | 120                     | 879                       | 1741              | 0.275 | 479                 | 457                             | 0.6               | 0.4             | 2.965     | A                             |
| D - A1041 Bawdry Road (South) | 663                   | 166                     | 613                       | 1773              | 0.374 | 664                 | 744                             | 0.9               | 0.6             | 3.308     | A                             |