### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 520 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 98 | 25 | 523 | 0.187 | 98 | 0.3 | 0.2 | 8.480 | A |
| C-A | 916 | 229 | | | 916 | | | | |
| A-B | 812 | 203 | | | 812 | | | | |
| A-C | 236 | 59 | | | 236 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 551 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 82 | 21 | 551 | 0.149 | 82 | 0.2 | 0.2 | 7.683 | A |
| C-A | 767 | 192 | | | 767 | | | | |
| A-B | 680 | 170 | | | 680 | | | | |
| A-C | 198 | 50 | | | 198 | | | | |

# 2026 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.33 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D20 | 2026 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Caldbeck Road (West) | | ONE HOUR | ✓ | 1066 | 100.000 |
| B - Welton Road (North) | | ONE HOUR | ✓ | 0 | 100.000 |
| C - Caldbeck Road (East) | | ONE HOUR | ✓ | 492 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 678 | 388 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 430 | 62 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 0 | 0 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.00 | 0.00 | 0.0 | A | 0 | 0 |
| C-AB | 0.14 | 8.29 | 0.2 | A | 57 | 85 |
| C-A | | | | | 395 | 592 |
| A-B | | | | | 622 | 933 |
| A-C | | | | | 356 | 534 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 583 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 47 | 12 | 563 | 0.083 | 46 | 0.0 | 0.1 | 6.959 | A |
| C-A | 324 | 81 | | | 324 | | | | |
| A-B | 510 | 128 | | | 510 | | | | |
| A-C | 292 | 73 | | | 292 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 561 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 56 | 14 | 538 | 0.104 | 56 | 0.1 | 0.1 | 7.463 | A |
| C-A | 387 | 97 | | | 387 | | | | |
| A-B | 610 | 152 | | | 610 | | | | |
| A-C | 349 | 87 | | | 349 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 529 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 68 | 17 | 503 | 0.136 | 68 | 0.1 | 0.2 | 8.286 | A |
| C-A | 473 | 118 | | | 473 | | | | |
| A-B | 746 | 187 | | | 746 | | | | |
| A-C | 427 | 107 | | | 427 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 529 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 68 | 17 | 503 | 0.136 | 68 | 0.2 | 0.2 | 8.289 | A |
| C-A | 473 | 118 | | | 473 | | | | |
| A-B | 746 | 187 | | | 746 | | | | |
| A-C | 427 | 107 | | | 427 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 561 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 56 | 14 | 538 | 0.104 | 56 | 0.2 | 0.1 | 7.474 | A |
| C-A | 387 | 97 | | | 387 | | | | |
| A-B | 610 | 152 | | | 610 | | | | |
| A-C | 349 | 87 | | | 349 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 583 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 47 | 12 | 563 | 0.083 | 47 | 0.1 | 0.1 | 6.972 | A |
| C-A | 324 | 81 | | | 324 | | | | |
| A-B | 510 | 128 | | | 510 | | | | |
| A-C | 292 | 73 | | | 292 | | | | |

# 2026 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.49 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D21 | 2026 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Caldbeck Road (West) | | ONE HOUR | ✓ | 1164 | 100.000 |
| B - Welton Road (North) | | ONE HOUR | ✓ | 0 | 100.000 |
| C - Caldbeck Road (East) | | ONE HOUR | ✓ | 1112 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 936 | 228 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 1000 | 112 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 0 | 0 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.00 | 0.00 | 0.0 | A | 0 | 0 |
| C-AB | 0.25 | 9.93 | 0.3 | A | 103 | 154 |
| C-A | | | | | 917 | 1376 |
| A-B | | | | | 859 | 1288 |
| A-C | | | | | 209 | 314 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 554 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 84 | 21 | 551 | 0.153 | 84 | 0.0 | 0.2 | 7.686 | A |
| C-A | 753 | 188 | | | 753 | | | | |
| A-B | 705 | 176 | | | 705 | | | | |
| A-C | 172 | 43 | | | 172 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 525 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 101 | 25 | 524 | 0.192 | 101 | 0.2 | 0.2 | 8.504 | A |
| C-A | 899 | 225 | | | 899 | | | | |
| A-B | 841 | 210 | | | 841 | | | | |
| A-C | 205 | 51 | | | 205 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 483 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 124 | 31 | 486 | 0.254 | 123 | 0.2 | 0.3 | 9.911 | A |
| C-A | 1101 | 275 | | | 1101 | | | | |
| A-B | 1031 | 258 | | | 1031 | | | | |
| A-C | 251 | 63 | | | 251 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 483 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 124 | 31 | 486 | 0.254 | 124 | 0.3 | 0.3 | 9.933 | A |
| C-A | 1101 | 275 | | | 1101 | | | | |
| A-B | 1031 | 258 | | | 1031 | | | | |
| A-C | 251 | 63 | | | 251 | | | | |

**17:15 - 17:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 525 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 101 | 25 | 524 | 0.192 | 101 | 0.3 | 0.2 | 8.528 | A |
| C-A | 899 | 225 | | | 899 | | | | |
| A-B | 841 | 210 | | | 841 | | | | |
| A-C | 205 | 51 | | | 205 | | | | |

**17:30 - 17:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 554 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 84 | 21 | 551 | 0.153 | 85 | 0.2 | 0.2 | 7.718 | A |
| C-A | 753 | 188 | | | 753 | | | | |
| A-B | 705 | 176 | | | 705 | | | | |
| A-C | 172 | 43 | | | 172 | | | | |

# 2026 Base + CD, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.32 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D23 | 2026 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 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 - Caldbeck Road (West) | | ONE HOUR | ✓ | 1088 | 100.000 |
| B - Welton Road (North) | | ONE HOUR | ✓ | 0 | 100.000 |
| C - Caldbeck Road (East) | | ONE HOUR | ✓ | 516 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 678 | 410 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 454 | 62 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 0 | 0 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.00 | 0.00 | 0.0 | A | 0 | 0 |
| C-AB | 0.14 | 8.37 | 0.2 | A | 57 | 85 |
| C-A | | | | | 417 | 625 |
| A-B | | | | | 622 | 933 |
| A-C | | | | | 376 | 564 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 579 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 47 | 12 | 561 | 0.083 | 46 | 0.0 | 0.1 | 6.995 | A |
| C-A | 342 | 85 | | | 342 | | | | |
| A-B | 510 | 128 | | | 510 | | | | |
| A-C | 309 | 77 | | | 309 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 556 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 56 | 14 | 535 | 0.104 | 56 | 0.1 | 0.1 | 7.514 | A |
| C-A | 408 | 102 | | | 408 | | | | |
| A-B | 610 | 152 | | | 610 | | | | |
| A-C | 369 | 92 | | | 369 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 523 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 68 | 17 | 499 | 0.137 | 68 | 0.1 | 0.2 | 8.356 | A |
| C-A | 500 | 125 | | | 500 | | | | |
| A-B | 746 | 187 | | | 746 | | | | |
| A-C | 451 | 113 | | | 451 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 523 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 68 | 17 | 499 | 0.137 | 68 | 0.2 | 0.2 | 8.365 | A |
| C-A | 500 | 125 | | | 500 | | | | |
| A-B | 746 | 187 | | | 746 | | | | |
| A-C | 451 | 113 | | | 451 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 556 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 56 | 14 | 535 | 0.104 | 56 | 0.2 | 0.1 | 7.525 | A |
| C-A | 408 | 102 | | | 408 | | | | |
| A-B | 610 | 152 | | | 610 | | | | |
| A-C | 369 | 92 | | | 369 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 579 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 47 | 12 | 561 | 0.083 | 47 | 0.1 | 0.1 | 7.006 | A |
| C-A | 342 | 85 | | | 342 | | | | |
| A-B | 510 | 128 | | | 510 | | | | |
| A-C | 309 | 77 | | | 309 | | | | |

# 2026 Base + CD, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.48 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D24 | 2026 Base + CD | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Caldbeck Road (West) | | ONE HOUR | ✓ | 1209 | 100.000 |
| B - Welton Road (North) | | ONE HOUR | ✓ | 0 | 100.000 |
| C - Caldbeck Road (East) | | ONE HOUR | ✓ | 1159 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 936 | 273 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 1047 | 112 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 0 | 0 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.00 | 0.00 | 0.0 | A | 0 | 0 |
| C-AB | 0.26 | 10.16 | 0.3 | B | 103 | 154 |
| C-A | | | | | 961 | 1441 |
| A-B | | | | | 859 | 1288 |
| A-C | | | | | 251 | 376 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 546 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 84 | 21 | 546 | 0.155 | 84 | 0.0 | 0.2 | 7.778 | A |
| C-A | 788 | 197 | | | 788 | | | | |
| A-B | 705 | 176 | | | 705 | | | | |
| A-C | 206 | 51 | | | 206 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 514 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 101 | 25 | 517 | 0.195 | 101 | 0.2 | 0.2 | 8.639 | A |
| C-A | 941 | 235 | | | 941 | | | | |
| A-B | 841 | 210 | | | 841 | | | | |
| A-C | 245 | 61 | | | 245 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 469 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 124 | 31 | 478 | 0.259 | 123 | 0.2 | 0.3 | 10.133 | B |
| C-A | 1152 | 288 | | | 1152 | | | | |
| A-B | 1031 | 258 | | | 1031 | | | | |
| A-C | 301 | 75 | | | 301 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 469 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 124 | 31 | 478 | 0.259 | 124 | 0.3 | 0.3 | 10.157 | B |
| C-A | 1152 | 288 | | | 1152 | | | | |
| A-B | 1031 | 258 | | | 1031 | | | | |
| A-C | 301 | 75 | | | 301 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 514 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 101 | 25 | 517 | 0.195 | 101 | 0.3 | 0.2 | 8.665 | A |
| C-A | 941 | 235 | | | 941 | | | | |
| A-B | 841 | 210 | | | 841 | | | | |
| A-C | 245 | 61 | | | 245 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 546 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 84 | 21 | 546 | 0.155 | 85 | 0.2 | 0.2 | 7.810 | A |
| C-A | 788 | 197 | | | 788 | | | | |
| A-B | 705 | 176 | | | 705 | | | | |
| A-C | 206 | 51 | | | 206 | | | | |

# 2026 Base + CD + Dev, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.34 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D25 | 2026 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 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 - Caldbeck Road (West) | | ONE HOUR | ✓ | 1107 | 100.000 |
| B - Welton Road (North) | | ONE HOUR | ✓ | 0 | 100.000 |
| C - Caldbeck Road (East) | | ONE HOUR | ✓ | 523 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 697 | 410 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 458 | 65 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 0 | 0 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.00 | 0.00 | 0.0 | A | 0 | 0 |
| C-AB | 0.14 | 8.50 | 0.2 | A | 60 | 89 |
| C-A | | | | | 420 | 630 |
| A-B | | | | | 640 | 959 |
| A-C | | | | | 376 | 564 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 578 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 49 | 12 | 558 | 0.088 | 49 | 0.0 | 0.1 | 7.059 | A |
| C-A | 345 | 86 | | | 345 | | | | |
| A-B | 525 | 131 | | | 525 | | | | |
| A-C | 309 | 77 | | | 309 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 554 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 58 | 15 | 532 | 0.110 | 58 | 0.1 | 0.1 | 7.601 | A |
| C-A | 412 | 103 | | | 412 | | | | |
| A-B | 627 | 157 | | | 627 | | | | |
| A-C | 369 | 92 | | | 369 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 521 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 72 | 18 | 495 | 0.145 | 71 | 0.1 | 0.2 | 8.491 | A |
| C-A | 504 | 126 | | | 504 | | | | |
| A-B | 767 | 192 | | | 767 | | | | |
| A-C | 451 | 113 | | | 451 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 521 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 72 | 18 | 495 | 0.145 | 72 | 0.2 | 0.2 | 8.498 | A |
| C-A | 504 | 126 | | | 504 | | | | |
| A-B | 767 | 192 | | | 767 | | | | |
| A-C | 451 | 113 | | | 451 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 554 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 58 | 15 | 532 | 0.110 | 59 | 0.2 | 0.1 | 7.613 | A |
| C-A | 412 | 103 | | | 412 | | | | |
| A-B | 627 | 157 | | | 627 | | | | |
| A-C | 369 | 92 | | | 369 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 578 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 49 | 12 | 558 | 0.088 | 49 | 0.1 | 0.1 | 7.073 | A |
| C-A | 345 | 86 | | | 345 | | | | |
| A-B | 525 | 131 | | | 525 | | | | |
| A-C | 309 | 77 | | | 309 | | | | |

# 2026 Base + CD + Dev, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.49 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D26 | 2026 Base + CD + Dev | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Caldbeck Road (West) | | ONE HOUR | ✓ | 1216 | 100.000 |
| B - Welton Road (North) | | ONE HOUR | ✓ | 0 | 100.000 |
| C - Caldbeck Road (East) | | ONE HOUR | ✓ | 1176 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 943 | 273 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 1062 | 114 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (West) | B - Welton Road (North) | C - Caldbeck Road (East) |
| From | A - Caldbeck Road (West) | 0 | 0 | 0 |
| | B - Welton Road (North) | 0 | 0 | 0 |
| | C - Caldbeck Road (East) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.00 | 0.00 | 0.0 | A | 0 | 0 |
| C-AB | 0.26 | 10.25 | 0.4 | B | 105 | 157 |
| C-A | | | | | 974 | 1462 |
| A-B | | | | | 865 | 1298 |
| A-C | | | | | 251 | 376 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 544 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 86 | 21 | 545 | 0.158 | 85 | 0.0 | 0.2 | 7.817 | A |
| C-A | 800 | 200 | | | 800 | | | | |
| A-B | 710 | 177 | | | 710 | | | | |
| A-C | 206 | 51 | | | 206 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 512 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 103 | 26 | 516 | 0.199 | 102 | 0.2 | 0.2 | 8.695 | A |
| C-A | 955 | 239 | | | 955 | | | | |
| A-B | 848 | 212 | | | 848 | | | | |
| A-C | 245 | 61 | | | 245 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 467 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 126 | 31 | 477 | 0.264 | 125 | 0.2 | 0.4 | 10.230 | B |
| C-A | 1169 | 292 | | | 1169 | | | | |
| A-B | 1038 | 260 | | | 1038 | | | | |
| A-C | 301 | 75 | | | 301 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 467 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 126 | 31 | 477 | 0.264 | 126 | 0.4 | 0.4 | 10.254 | B |
| C-A | 1169 | 292 | | | 1169 | | | | |
| A-B | 1038 | 260 | | | 1038 | | | | |
| A-C | 301 | 75 | | | 301 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 512 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 103 | 26 | 516 | 0.199 | 103 | 0.4 | 0.3 | 8.726 | A |
| C-A | 955 | 239 | | | 955 | | | | |
| A-B | 848 | 212 | | | 848 | | | | |
| A-C | 245 | 61 | | | 245 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0 | 0 | 544 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| C-AB | 86 | 21 | 545 | 0.158 | 86 | 0.3 | 0.2 | 7.850 | A |
| C-A | 800 | 200 | | | 800 | | | | |
| A-B | 710 | 177 | | | 710 | | | | |
| A-C | 206 | 51 | | | 206 | | | | |

# APPENDIX K

Caldbeck Road / Thursby Road – PICADY Modelling

# Junctions 9

## PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947


For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk



**Filename:** 2_Caldbeck Road_Thursby Road.j9
**Path:** C:\Users\manch\Dropbox (mode)\Project\Manchester\2. Projects\J325601_Croft Retail Park, Welton Road\4. Data\6. Junction Capacity Assessments\PICADY\2_Caldbeck Road_Thursby Road
**Report generation date:** 28/05/2021 08:21:21

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»2018 Base, AM
»2018 Base, PM
»2021 Base, AM
»2021 Base, PM
»2021 Base + CD , AM
»2021 Base + CD, PM
»2021 Base + CD + Dev, AM
»2021 Base + CD + Dev, PM
»2026 Base, AM
»2026 Base, PM
»2026 Base + CD, AM
»2026 Base + CD, PM
»2026 Base + CD + Dev, AM
»2026 Base + CD + Dev, PM

## Summary of junction performance

| | AM | | | | PM | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Junction Delay (s) | Queue (PCU) | Delay (s) | RFC | Junction Delay (s) |
| | 2018 Base | | | | | | | |
| Stream B-C | 0.0 | 5.98 | 0.04 | 1.04 | 0.3 | 8.54 | 0.24 | 0.91 |
| Stream B-A | 0.0 | 9.63 | 0.03 | | 0.0 | 11.90 | 0.01 | |
| Stream C-AB | 0.2 | 6.92 | 0.17 | | 0.0 | 6.99 | 0.03 | |
| | 2021 Base | | | | | | | |
| Stream B-C | 0.0 | 6.02 | 0.04 | 1.05 | 0.3 | 8.77 | 0.25 | 0.93 |
| Stream B-A | 0.0 | 9.79 | 0.03 | | 0.0 | 12.17 | 0.01 | |
| Stream C-AB | 0.2 | 7.02 | 0.18 | | 0.0 | 7.08 | 0.03 | |
| | 2021 Base + CD | | | | | | | |
| Stream B-C | 0.1 | 6.56 | 0.09 | 1.59 | 0.6 | 11.30 | 0.38 | 2.12 |
| Stream B-A | 0.1 | 10.42 | 0.09 | | 0.2 | 15.18 | 0.17 | |
| Stream C-AB | 0.3 | 7.45 | 0.22 | | 0.2 | 8.04 | 0.13 | |
| | 2021 Base + CD + Dev | | | | | | | |
| Stream B-C | 0.1 | 6.58 | 0.09 | 1.59 | 0.6 | 11.43 | 0.38 | 2.12 |
| Stream B-A | 0.1 | 10.47 | 0.09 | | 0.2 | 15.36 | 0.17 | |
| Stream C-AB | 0.3 | 7.47 | 0.22 | | 0.2 | 8.10 | 0.13 | |
| | 2026 Base | | | | | | | |
| Stream B-C | 0.0 | 6.09 | 0.04 | 1.07 | 0.4 | 9.12 | 0.26 | 0.97 |
| Stream B-A | 0.0 | 9.96 | 0.03 | | 0.0 | 12.55 | 0.02 | |
| Stream C-AB | 0.2 | 7.15 | 0.19 | | 0.0 | 7.22 | 0.03 | |
| | 2026 Base + CD | | | | | | | |
| Stream B-C | 0.1 | 6.64 | 0.09 | 1.61 | 0.6 | 11.89 | 0.40 | 2.19 |
| Stream B-A | 0.1 | 10.66 | 0.09 | | 0.2 | 15.89 | 0.18 | |
| Stream C-AB | 0.3 | 7.60 | 0.23 | | 0.2 | 8.22 | 0.14 | |
| | 2026 Base + CD + Dev | | | | | | | |
| Stream B-C | 0.1 | 6.66 | 0.09 | 1.61 | 0.7 | 12.03 | 0.40 | 2.19 |
| Stream B-A | 0.1 | 10.70 | 0.09 | | 0.2 | 16.10 | 0.18 | |
| Stream C-AB | 0.3 | 7.63 | 0.23 | | 0.2 | 8.28 | 0.14 | |

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

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

## File summary

### File Description

| | |
|---|---|
| Title | (untitled) |
| Location | |
| Site number | |
| Date | 03/12/2018 |
| Version | |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | |
| Enumerator | DESKTOP-J595SBC\Manchester Mode |
| Description | |

## Units

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

## Analysis Options

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

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D1 | 2018 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D2 | 2018 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D4 | 2021 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D5 | 2021 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D9 | 2021 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D10 | 2021 Base + CD | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D11 | 2021 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D12 | 2021 Base + CD + Dev | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D13 | 2026 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D14 | 2026 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D15 | 2026 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D16 | 2026 Base + CD | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D20 | 2026 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D21 | 2026 Base + CD + Dev | 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 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 1.04 | A |

### Junction Network Options

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

## Arms

### Arms

| Arm | Name | Description | Arm type |
|---|---|---|---|
| A | Caldbeck Road (East) | | Major |
| B | Thursby Road (South) | | Minor |
| C | Caldbeck Road (West) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right turn bay | Width for right turn (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|---|---|---|---|---|---|---|---|
| C - Caldbeck Road (West) | 13.50 | | ✓ | 3.70 | 80.0 | ✓ | 3.00 |

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

### Minor Arm Geometry

| Arm | Minor arm type | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate flare length | Flare length (PCU) | Visibility to left (m) | Visibility to right (m) |
|---|---|---|---|---|---|---|---|---|---|---|
| B - Thursby Road (South) | One lane plus flare | 10.00 | 9.50 | 5.80 | 4.40 | 4.20 | | 1.00 | 45 | 30 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 517 | 0.063 | 0.160 | 0.101 | 0.229 |
| 1 | B-C | 722 | 0.075 | 0.188 | - | - |
| 1 | C-B | 722 | 0.188 | 0.188 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

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

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

# Traffic Demand

## Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D1 | 2018 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Caldbeck Road (East) | | ONE HOUR | ✓ | 467 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 31 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 358 | 100.000 |

# Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 35 | 432 |
| | B - Thursby Road (South) | 10 | 0 | 21 |
| | C - Caldbeck Road (West) | 262 | 96 | 0 |

# Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.04 | 5.98 | 0.0 | A | 19 | 29 |
| B-A | 0.03 | 9.63 | 0.0 | A | 9 | 14 |
| C-AB | 0.17 | 6.92 | 0.2 | A | 88 | 132 |
| C-A | | | | | 240 | 360 |
| A-B | | | | | 32 | 48 |
| A-C | | | | | 396 | 595 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 16 | 4 | 656 | 0.024 | 16 | 0.0 | 0.0 | 5.625 | A |
| B-A | 8 | 2 | 427 | 0.018 | 7 | 0.0 | 0.0 | 8.586 | A |
| C-AB | 72 | 18 | 656 | 0.110 | 72 | 0.0 | 0.1 | 6.161 | A |
| C-A | 197 | 49 | | | 197 | | | | |
| A-B | 26 | 7 | | | 26 | | | | |
| A-C | 325 | 81 | | | 325 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 19 | 5 | 643 | 0.029 | 19 | 0.0 | 0.0 | 5.770 | A |
| B-A | 9 | 2 | 409 | 0.022 | 9 | 0.0 | 0.0 | 8.997 | A |
| C-AB | 86 | 22 | 643 | 0.134 | 86 | 0.1 | 0.2 | 6.463 | A |
| C-A | 235 | 59 | | | 235 | | | | |
| A-B | 31 | 8 | | | 31 | | | | |
| A-C | 388 | 97 | | | 388 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 23 | 6 | 625 | 0.037 | 23 | 0.0 | 0.0 | 5.983 | A |
| B-A | 11 | 3 | 385 | 0.029 | 11 | 0.0 | 0.0 | 9.629 | A |
| C-AB | 106 | 26 | 626 | 0.169 | 106 | 0.2 | 0.2 | 6.917 | A |
| C-A | 288 | 72 | | | 288 | | | | |
| A-B | 39 | 10 | | | 39 | | | | |
| A-C | 476 | 119 | | | 476 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 23 | 6 | 625 | 0.037 | 23 | 0.0 | 0.0 | 5.984 | A |
| B-A | 11 | 3 | 385 | 0.029 | 11 | 0.0 | 0.0 | 9.630 | A |
| C-AB | 106 | 26 | 626 | 0.169 | 106 | 0.2 | 0.2 | 6.919 | A |
| C-A | 288 | 72 | | | 288 | | | | |
| A-B | 39 | 10 | | | 39 | | | | |
| A-C | 476 | 119 | | | 476 | | | | |

### 09:15 - 09:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 19 | 5 | 643 | 0.029 | 19 | 0.0 | 0.0 | 5.772 | A |
| B-A | 9 | 2 | 409 | 0.022 | 9 | 0.0 | 0.0 | 9.000 | A |
| C-AB | 86 | 22 | 643 | 0.134 | 87 | 0.2 | 0.2 | 6.473 | A |
| C-A | 235 | 59 | | | 235 | | | | |
| A-B | 31 | 8 | | | 31 | | | | |
| A-C | 388 | 97 | | | 388 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 16 | 4 | 655 | 0.024 | 16 | 0.0 | 0.0 | 5.629 | A |
| B-A | 8 | 2 | 427 | 0.018 | 8 | 0.0 | 0.0 | 8.590 | A |
| C-AB | 72 | 18 | 656 | 0.110 | 72 | 0.2 | 0.1 | 6.176 | A |
| C-A | 197 | 49 | | | 197 | | | | |
| A-B | 26 | 7 | | | 26 | | | | |
| A-C | 325 | 81 | | | 325 | | | | |

# 2018 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.91 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D2 | 2018 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Caldbeck Road (East) | | ONE HOUR | ✓ | 926 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 122 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 211 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 15 | 911 |
| | B - Thursby Road (South) | 4 | 0 | 118 |
| | C - Caldbeck Road (West) | 198 | 13 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.24 | 8.54 | 0.3 | A | 108 | 162 |
| B-A | 0.01 | 11.90 | 0.0 | B | 4 | 6 |
| C-AB | 0.03 | 6.99 | 0.0 | A | 12 | 18 |
| C-A | | | | | 182 | 273 |
| A-B | | | | | 14 | 21 |
| A-C | | | | | 836 | 1254 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 89 | 22 | 615 | 0.144 | 88 | 0.0 | 0.2 | 6.825 | A |
| B-A | 3 | 0.75 | 366 | 0.008 | 3 | 0.0 | 0.0 | 9.929 | A |
| C-AB | 10 | 2 | 590 | 0.017 | 10 | 0.0 | 0.0 | 6.201 | A |
| C-A | 149 | 37 | | | 149 | | | | |
| A-B | 11 | 3 | | | 11 | | | | |
| A-C | 686 | 171 | | | 686 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 106 | 27 | 588 | 0.180 | 106 | 0.2 | 0.2 | 7.457 | A |
| B-A | 4 | 0.90 | 341 | 0.011 | 4 | 0.0 | 0.0 | 10.662 | B |
| C-AB | 12 | 3 | 565 | 0.021 | 12 | 0.0 | 0.0 | 6.508 | A |
| C-A | 178 | 44 | | | 178 | | | | |
| A-B | 13 | 3 | | | 13 | | | | |
| A-C | 819 | 205 | | | 819 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 130 | 32 | 552 | 0.236 | 130 | 0.2 | 0.3 | 8.524 | A |
| B-A | 4 | 1 | 307 | 0.014 | 4 | 0.0 | 0.0 | 11.901 | B |
| C-AB | 14 | 4 | 530 | 0.027 | 14 | 0.0 | 0.0 | 6.986 | A |
| C-A | 218 | 55 | | | 218 | | | | |
| A-B | 17 | 4 | | | 17 | | | | |
| A-C | 1003 | 251 | | | 1003 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 130 | 32 | 552 | 0.236 | 130 | 0.3 | 0.3 | 8.537 | A |
| B-A | 4 | 1 | 307 | 0.014 | 4 | 0.0 | 0.0 | 11.902 | B |
| C-AB | 14 | 4 | 530 | 0.027 | 14 | 0.0 | 0.0 | 6.986 | A |
| C-A | 218 | 55 | | | 218 | | | | |
| A-B | 17 | 4 | | | 17 | | | | |
| A-C | 1003 | 251 | | | 1003 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 106 | 27 | 588 | 0.180 | 106 | 0.3 | 0.2 | 7.474 | A |
| B-A | 4 | 0.90 | 341 | 0.011 | 4 | 0.0 | 0.0 | 10.664 | B |
| C-AB | 12 | 3 | 565 | 0.021 | 12 | 0.0 | 0.0 | 6.511 | A |
| C-A | 178 | 44 | | | 178 | | | | |
| A-B | 13 | 3 | | | 13 | | | | |
| A-C | 819 | 205 | | | 819 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 89 | 22 | 615 | 0.144 | 89 | 0.2 | 0.2 | 6.850 | A |
| B-A | 3 | 0.75 | 365 | 0.008 | 3 | 0.0 | 0.0 | 9.931 | A |
| C-AB | 10 | 2 | 590 | 0.017 | 10 | 0.0 | 0.0 | 6.204 | A |
| C-A | 149 | 37 | | | 149 | | | | |
| A-B | 11 | 3 | | | 11 | | | | |
| A-C | 686 | 171 | | | 686 | | | | |

# 2021 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 1.05 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D4 | 2021 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Caldbeck Road (East) | | ONE HOUR | ✓ | 484 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 32 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 372 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 36 | 448 |
| | B - Thursby Road (South) | 10 | 0 | 22 |
| | C - Caldbeck Road (West) | 272 | 100 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.04 | 6.02 | 0.0 | A | 20 | 30 |
| B-A | 0.03 | 9.79 | 0.0 | A | 9 | 14 |
| C-AB | 0.18 | 7.02 | 0.2 | A | 92 | 138 |
| C-A | | | | | 249 | 374 |
| A-B | | | | | 33 | 50 |
| A-C | | | | | 411 | 617 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 17 | 4 | 655 | 0.025 | 16 | 0.0 | 0.0 | 5.639 | A |
| B-A | 8 | 2 | 422 | 0.018 | 7 | 0.0 | 0.0 | 8.679 | A |
| C-AB | 75 | 19 | 653 | 0.115 | 75 | 0.0 | 0.1 | 6.218 | A |
| C-A | 205 | 51 | | | 205 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 337 | 84 | | | 337 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 20 | 5 | 641 | 0.031 | 20 | 0.0 | 0.0 | 5.791 | A |
| B-A | 9 | 2 | 404 | 0.022 | 9 | 0.0 | 0.0 | 9.113 | A |
| C-AB | 90 | 22 | 640 | 0.141 | 90 | 0.1 | 0.2 | 6.538 | A |
| C-A | 244 | 61 | | | 244 | | | | |
| A-B | 32 | 8 | | | 32 | | | | |
| A-C | 403 | 101 | | | 403 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 24 | 6 | 623 | 0.039 | 24 | 0.0 | 0.0 | 6.015 | A |
| B-A | 11 | 3 | 379 | 0.029 | 11 | 0.0 | 0.0 | 9.786 | A |
| C-AB | 110 | 28 | 623 | 0.177 | 110 | 0.2 | 0.2 | 7.018 | A |
| C-A | 299 | 75 | | | 299 | | | | |
| A-B | 40 | 10 | | | 40 | | | | |
| A-C | 493 | 123 | | | 493 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 24 | 6 | 623 | 0.039 | 24 | 0.0 | 0.0 | 6.015 | A |
| B-A | 11 | 3 | 379 | 0.029 | 11 | 0.0 | 0.0 | 9.786 | A |
| C-AB | 110 | 28 | 623 | 0.177 | 110 | 0.2 | 0.2 | 7.024 | A |
| C-A | 299 | 75 | | | 299 | | | | |
| A-B | 40 | 10 | | | 40 | | | | |
| A-C | 493 | 123 | | | 493 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 20 | 5 | 641 | 0.031 | 20 | 0.0 | 0.0 | 5.793 | A |
| B-A | 9 | 2 | 404 | 0.022 | 9 | 0.0 | 0.0 | 9.117 | A |
| C-AB | 90 | 22 | 640 | 0.141 | 90 | 0.2 | 0.2 | 6.548 | A |
| C-A | 244 | 61 | | | 244 | | | | |
| A-B | 32 | 8 | | | 32 | | | | |
| A-C | 403 | 101 | | | 403 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 17 | 4 | 655 | 0.025 | 17 | 0.0 | 0.0 | 5.641 | A |
| B-A | 8 | 2 | 422 | 0.018 | 8 | 0.0 | 0.0 | 8.683 | A |
| C-AB | 75 | 19 | 653 | 0.115 | 75 | 0.2 | 0.1 | 6.233 | A |
| C-A | 205 | 51 | | | 205 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 337 | 84 | | | 337 | | | | |

# 2021 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.93 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D5 | 2021 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Caldbeck Road (East) | | ONE HOUR | ✓ | 959 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 126 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 218 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 16 | 943 |
| | B - Thursby Road (South) | 4 | 0 | 122 |
| | C - Caldbeck Road (West) | 205 | 13 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.25 | 8.77 | 0.3 | A | 112 | 168 |
| B-A | 0.01 | 12.17 | 0.0 | B | 4 | 6 |
| C-AB | 0.03 | 7.08 | 0.0 | A | 12 | 18 |
| C-A | | | | | 188 | 282 |
| A-B | | | | | 15 | 22 |
| A-C | | | | | 865 | 1298 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 92 | 23 | 610 | 0.151 | 91 | 0.0 | 0.2 | 6.927 | A |
| B-A | 3 | 0.75 | 361 | 0.008 | 3 | 0.0 | 0.0 | 10.050 | B |
| C-AB | 10 | 2 | 586 | 0.017 | 10 | 0.0 | 0.0 | 6.251 | A |
| C-A | 154 | 39 | | | 154 | | | | |
| A-B | 12 | 3 | | | 12 | | | | |
| A-C | 710 | 177 | | | 710 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 110 | 27 | 583 | 0.188 | 109 | 0.2 | 0.2 | 7.604 | A |
| B-A | 4 | 0.90 | 336 | 0.011 | 4 | 0.0 | 0.0 | 10.831 | B |
| C-AB | 12 | 3 | 559 | 0.021 | 12 | 0.0 | 0.0 | 6.574 | A |
| C-A | 184 | 46 | | | 184 | | | | |
| A-B | 14 | 4 | | | 14 | | | | |
| A-C | 848 | 212 | | | 848 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 134 | 34 | 545 | 0.247 | 134 | 0.2 | 0.3 | 8.758 | A |
| B-A | 4 | 1 | 300 | 0.015 | 4 | 0.0 | 0.0 | 12.169 | B |
| C-AB | 14 | 4 | 523 | 0.027 | 14 | 0.0 | 0.0 | 7.080 | A |
| C-A | 226 | 56 | | | 226 | | | | |
| A-B | 18 | 4 | | | 18 | | | | |
| A-C | 1038 | 260 | | | 1038 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 134 | 34 | 545 | 0.247 | 134 | 0.3 | 0.3 | 8.774 | A |
| B-A | 4 | 1 | 300 | 0.015 | 4 | 0.0 | 0.0 | 12.170 | B |
| C-AB | 14 | 4 | 523 | 0.027 | 14 | 0.0 | 0.0 | 7.080 | A |
| C-A | 226 | 56 | | | 226 | | | | |
| A-B | 18 | 4 | | | 18 | | | | |
| A-C | 1038 | 260 | | | 1038 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 110 | 27 | 583 | 0.188 | 110 | 0.3 | 0.2 | 7.625 | A |
| B-A | 4 | 0.90 | 336 | 0.011 | 4 | 0.0 | 0.0 | 10.835 | B |
| C-AB | 12 | 3 | 559 | 0.021 | 12 | 0.0 | 0.0 | 6.575 | A |
| C-A | 184 | 46 | | | 184 | | | | |
| A-B | 14 | 4 | | | 14 | | | | |
| A-C | 848 | 212 | | | 848 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 92 | 23 | 610 | 0.151 | 92 | 0.2 | 0.2 | 6.950 | A |
| B-A | 3 | 0.75 | 361 | 0.008 | 3 | 0.0 | 0.0 | 10.054 | B |
| C-AB | 10 | 2 | 586 | 0.017 | 10 | 0.0 | 0.0 | 6.254 | A |
| C-A | 154 | 39 | | | 154 | | | | |
| A-B | 12 | 3 | | | 12 | | | | |
| A-C | 710 | 177 | | | 710 | | | | |

# 2021 Base + CD , AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 1.59 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D9 | 2021 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 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 - Caldbeck Road (East) | | ONE HOUR | ✓ | 502 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 78 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 394 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 56 | 446 |
| | B - Thursby Road (South) | 30 | 0 | 48 |
| | C - Caldbeck Road (West) | 270 | 124 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.09 | 6.56 | 0.1 | A | 44 | 66 |
| B-A | 0.09 | 10.42 | 0.1 | B | 28 | 41 |
| C-AB | 0.22 | 7.45 | 0.3 | A | 114 | 171 |
| C-A | | | | | 247 | 371 |
| A-B | | | | | 51 | 77 |
| A-C | | | | | 409 | 614 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 36 | 9 | 637 | 0.057 | 36 | 0.0 | 0.1 | 5.980 | A |
| B-A | 23 | 6 | 425 | 0.053 | 22 | 0.0 | 0.1 | 8.937 | A |
| C-AB | 93 | 23 | 651 | 0.144 | 93 | 0.0 | 0.2 | 6.439 | A |
| C-A | 203 | 51 | | | 203 | | | | |
| A-B | 42 | 11 | | | 42 | | | | |
| A-C | 336 | 84 | | | 336 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 43 | 11 | 623 | 0.069 | 43 | 0.1 | 0.1 | 6.212 | A |
| B-A | 27 | 7 | 405 | 0.067 | 27 | 0.1 | 0.1 | 9.510 | A |
| C-AB | 112 | 28 | 638 | 0.175 | 112 | 0.2 | 0.2 | 6.838 | A |
| C-A | 242 | 61 | | | 242 | | | | |
| A-B | 50 | 13 | | | 50 | | | | |
| A-C | 401 | 100 | | | 401 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 53 | 13 | 602 | 0.088 | 53 | 0.1 | 0.1 | 6.557 | A |
| B-A | 33 | 8 | 378 | 0.087 | 33 | 0.1 | 0.1 | 10.418 | B |
| C-AB | 137 | 34 | 621 | 0.221 | 137 | 0.2 | 0.3 | 7.437 | A |
| C-A | 297 | 74 | | | 297 | | | | |
| A-B | 62 | 15 | | | 62 | | | | |
| A-C | 491 | 123 | | | 491 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 53 | 13 | 602 | 0.088 | 53 | 0.1 | 0.1 | 6.558 | A |
| B-A | 33 | 8 | 378 | 0.087 | 33 | 0.1 | 0.1 | 10.423 | B |
| C-AB | 137 | 34 | 621 | 0.221 | 137 | 0.3 | 0.3 | 7.445 | A |
| C-A | 297 | 74 | | | 297 | | | | |
| A-B | 62 | 15 | | | 62 | | | | |
| A-C | 491 | 123 | | | 491 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 43 | 11 | 622 | 0.069 | 43 | 0.1 | 0.1 | 6.216 | A |
| B-A | 27 | 7 | 405 | 0.067 | 27 | 0.1 | 0.1 | 9.519 | A |
| C-AB | 112 | 28 | 638 | 0.175 | 112 | 0.3 | 0.2 | 6.848 | A |
| C-A | 242 | 61 | | | 242 | | | | |
| A-B | 50 | 13 | | | 50 | | | | |
| A-C | 401 | 100 | | | 401 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 36 | 9 | 637 | 0.057 | 36 | 0.1 | 0.1 | 5.989 | A |
| B-A | 23 | 6 | 425 | 0.053 | 23 | 0.1 | 0.1 | 8.952 | A |
| C-AB | 93 | 23 | 651 | 0.144 | 94 | 0.2 | 0.2 | 6.460 | A |
| C-A | 203 | 51 | | | 203 | | | | |
| A-B | 42 | 11 | | | 42 | | | | |
| A-C | 336 | 84 | | | 336 | | | | |

# 2021 Base + CD, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.12 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D10 | 2021 Base + CD | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Caldbeck Road (East) | | ONE HOUR | ✓ | 994 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 218 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 263 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 55 | 939 |
| | B - Thursby Road (South) | 44 | 0 | 174 |
| | C - Caldbeck Road (West) | 201 | 62 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.38 | 11.30 | 0.6 | B | 160 | 239 |
| B-A | 0.17 | 15.18 | 0.2 | C | 40 | 61 |
| C-AB | 0.13 | 8.04 | 0.2 | A | 57 | 85 |
| C-A | | | | | 184 | 277 |
| A-B | | | | | 50 | 76 |
| A-C | | | | | 862 | 1292 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 131 | 33 | 587 | 0.223 | 130 | 0.0 | 0.3 | 7.856 | A |
| B-A | 33 | 8 | 360 | 0.092 | 33 | 0.0 | 0.1 | 10.983 | B |
| C-AB | 47 | 12 | 581 | 0.080 | 46 | 0.0 | 0.1 | 6.732 | A |
| C-A | 151 | 38 | | | 151 | | | | |
| A-B | 41 | 10 | | | 41 | | | | |
| A-C | 707 | 177 | | | 707 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 156 | 39 | 555 | 0.282 | 156 | 0.3 | 0.4 | 9.005 | A |
| B-A | 40 | 10 | 330 | 0.120 | 39 | 0.1 | 0.1 | 12.377 | B |
| C-AB | 56 | 14 | 553 | 0.101 | 56 | 0.1 | 0.1 | 7.229 | A |
| C-A | 181 | 45 | | | 181 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 844 | 211 | | | 844 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 192 | 48 | 510 | 0.375 | 191 | 0.4 | 0.6 | 11.237 | B |
| B-A | 48 | 12 | 286 | 0.169 | 48 | 0.1 | 0.2 | 15.131 | C |
| C-AB | 68 | 17 | 516 | 0.132 | 68 | 0.1 | 0.2 | 8.037 | A |
| C-A | 221 | 55 | | | 221 | | | | |
| A-B | 61 | 15 | | | 61 | | | | |
| A-C | 1034 | 258 | | | 1034 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 192 | 48 | 510 | 0.376 | 192 | 0.6 | 0.6 | 11.300 | B |
| B-A | 48 | 12 | 286 | 0.170 | 48 | 0.2 | 0.2 | 15.177 | C |
| C-AB | 68 | 17 | 516 | 0.132 | 68 | 0.2 | 0.2 | 8.042 | A |
| C-A | 221 | 55 | | | 221 | | | | |
| A-B | 61 | 15 | | | 61 | | | | |
| A-C | 1034 | 258 | | | 1034 | | | | |

**17:15 - 17:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 156 | 39 | 555 | 0.282 | 157 | 0.6 | 0.4 | 9.067 | A |
| B-A | 40 | 10 | 330 | 0.120 | 40 | 0.2 | 0.1 | 12.419 | B |
| C-AB | 56 | 14 | 553 | 0.101 | 56 | 0.2 | 0.1 | 7.240 | A |
| C-A | 181 | 45 | | | 181 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 844 | 211 | | | 844 | | | | |

**17:30 - 17:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 131 | 33 | 587 | 0.223 | 131 | 0.4 | 0.3 | 7.916 | A |
| B-A | 33 | 8 | 360 | 0.092 | 33 | 0.1 | 0.1 | 11.026 | B |
| C-AB | 47 | 12 | 581 | 0.080 | 47 | 0.1 | 0.1 | 6.743 | A |
| C-A | 151 | 38 | | | 151 | | | | |
| A-B | 41 | 10 | | | 41 | | | | |
| A-C | 707 | 177 | | | 707 | | | | |

# 2021 Base + CD + Dev, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 1.59 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D11 | 2021 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 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 - Caldbeck Road (East) | | ONE HOUR | ✓ | 510 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 78 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 394 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 56 | 454 |
| | B - Thursby Road (South) | 30 | 0 | 48 |
| | C - Caldbeck Road (West) | 270 | 124 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.09 | 6.58 | 0.1 | A | 44 | 66 |
| B-A | 0.09 | 10.47 | 0.1 | B | 28 | 41 |
| C-AB | 0.22 | 7.47 | 0.3 | A | 114 | 171 |
| C-A | | | | | 247 | 371 |
| A-B | | | | | 51 | 77 |
| A-C | | | | | 417 | 625 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 36 | 9 | 636 | 0.057 | 36 | 0.0 | 0.1 | 5.991 | A |
| B-A | 23 | 6 | 424 | 0.053 | 22 | 0.0 | 0.1 | 8.959 | A |
| C-AB | 93 | 23 | 650 | 0.144 | 93 | 0.0 | 0.2 | 6.454 | A |
| C-A | 203 | 51 | | | 203 | | | | |
| A-B | 42 | 11 | | | 42 | | | | |
| A-C | 342 | 85 | | | 342 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 43 | 11 | 621 | 0.069 | 43 | 0.1 | 0.1 | 6.227 | A |
| B-A | 27 | 7 | 404 | 0.067 | 27 | 0.1 | 0.1 | 9.539 | A |
| C-AB | 112 | 28 | 637 | 0.175 | 112 | 0.2 | 0.2 | 6.856 | A |
| C-A | 242 | 61 | | | 242 | | | | |
| A-B | 50 | 13 | | | 50 | | | | |
| A-C | 408 | 102 | | | 408 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 53 | 13 | 600 | 0.088 | 53 | 0.1 | 0.1 | 6.577 | A |
| B-A | 33 | 8 | 377 | 0.088 | 33 | 0.1 | 0.1 | 10.461 | B |
| C-AB | 137 | 34 | 619 | 0.222 | 137 | 0.2 | 0.3 | 7.462 | A |
| C-A | 297 | 74 | | | 297 | | | | |
| A-B | 62 | 15 | | | 62 | | | | |
| A-C | 500 | 125 | | | 500 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 53 | 13 | 600 | 0.088 | 53 | 0.1 | 0.1 | 6.578 | A |
| B-A | 33 | 8 | 377 | 0.088 | 33 | 0.1 | 0.1 | 10.467 | B |
| C-AB | 137 | 34 | 619 | 0.222 | 137 | 0.3 | 0.3 | 7.471 | A |
| C-A | 297 | 74 | | | 297 | | | | |
| A-B | 62 | 15 | | | 62 | | | | |
| A-C | 500 | 125 | | | 500 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 43 | 11 | 621 | 0.069 | 43 | 0.1 | 0.1 | 6.233 | A |
| B-A | 27 | 7 | 404 | 0.067 | 27 | 0.1 | 0.1 | 9.549 | A |
| C-AB | 112 | 28 | 637 | 0.175 | 112 | 0.3 | 0.2 | 6.868 | A |
| C-A | 242 | 61 | | | 242 | | | | |
| A-B | 50 | 13 | | | 50 | | | | |
| A-C | 408 | 102 | | | 408 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 36 | 9 | 636 | 0.057 | 36 | 0.1 | 0.1 | 6.001 | A |
| B-A | 23 | 6 | 424 | 0.053 | 23 | 0.1 | 0.1 | 8.974 | A |
| C-AB | 93 | 23 | 650 | 0.144 | 94 | 0.2 | 0.2 | 6.476 | A |
| C-A | 203 | 51 | | | 203 | | | | |
| A-B | 42 | 11 | | | 42 | | | | |
| A-C | 342 | 85 | | | 342 | | | | |

# 2021 Base + CD + Dev, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.12 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D12 | 2021 Base + CD + Dev | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Caldbeck Road (East) | | ONE HOUR | ✓ | 1010 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 218 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 263 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 55 | 955 |
| | B - Thursby Road (South) | 44 | 0 | 174 |
| | C - Caldbeck Road (West) | 201 | 62 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.38 | 11.43 | 0.6 | B | 160 | 239 |
| B-A | 0.17 | 15.36 | 0.2 | C | 40 | 61 |
| C-AB | 0.13 | 8.10 | 0.2 | A | 57 | 85 |
| C-A | | | | | 184 | 277 |
| A-B | | | | | 50 | 76 |
| A-C | | | | | 876 | 1314 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 131 | 33 | 585 | 0.224 | 130 | 0.0 | 0.3 | 7.897 | A |
| B-A | 33 | 8 | 358 | 0.092 | 33 | 0.0 | 0.1 | 11.047 | B |
| C-AB | 47 | 12 | 578 | 0.081 | 46 | 0.0 | 0.1 | 6.761 | A |
| C-A | 151 | 38 | | | 151 | | | | |
| A-B | 41 | 10 | | | 41 | | | | |
| A-C | 719 | 180 | | | 719 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 156 | 39 | 553 | 0.283 | 156 | 0.3 | 0.4 | 9.070 | A |
| B-A | 40 | 10 | 328 | 0.121 | 39 | 0.1 | 0.1 | 12.473 | B |
| C-AB | 56 | 14 | 551 | 0.101 | 56 | 0.1 | 0.1 | 7.269 | A |
| C-A | 181 | 45 | | | 181 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 859 | 215 | | | 859 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 192 | 48 | 507 | 0.378 | 191 | 0.4 | 0.6 | 11.362 | B |
| B-A | 48 | 12 | 283 | 0.171 | 48 | 0.1 | 0.2 | 15.322 | C |
| C-AB | 68 | 17 | 513 | 0.133 | 68 | 0.1 | 0.2 | 8.097 | A |
| C-A | 221 | 55 | | | 221 | | | | |
| A-B | 61 | 15 | | | 61 | | | | |
| A-C | 1051 | 263 | | | 1051 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 192 | 48 | 507 | 0.378 | 192 | 0.6 | 0.6 | 11.428 | B |
| B-A | 48 | 12 | 283 | 0.171 | 48 | 0.2 | 0.2 | 15.364 | C |
| C-AB | 68 | 17 | 513 | 0.133 | 68 | 0.2 | 0.2 | 8.102 | A |
| C-A | 221 | 55 | | | 221 | | | | |
| A-B | 61 | 15 | | | 61 | | | | |
| A-C | 1051 | 263 | | | 1051 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 156 | 39 | 552 | 0.283 | 157 | 0.6 | 0.4 | 9.131 | A |
| B-A | 40 | 10 | 328 | 0.121 | 40 | 0.2 | 0.1 | 12.517 | B |
| C-AB | 56 | 14 | 551 | 0.101 | 56 | 0.2 | 0.1 | 7.279 | A |
| C-A | 181 | 45 | | | 181 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 859 | 215 | | | 859 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 131 | 33 | 584 | 0.224 | 131 | 0.4 | 0.3 | 7.958 | A |
| B-A | 33 | 8 | 358 | 0.093 | 33 | 0.1 | 0.1 | 11.091 | B |
| C-AB | 47 | 12 | 578 | 0.081 | 47 | 0.1 | 0.1 | 6.774 | A |
| C-A | 151 | 38 | | | 151 | | | | |
| A-B | 41 | 10 | | | 41 | | | | |
| A-C | 719 | 180 | | | 719 | | | | |

# 2026 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 1.07 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D13 | 2026 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Caldbeck Road (East) | | ONE HOUR | ✓ | 507 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 34 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 389 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 38 | 469 |
| | B - Thursby Road (South) | 11 | 0 | 23 |
| | C - Caldbeck Road (West) | 285 | 104 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.04 | 6.09 | 0.0 | A | 21 | 32 |
| B-A | 0.03 | 9.96 | 0.0 | A | 10 | 15 |
| C-AB | 0.19 | 7.15 | 0.2 | A | 96 | 143 |
| C-A | | | | | 261 | 392 |
| A-B | | | | | 35 | 52 |
| A-C | | | | | 430 | 646 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 17 | 4 | 650 | 0.027 | 17 | 0.0 | 0.0 | 5.691 | A |
| B-A | 8 | 2 | 419 | 0.020 | 8 | 0.0 | 0.0 | 8.763 | A |
| C-AB | 78 | 20 | 650 | 0.121 | 78 | 0.0 | 0.1 | 6.286 | A |
| C-A | 215 | 54 | | | 215 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 353 | 88 | | | 353 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 21 | 5 | 636 | 0.033 | 21 | 0.0 | 0.0 | 5.853 | A |
| B-A | 10 | 2 | 400 | 0.025 | 10 | 0.0 | 0.0 | 9.229 | A |
| C-AB | 94 | 23 | 637 | 0.147 | 93 | 0.1 | 0.2 | 6.627 | A |
| C-A | 256 | 64 | | | 256 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 422 | 105 | | | 422 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 25 | 6 | 616 | 0.041 | 25 | 0.0 | 0.0 | 6.093 | A |
| B-A | 12 | 3 | 374 | 0.032 | 12 | 0.0 | 0.0 | 9.958 | A |
| C-AB | 115 | 29 | 618 | 0.186 | 115 | 0.2 | 0.2 | 7.142 | A |
| C-A | 313 | 78 | | | 313 | | | | |
| A-B | 42 | 10 | | | 42 | | | | |
| A-C | 516 | 129 | | | 516 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 25 | 6 | 616 | 0.041 | 25 | 0.0 | 0.0 | 6.093 | A |
| B-A | 12 | 3 | 374 | 0.032 | 12 | 0.0 | 0.0 | 9.959 | A |
| C-AB | 115 | 29 | 618 | 0.186 | 115 | 0.2 | 0.2 | 7.148 | A |
| C-A | 313 | 78 | | | 313 | | | | |
| A-B | 42 | 10 | | | 42 | | | | |
| A-C | 516 | 129 | | | 516 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 21 | 5 | 636 | 0.033 | 21 | 0.0 | 0.0 | 5.855 | A |
| B-A | 10 | 2 | 400 | 0.025 | 10 | 0.0 | 0.0 | 9.233 | A |
| C-AB | 94 | 23 | 637 | 0.147 | 94 | 0.2 | 0.2 | 6.635 | A |
| C-A | 256 | 64 | | | 256 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 422 | 105 | | | 422 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 17 | 4 | 650 | 0.027 | 17 | 0.0 | 0.0 | 5.695 | A |
| B-A | 8 | 2 | 419 | 0.020 | 8 | 0.0 | 0.0 | 8.767 | A |
| C-AB | 78 | 20 | 650 | 0.121 | 78 | 0.2 | 0.1 | 6.299 | A |
| C-A | 215 | 54 | | | 215 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 353 | 88 | | | 353 | | | | |

# 2026 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.97 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D14 | 2026 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Caldbeck Road (East) | | ONE HOUR | ✓ | 1001 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 132 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 228 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 16 | 985 |
| | B - Thursby Road (South) | 4 | 0 | 128 |
| | C - Caldbeck Road (West) | 214 | 14 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.26 | 9.12 | 0.4 | A | 117 | 176 |
| B-A | 0.02 | 12.55 | 0.0 | B | 4 | 6 |
| C-AB | 0.03 | 7.22 | 0.0 | A | 13 | 19 |
| C-A | | | | | 196 | 295 |
| A-B | | | | | 15 | 22 |
| A-C | | | | | 904 | 1356 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 96 | 24 | 604 | 0.160 | 96 | 0.0 | 0.2 | 7.070 | A |
| B-A | 3 | 0.75 | 355 | 0.008 | 3 | 0.0 | 0.0 | 10.217 | B |
| C-AB | 11 | 3 | 580 | 0.018 | 10 | 0.0 | 0.0 | 6.325 | A |
| C-A | 161 | 40 | | | 161 | | | | |
| A-B | 12 | 3 | | | 12 | | | | |
| A-C | 742 | 185 | | | 742 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 115 | 29 | 575 | 0.200 | 115 | 0.2 | 0.2 | 7.813 | A |
| B-A | 4 | 0.90 | 329 | 0.011 | 4 | 0.0 | 0.0 | 11.068 | B |
| C-AB | 13 | 3 | 552 | 0.023 | 13 | 0.0 | 0.0 | 6.672 | A |
| C-A | 192 | 48 | | | 192 | | | | |
| A-B | 14 | 4 | | | 14 | | | | |
| A-C | 885 | 221 | | | 885 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 141 | 35 | 536 | 0.263 | 141 | 0.2 | 0.4 | 9.102 | A |
| B-A | 4 | 1 | 291 | 0.015 | 4 | 0.0 | 0.0 | 12.552 | B |
| C-AB | 15 | 4 | 514 | 0.030 | 15 | 0.0 | 0.0 | 7.219 | A |
| C-A | 236 | 59 | | | 236 | | | | |
| A-B | 18 | 4 | | | 18 | | | | |
| A-C | 1085 | 271 | | | 1085 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 141 | 35 | 536 | 0.263 | 141 | 0.4 | 0.4 | 9.122 | A |
| B-A | 4 | 1 | 291 | 0.015 | 4 | 0.0 | 0.0 | 12.554 | B |
| C-AB | 15 | 4 | 514 | 0.030 | 15 | 0.0 | 0.0 | 7.219 | A |
| C-A | 236 | 59 | | | 236 | | | | |
| A-B | 18 | 4 | | | 18 | | | | |
| A-C | 1085 | 271 | | | 1085 | | | | |

**17:15 - 17:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 115 | 29 | 575 | 0.200 | 115 | 0.4 | 0.3 | 7.835 | A |
| B-A | 4 | 0.90 | 329 | 0.011 | 4 | 0.0 | 0.0 | 11.071 | B |
| C-AB | 13 | 3 | 552 | 0.023 | 13 | 0.0 | 0.0 | 6.672 | A |
| C-A | 192 | 48 | | | 192 | | | | |
| A-B | 14 | 4 | | | 14 | | | | |
| A-C | 885 | 221 | | | 885 | | | | |

**17:30 - 17:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 96 | 24 | 604 | 0.160 | 97 | 0.3 | 0.2 | 7.100 | A |
| B-A | 3 | 0.75 | 355 | 0.008 | 3 | 0.0 | 0.0 | 10.221 | B |
| C-AB | 11 | 3 | 580 | 0.018 | 11 | 0.0 | 0.0 | 6.325 | A |
| C-A | 161 | 40 | | | 161 | | | | |
| A-B | 12 | 3 | | | 12 | | | | |
| A-C | 742 | 185 | | | 742 | | | | |

# 2026 Base + CD, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 1.61 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D15 | 2026 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 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 - Caldbeck Road (East) | | ONE HOUR | ✓ | 525 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 80 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 412 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 58 | 467 |
| | B - Thursby Road (South) | 31 | 0 | 49 |
| | C - Caldbeck Road (West) | 283 | 129 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.09 | 6.64 | 0.1 | A | 45 | 67 |
| B-A | 0.09 | 10.66 | 0.1 | B | 28 | 43 |
| C-AB | 0.23 | 7.60 | 0.3 | A | 119 | 178 |
| C-A | | | | | 259 | 389 |
| A-B | | | | | 53 | 80 |
| A-C | | | | | 429 | 643 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 37 | 9 | 634 | 0.058 | 37 | 0.0 | 0.1 | 6.027 | A |
| B-A | 23 | 6 | 421 | 0.055 | 23 | 0.0 | 0.1 | 9.051 | A |
| C-AB | 97 | 24 | 648 | 0.150 | 97 | 0.0 | 0.2 | 6.522 | A |
| C-A | 213 | 53 | | | 213 | | | | |
| A-B | 44 | 11 | | | 44 | | | | |
| A-C | 352 | 88 | | | 352 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 44 | 11 | 618 | 0.071 | 44 | 0.1 | 0.1 | 6.271 | A |
| B-A | 28 | 7 | 400 | 0.070 | 28 | 0.1 | 0.1 | 9.665 | A |
| C-AB | 116 | 29 | 634 | 0.183 | 116 | 0.2 | 0.2 | 6.946 | A |
| C-A | 254 | 64 | | | 254 | | | | |
| A-B | 52 | 13 | | | 52 | | | | |
| A-C | 420 | 105 | | | 420 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 54 | 13 | 596 | 0.090 | 54 | 0.1 | 0.1 | 6.637 | A |
| B-A | 34 | 9 | 372 | 0.092 | 34 | 0.1 | 0.1 | 10.648 | B |
| C-AB | 143 | 36 | 617 | 0.232 | 143 | 0.2 | 0.3 | 7.590 | A |
| C-A | 311 | 78 | | | 311 | | | | |
| A-B | 64 | 16 | | | 64 | | | | |
| A-C | 514 | 129 | | | 514 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 54 | 13 | 596 | 0.090 | 54 | 0.1 | 0.1 | 6.638 | A |
| B-A | 34 | 9 | 372 | 0.092 | 34 | 0.1 | 0.1 | 10.656 | B |
| C-AB | 143 | 36 | 617 | 0.232 | 143 | 0.3 | 0.3 | 7.599 | A |
| C-A | 311 | 78 | | | 311 | | | | |
| A-B | 64 | 16 | | | 64 | | | | |
| A-C | 514 | 129 | | | 514 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 44 | 11 | 618 | 0.071 | 44 | 0.1 | 0.1 | 6.275 | A |
| B-A | 28 | 7 | 400 | 0.070 | 28 | 0.1 | 0.1 | 9.673 | A |
| C-AB | 116 | 29 | 634 | 0.183 | 117 | 0.3 | 0.2 | 6.957 | A |
| C-A | 254 | 64 | | | 254 | | | | |
| A-B | 52 | 13 | | | 52 | | | | |
| A-C | 420 | 105 | | | 420 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 37 | 9 | 633 | 0.058 | 37 | 0.1 | 0.1 | 6.038 | A |
| B-A | 23 | 6 | 421 | 0.055 | 23 | 0.1 | 0.1 | 9.064 | A |
| C-AB | 97 | 24 | 648 | 0.150 | 97 | 0.2 | 0.2 | 6.544 | A |
| C-A | 213 | 53 | | | 213 | | | | |
| A-B | 44 | 11 | | | 44 | | | | |
| A-C | 352 | 88 | | | 352 | | | | |

# 2026 Base + CD, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.19 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D16 | 2026 Base + CD | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Caldbeck Road (East) | | ONE HOUR | ✓ | 1036 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 224 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 273 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 55 | 981 |
| | B - Thursby Road (South) | 44 | 0 | 180 |
| | C - Caldbeck Road (West) | 210 | 63 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.40 | 11.89 | 0.6 | B | 165 | 248 |
| B-A | 0.18 | 15.89 | 0.2 | C | 40 | 61 |
| C-AB | 0.14 | 8.22 | 0.2 | A | 58 | 87 |
| C-A | | | | | 193 | 289 |
| A-B | | | | | 50 | 76 |
| A-C | | | | | 900 | 1350 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 136 | 34 | 581 | 0.233 | 134 | 0.0 | 0.3 | 8.031 | A |
| B-A | 33 | 8 | 353 | 0.094 | 33 | 0.0 | 0.1 | 11.211 | B |
| C-AB | 47 | 12 | 575 | 0.083 | 47 | 0.0 | 0.1 | 6.818 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 41 | 10 | | | 41 | | | | |
| A-C | 739 | 185 | | | 739 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 162 | 40 | 548 | 0.295 | 161 | 0.3 | 0.4 | 9.290 | A |
| B-A | 40 | 10 | 322 | 0.123 | 39 | 0.1 | 0.1 | 12.732 | B |
| C-AB | 57 | 14 | 546 | 0.104 | 57 | 0.1 | 0.1 | 7.347 | A |
| C-A | 189 | 47 | | | 189 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 882 | 220 | | | 882 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 198 | 50 | 501 | 0.395 | 197 | 0.4 | 0.6 | 11.807 | B |
| B-A | 48 | 12 | 275 | 0.176 | 48 | 0.1 | 0.2 | 15.834 | C |
| C-AB | 69 | 17 | 507 | 0.137 | 69 | 0.1 | 0.2 | 8.212 | A |
| C-A | 231 | 58 | | | 231 | | | | |
| A-B | 61 | 15 | | | 61 | | | | |
| A-C | 1080 | 270 | | | 1080 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 198 | 50 | 501 | 0.396 | 198 | 0.6 | 0.6 | 11.886 | B |
| B-A | 48 | 12 | 275 | 0.176 | 48 | 0.2 | 0.2 | 15.892 | C |
| C-AB | 69 | 17 | 507 | 0.137 | 69 | 0.2 | 0.2 | 8.221 | A |
| C-A | 231 | 58 | | | 231 | | | | |
| A-B | 61 | 15 | | | 61 | | | | |
| A-C | 1080 | 270 | | | 1080 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 162 | 40 | 548 | 0.295 | 163 | 0.6 | 0.4 | 9.362 | A |
| B-A | 40 | 10 | 322 | 0.123 | 40 | 0.2 | 0.1 | 12.782 | B |
| C-AB | 57 | 14 | 546 | 0.104 | 57 | 0.2 | 0.1 | 7.355 | A |
| C-A | 189 | 47 | | | 189 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 882 | 220 | | | 882 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 136 | 34 | 581 | 0.233 | 136 | 0.4 | 0.3 | 8.098 | A |
| B-A | 33 | 8 | 353 | 0.094 | 33 | 0.1 | 0.1 | 11.257 | B |
| C-AB | 47 | 12 | 575 | 0.083 | 48 | 0.1 | 0.1 | 6.831 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 41 | 10 | | | 41 | | | | |
| A-C | 739 | 185 | | | 739 | | | | |

# 2026 Base + CD + Dev, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 1.61 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D20 | 2026 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 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 - Caldbeck Road (East) | | ONE HOUR | ✓ | 533 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 80 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 412 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 58 | 475 |
| | B - Thursby Road (South) | 31 | 0 | 49 |
| | C - Caldbeck Road (West) | 283 | 129 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.09 | 6.66 | 0.1 | A | 45 | 67 |
| B-A | 0.09 | 10.70 | 0.1 | B | 28 | 43 |
| C-AB | 0.23 | 7.63 | 0.3 | A | 119 | 178 |
| C-A | | | | | 259 | 389 |
| A-B | | | | | 53 | 80 |
| A-C | | | | | 436 | 654 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 37 | 9 | 633 | 0.058 | 37 | 0.0 | 0.1 | 6.038 | A |
| B-A | 23 | 6 | 420 | 0.056 | 23 | 0.0 | 0.1 | 9.073 | A |
| C-AB | 97 | 24 | 647 | 0.150 | 97 | 0.0 | 0.2 | 6.535 | A |
| C-A | 213 | 53 | | | 213 | | | | |
| A-B | 44 | 11 | | | 44 | | | | |
| A-C | 358 | 89 | | | 358 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 44 | 11 | 617 | 0.071 | 44 | 0.1 | 0.1 | 6.286 | A |
| B-A | 28 | 7 | 399 | 0.070 | 28 | 0.1 | 0.1 | 9.695 | A |
| C-AB | 116 | 29 | 633 | 0.184 | 116 | 0.2 | 0.2 | 6.964 | A |
| C-A | 254 | 64 | | | 254 | | | | |
| A-B | 52 | 13 | | | 52 | | | | |
| A-C | 427 | 107 | | | 427 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 54 | 13 | 595 | 0.091 | 54 | 0.1 | 0.1 | 6.657 | A |
| B-A | 34 | 9 | 371 | 0.092 | 34 | 0.1 | 0.1 | 10.693 | B |
| C-AB | 143 | 36 | 615 | 0.232 | 143 | 0.2 | 0.3 | 7.617 | A |
| C-A | 311 | 78 | | | 311 | | | | |
| A-B | 64 | 16 | | | 64 | | | | |
| A-C | 523 | 131 | | | 523 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 54 | 13 | 595 | 0.091 | 54 | 0.1 | 0.1 | 6.658 | A |
| B-A | 34 | 9 | 371 | 0.092 | 34 | 0.1 | 0.1 | 10.701 | B |
| C-AB | 143 | 36 | 615 | 0.232 | 143 | 0.3 | 0.3 | 7.626 | A |
| C-A | 311 | 78 | | | 311 | | | | |
| A-B | 64 | 16 | | | 64 | | | | |
| A-C | 523 | 131 | | | 523 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 44 | 11 | 617 | 0.071 | 44 | 0.1 | 0.1 | 6.292 | A |
| B-A | 28 | 7 | 399 | 0.070 | 28 | 0.1 | 0.1 | 9.704 | A |
| C-AB | 116 | 29 | 633 | 0.184 | 117 | 0.3 | 0.2 | 6.975 | A |
| C-A | 254 | 64 | | | 254 | | | | |
| A-B | 52 | 13 | | | 52 | | | | |
| A-C | 427 | 107 | | | 427 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 37 | 9 | 632 | 0.058 | 37 | 0.1 | 0.1 | 6.047 | A |
| B-A | 23 | 6 | 420 | 0.056 | 23 | 0.1 | 0.1 | 9.086 | A |
| C-AB | 97 | 24 | 647 | 0.150 | 97 | 0.2 | 0.2 | 6.558 | A |
| C-A | 213 | 53 | | | 213 | | | | |
| A-B | 44 | 11 | | | 44 | | | | |
| A-C | 358 | 89 | | | 358 | | | | |

# 2026 Base + CD + Dev, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.19 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D21 | 2026 Base + CD + Dev | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Caldbeck Road (East) | | ONE HOUR | ✓ | 1052 | 100.000 |
| B - Thursby Road (South) | | ONE HOUR | ✓ | 224 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 273 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 55 | 997 |
| | B - Thursby Road (South) | 44 | 0 | 180 |
| | C - Caldbeck Road (West) | 210 | 63 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Caldbeck Road (East) | B - Thursby Road (South) | C - Caldbeck Road (West) |
| From | A - Caldbeck Road (East) | 0 | 0 | 0 |
| | B - Thursby Road (South) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.40 | 12.03 | 0.7 | B | 165 | 248 |
| B-A | 0.18 | 16.10 | 0.2 | C | 40 | 61 |
| C-AB | 0.14 | 8.28 | 0.2 | A | 58 | 87 |
| C-A | | | | | 193 | 289 |
| A-B | | | | | 50 | 76 |
| A-C | | | | | 915 | 1372 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 136 | 34 | 579 | 0.234 | 134 | 0.0 | 0.3 | 8.074 | A |
| B-A | 33 | 8 | 352 | 0.094 | 33 | 0.0 | 0.1 | 11.278 | B |
| C-AB | 47 | 12 | 572 | 0.083 | 47 | 0.0 | 0.1 | 6.847 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 41 | 10 | | | 41 | | | | |
| A-C | 751 | 188 | | | 751 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 162 | 40 | 546 | 0.297 | 161 | 0.3 | 0.4 | 9.359 | A |
| B-A | 40 | 10 | 320 | 0.124 | 39 | 0.1 | 0.1 | 12.836 | B |
| C-AB | 57 | 14 | 544 | 0.104 | 57 | 0.1 | 0.1 | 7.388 | A |
| C-A | 189 | 47 | | | 189 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 896 | 224 | | | 896 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 198 | 50 | 498 | 0.398 | 197 | 0.4 | 0.6 | 11.910 | B |
| B-A | 48 | 12 | 272 | 0.178 | 48 | 0.1 | 0.2 | 16.040 | C |
| C-AB | 69 | 17 | 504 | 0.138 | 69 | 0.1 | 0.2 | 8.277 | A |
| C-A | 231 | 58 | | | 231 | | | | |
| A-B | 61 | 15 | | | 61 | | | | |
| A-C | 1098 | 274 | | | 1098 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 198 | 50 | 497 | 0.398 | 198 | 0.6 | 0.7 | 12.029 | B |
| B-A | 48 | 12 | 272 | 0.178 | 48 | 0.2 | 0.2 | 16.100 | C |
| C-AB | 69 | 17 | 504 | 0.138 | 69 | 0.2 | 0.2 | 8.284 | A |
| C-A | 231 | 58 | | | 231 | | | | |
| A-B | 61 | 15 | | | 61 | | | | |
| A-C | 1098 | 274 | | | 1098 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 162 | 40 | 545 | 0.297 | 163 | 0.7 | 0.4 | 9.433 | A |
| B-A | 40 | 10 | 319 | 0.124 | 40 | 0.2 | 0.1 | 12.886 | B |
| C-AB | 57 | 14 | 544 | 0.104 | 57 | 0.2 | 0.1 | 7.399 | A |
| C-A | 189 | 47 | | | 189 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 896 | 224 | | | 896 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 136 | 34 | 579 | 0.234 | 136 | 0.4 | 0.3 | 8.142 | A |
| B-A | 33 | 8 | 351 | 0.094 | 33 | 0.1 | 0.1 | 11.323 | B |
| C-AB | 47 | 12 | 572 | 0.083 | 48 | 0.1 | 0.1 | 6.861 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 41 | 10 | | | 41 | | | | |
| A-C | 751 | 188 | | | 751 | | | | |

# APPENDIX L

Welton Road (East) / Caldbeck Road – PICADY Modelling

# Junctions 9

## PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947


For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk



**Filename:** 3_Welton Road (East)_Caldbeck Road.j9
**Path:** C:\Users\manch\Dropbox (mode)\Project\Manchester\2. Projects\J325601_Croft Retail Park, Welton Road\4. Data\6. Junction Capacity Assessments\PICADY\3_Welton Road (east)_Caldbeck Road
**Report generation date:** 28/05/2021 09:21:16

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»2018 Base, AM
»2018 Base, PM
»2021 Base, AM
»2021 Base, PM
»2021 Base + CD, AM
»2021 Base + CD, PM
»2021 Base + CD + Dev, AM
»2021 Base + CD + Dev, PM
»2026 Base, AM
»2026 Base, PM
»2026 Base + CD, AM
»2026 Base + CD, PM
»2026 Base + CD + Dev, AM
»2026 Base + CD + Dev, PM

## Summary of junction performance

| | AM | | | | PM | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Junction Delay (s) | Queue (PCU) | Delay (s) | RFC | Junction Delay (s) |
| **2018 Base** | | | | | | | | |
| Stream B-AC | 0.3 | 7.63 | 0.22 | 2.78 | 0.6 | 12.16 | 0.38 | 1.90 |
| Stream C-AB | 0.4 | 9.01 | 0.29 | | 0.1 | 9.08 | 0.10 | |
| **2021 Base** | | | | | | | | |
| Stream B-AC | 0.3 | 7.78 | 0.23 | 2.85 | 0.7 | 12.85 | 0.40 | 1.99 |
| Stream C-AB | 0.4 | 9.26 | 0.31 | | 0.1 | 9.28 | 0.10 | |
| **2021 Base + CD** | | | | | | | | |
| Stream B-AC | 0.4 | 8.14 | 0.27 | 3.27 | 1.0 | 15.13 | 0.50 | 2.93 |
| Stream C-AB | 0.5 | 9.82 | 0.35 | | 0.3 | 10.46 | 0.20 | |
| **2021 Base + CD + Dev** | | | | | | | | |
| Stream B-AC | 0.4 | 8.18 | 0.27 | 3.26 | 1.0 | 15.46 | 0.50 | 2.95 |
| Stream C-AB | 0.5 | 9.89 | 0.35 | | 0.3 | 10.62 | 0.21 | |
| **2026 Base** | | | | | | | | |
| Stream B-AC | 0.3 | 8.02 | 0.24 | 2.94 | 0.7 | 13.78 | 0.43 | 2.12 |
| Stream C-AB | 0.5 | 9.59 | 0.32 | | 0.1 | 9.61 | 0.11 | |
| **2026 Base + CD** | | | | | | | | |
| Stream B-AC | 0.4 | 8.40 | 0.28 | 3.37 | 1.1 | 16.44 | 0.52 | 3.12 |
| Stream C-AB | 0.6 | 10.18 | 0.36 | | 0.3 | 10.89 | 0.21 | |
| **2026 Base + CD + Dev** | | | | | | | | |
| Stream B-AC | 0.4 | 8.47 | 0.28 | 3.37 | 1.1 | 16.83 | 0.53 | 3.15 |
| Stream C-AB | 0.6 | 10.25 | 0.37 | | 0.3 | 11.06 | 0.22 | |

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

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

## File summary

### File Description

| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site number** | |
| **Date** | 04/12/2018 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | DESKTOP-J595SBC\Manchester Mode |
| **Description** | |

## Units

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

## Analysis Options

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

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D1 | 2018 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D2 | 2018 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D4 | 2021 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D5 | 2021 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D6 | 2021 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D7 | 2021 Base + CD | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D10 | 2021 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D11 | 2021 Base + CD + Dev | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D18 | 2026 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D19 | 2026 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D22 | 2026 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D23 | 2026 Base + CD | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D24 | 2026 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D25 | 2026 Base + CD + Dev | 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 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.78 | A |

### Junction Network Options

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

## Arms

### Arms

| Arm | Name | Description | Arm type |
|---|---|---|---|
| A | Welton Road | | Major |
| B | Caldbeck Road (East) | | Minor |
| C | Caldbeck Road (West) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right turn bay | Width for right turn (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|---|---|---|---|---|---|---|---|
| C - Caldbeck Road (West) | 7.50 | | ✓ | 2.80 | 115.0 | ✓ | 6.00 |

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

### Minor Arm Geometry

| Arm | Minor arm type | Lane width (m) | Visibility to left (m) | Visibility to right (m) |
|---|---|---|---|---|
| B - Caldbeck Road (East) | One lane | 4.50 | 250 | 35 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 663 | 0.113 | 0.285 | 0.179 | 0.407 |
| 1 | B-C | 743 | 0.106 | 0.269 | - | - |
| 1 | C-B | 682 | 0.247 | 0.247 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

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

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

# Traffic Demand

## Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D1 | 2018 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Welton Road | | ONE HOUR | ✓ | 428 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 121 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 272 | 100.000 |

# Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 70 | 358 |
| | B - Caldbeck Road (East) | 12 | 0 | 109 |
| | C - Caldbeck Road (West) | 121 | 151 | 0 |

# Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.22 | 7.63 | 0.3 | A | 111 | 167 |
| C-AB | 0.29 | 9.01 | 0.4 | A | 139 | 208 |
| C-A | | | | | 111 | 167 |
| A-B | | | | | 64 | 96 |
| A-C | | | | | 329 | 493 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 91 | 23 | 647 | 0.141 | 90 | 0.0 | 0.2 | 6.467 | A |
| C-AB | 114 | 28 | 603 | 0.189 | 113 | 0.0 | 0.2 | 7.333 | A |
| C-A | 91 | 23 | | | 91 | | | | |
| A-B | 53 | 13 | | | 53 | | | | |
| A-C | 270 | 67 | | | 270 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 109 | 27 | 629 | 0.173 | 109 | 0.2 | 0.2 | 6.914 | A |
| C-AB | 136 | 34 | 587 | 0.231 | 135 | 0.2 | 0.3 | 7.962 | A |
| C-A | 109 | 27 | | | 109 | | | | |
| A-B | 63 | 16 | | | 63 | | | | |
| A-C | 322 | 80 | | | 322 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 133 | 33 | 605 | 0.220 | 133 | 0.2 | 0.3 | 7.623 | A |
| C-AB | 166 | 42 | 566 | 0.294 | 166 | 0.3 | 0.4 | 8.986 | A |
| C-A | 133 | 33 | | | 133 | | | | |
| A-B | 77 | 19 | | | 77 | | | | |
| A-C | 394 | 99 | | | 394 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 133 | 33 | 605 | 0.220 | 133 | 0.3 | 0.3 | 7.633 | A |
| C-AB | 166 | 42 | 566 | 0.294 | 166 | 0.4 | 0.4 | 9.005 | A |
| C-A | 133 | 33 | | | 133 | | | | |
| A-B | 77 | 19 | | | 77 | | | | |
| A-C | 394 | 99 | | | 394 | | | | |

### 09:15 - 09:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 109 | 27 | 629 | 0.173 | 109 | 0.3 | 0.2 | 6.925 | A |
| C-AB | 136 | 34 | 587 | 0.231 | 136 | 0.4 | 0.3 | 7.987 | A |
| C-A | 109 | 27 | | | 109 | | | | |
| A-B | 63 | 16 | | | 63 | | | | |
| A-C | 322 | 80 | | | 322 | | | | |

### 09:30 - 09:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 91 | 23 | 646 | 0.141 | 91 | 0.2 | 0.2 | 6.488 | A |
| C-AB | 114 | 28 | 603 | 0.189 | 114 | 0.3 | 0.2 | 7.368 | A |
| C-A | 91 | 23 | | | 91 | | | | |
| A-B | 53 | 13 | | | 53 | | | | |
| A-C | 270 | 67 | | | 270 | | | | |

# 2018 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 1.90 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D2 | 2018 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Welton Road | | ONE HOUR | ✓ | 889 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 167 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 203 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 113 | 776 |
| | B - Caldbeck Road (East) | 17 | 0 | 150 |
| | C - Caldbeck Road (West) | 163 | 40 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.38 | 12.16 | 0.6 | B | 153 | 230 |
| C-AB | 0.10 | 9.08 | 0.1 | A | 37 | 55 |
| C-A | | | | | 150 | 224 |
| A-B | | | | | 104 | 156 |
| A-C | | | | | 712 | 1068 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 126 | 31 | 561 | 0.224 | 125 | 0.0 | 0.3 | 8.228 | A |
| C-AB | 30 | 8 | 517 | 0.058 | 30 | 0.0 | 0.1 | 7.387 | A |
| C-A | 123 | 31 | | | 123 | | | | |
| A-B | 85 | 21 | | | 85 | | | | |
| A-C | 584 | 146 | | | 584 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 150 | 38 | 527 | 0.285 | 150 | 0.3 | 0.4 | 9.529 | A |
| C-AB | 36 | 9 | 485 | 0.074 | 36 | 0.1 | 0.1 | 8.017 | A |
| C-A | 147 | 37 | | | 147 | | | | |
| A-B | 102 | 25 | | | 102 | | | | |
| A-C | 698 | 174 | | | 698 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 184 | 46 | 480 | 0.383 | 183 | 0.4 | 0.6 | 12.090 | B |
| C-AB | 44 | 11 | 440 | 0.100 | 44 | 0.1 | 0.1 | 9.074 | A |
| C-A | 179 | 45 | | | 179 | | | | |
| A-B | 124 | 31 | | | 124 | | | | |
| A-C | 854 | 214 | | | 854 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 184 | 46 | 480 | 0.383 | 184 | 0.6 | 0.6 | 12.159 | B |
| C-AB | 44 | 11 | 440 | 0.100 | 44 | 0.1 | 0.1 | 9.080 | A |
| C-A | 179 | 45 | | | 179 | | | | |
| A-B | 124 | 31 | | | 124 | | | | |
| A-C | 854 | 214 | | | 854 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 150 | 38 | 527 | 0.285 | 151 | 0.6 | 0.4 | 9.592 | A |
| C-AB | 36 | 9 | 485 | 0.074 | 36 | 0.1 | 0.1 | 8.024 | A |
| C-A | 147 | 37 | | | 147 | | | | |
| A-B | 102 | 25 | | | 102 | | | | |
| A-C | 698 | 174 | | | 698 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 126 | 31 | 561 | 0.224 | 126 | 0.4 | 0.3 | 8.289 | A |
| C-AB | 30 | 8 | 517 | 0.058 | 30 | 0.1 | 0.1 | 7.395 | A |
| C-A | 123 | 31 | | | 123 | | | | |
| A-B | 85 | 21 | | | 85 | | | | |
| A-C | 584 | 146 | | | 584 | | | | |

# 2021 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.85 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D4 | 2021 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Welton Road | | ONE HOUR | ✓ | 445 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 125 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 283 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 73 | 372 |
| | B - Caldbeck Road (East) | 12 | 0 | 113 |
| | C - Caldbeck Road (West) | 126 | 157 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.23 | 7.78 | 0.3 | A | 115 | 172 |
| C-AB | 0.31 | 9.26 | 0.4 | A | 144 | 216 |
| C-A | | | | | 116 | 173 |
| A-B | | | | | 67 | 100 |
| A-C | | | | | 341 | 512 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 94 | 24 | 644 | 0.146 | 93 | 0.0 | 0.2 | 6.535 | A |
| C-AB | 118 | 30 | 600 | 0.197 | 117 | 0.0 | 0.2 | 7.448 | A |
| C-A | 95 | 24 | | | 95 | | | | |
| A-B | 55 | 14 | | | 55 | | | | |
| A-C | 280 | 70 | | | 280 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 112 | 28 | 626 | 0.180 | 112 | 0.2 | 0.2 | 7.011 | A |
| C-AB | 141 | 35 | 584 | 0.242 | 141 | 0.2 | 0.3 | 8.127 | A |
| C-A | 113 | 28 | | | 113 | | | | |
| A-B | 66 | 16 | | | 66 | | | | |
| A-C | 334 | 84 | | | 334 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 138 | 34 | 600 | 0.229 | 137 | 0.2 | 0.3 | 7.771 | A |
| C-AB | 173 | 43 | 561 | 0.308 | 172 | 0.3 | 0.4 | 9.241 | A |
| C-A | 139 | 35 | | | 139 | | | | |
| A-B | 80 | 20 | | | 80 | | | | |
| A-C | 410 | 102 | | | 410 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 138 | 34 | 600 | 0.229 | 138 | 0.3 | 0.3 | 7.781 | A |
| C-AB | 173 | 43 | 561 | 0.308 | 173 | 0.4 | 0.4 | 9.265 | A |
| C-A | 139 | 35 | | | 139 | | | | |
| A-B | 80 | 20 | | | 80 | | | | |
| A-C | 410 | 102 | | | 410 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 112 | 28 | 625 | 0.180 | 113 | 0.3 | 0.2 | 7.026 | A |
| C-AB | 141 | 35 | 584 | 0.242 | 142 | 0.4 | 0.3 | 8.154 | A |
| C-A | 113 | 28 | | | 113 | | | | |
| A-B | 66 | 16 | | | 66 | | | | |
| A-C | 334 | 84 | | | 334 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 94 | 24 | 644 | 0.146 | 94 | 0.2 | 0.2 | 6.556 | A |
| C-AB | 118 | 30 | 600 | 0.197 | 118 | 0.3 | 0.2 | 7.486 | A |
| C-A | 95 | 24 | | | 95 | | | | |
| A-B | 55 | 14 | | | 55 | | | | |
| A-C | 280 | 70 | | | 280 | | | | |

# 2021 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 1.99 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D5 | 2021 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Welton Road | | ONE HOUR | ✓ | 920 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 173 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 209 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 117 | 803 |
| | B - Caldbeck Road (East) | 18 | 0 | 155 |
| | C - Caldbeck Road (West) | 169 | 40 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.40 | 12.85 | 0.7 | B | 159 | 238 |
| C-AB | 0.10 | 9.28 | 0.1 | A | 37 | 55 |
| C-A | | | | | 155 | 233 |
| A-B | | | | | 107 | 161 |
| A-C | | | | | 737 | 1105 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 130 | 33 | 555 | 0.235 | 129 | 0.0 | 0.3 | 8.435 | A |
| C-AB | 30 | 8 | 511 | 0.059 | 30 | 0.0 | 0.1 | 7.476 | A |
| C-A | 127 | 32 | | | 127 | | | | |
| A-B | 88 | 22 | | | 88 | | | | |
| A-C | 605 | 151 | | | 605 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 156 | 39 | 519 | 0.299 | 155 | 0.3 | 0.4 | 9.865 | A |
| C-AB | 36 | 9 | 478 | 0.075 | 36 | 0.1 | 0.1 | 8.142 | A |
| C-A | 152 | 38 | | | 152 | | | | |
| A-B | 105 | 26 | | | 105 | | | | |
| A-C | 722 | 180 | | | 722 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 190 | 48 | 471 | 0.405 | 190 | 0.4 | 0.7 | 12.766 | B |
| C-AB | 44 | 11 | 432 | 0.102 | 44 | 0.1 | 0.1 | 9.272 | A |
| C-A | 186 | 47 | | | 186 | | | | |
| A-B | 129 | 32 | | | 129 | | | | |
| A-C | 884 | 221 | | | 884 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 190 | 48 | 471 | 0.405 | 190 | 0.7 | 0.7 | 12.849 | B |
| C-AB | 44 | 11 | 432 | 0.102 | 44 | 0.1 | 0.1 | 9.277 | A |
| C-A | 186 | 47 | | | 186 | | | | |
| A-B | 129 | 32 | | | 129 | | | | |
| A-C | 884 | 221 | | | 884 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 156 | 39 | 519 | 0.299 | 156 | 0.7 | 0.4 | 9.944 | A |
| C-AB | 36 | 9 | 478 | 0.075 | 36 | 0.1 | 0.1 | 8.148 | A |
| C-A | 152 | 38 | | | 152 | | | | |
| A-B | 105 | 26 | | | 105 | | | | |
| A-C | 722 | 180 | | | 722 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 130 | 33 | 555 | 0.235 | 131 | 0.4 | 0.3 | 8.502 | A |
| C-AB | 30 | 8 | 511 | 0.059 | 30 | 0.1 | 0.1 | 7.484 | A |
| C-A | 127 | 32 | | | 127 | | | | |
| A-B | 88 | 22 | | | 88 | | | | |
| A-C | 605 | 151 | | | 605 | | | | |

# 2021 Base + CD, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.27 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D6 | 2021 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 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 - Welton Road | | ONE HOUR | ✓ | 445 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 145 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 303 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 73 | 372 |
| | B - Caldbeck Road (East) | 12 | 0 | 133 |
| | C - Caldbeck Road (West) | 126 | 177 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.27 | 8.14 | 0.4 | A | 133 | 200 |
| C-AB | 0.35 | 9.82 | 0.5 | A | 162 | 244 |
| C-A | | | | | 116 | 173 |
| A-B | | | | | 67 | 100 |
| A-C | | | | | 341 | 512 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 109 | 27 | 645 | 0.169 | 108 | 0.0 | 0.2 | 6.696 | A |
| C-AB | 133 | 33 | 600 | 0.222 | 132 | 0.0 | 0.3 | 7.683 | A |
| C-A | 95 | 24 | | | 95 | | | | |
| A-B | 55 | 14 | | | 55 | | | | |
| A-C | 280 | 70 | | | 280 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 130 | 33 | 627 | 0.208 | 130 | 0.2 | 0.3 | 7.238 | A |
| C-AB | 159 | 40 | 584 | 0.273 | 159 | 0.3 | 0.4 | 8.468 | A |
| C-A | 113 | 28 | | | 113 | | | | |
| A-B | 66 | 16 | | | 66 | | | | |
| A-C | 334 | 84 | | | 334 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 160 | 40 | 602 | 0.265 | 159 | 0.3 | 0.4 | 8.122 | A |
| C-AB | 195 | 49 | 562 | 0.347 | 194 | 0.4 | 0.5 | 9.787 | A |
| C-A | 139 | 35 | | | 139 | | | | |
| A-B | 80 | 20 | | | 80 | | | | |
| A-C | 410 | 102 | | | 410 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 160 | 40 | 602 | 0.265 | 160 | 0.4 | 0.4 | 8.137 | A |
| C-AB | 195 | 49 | 562 | 0.347 | 195 | 0.5 | 0.5 | 9.820 | A |
| C-A | 139 | 35 | | | 139 | | | | |
| A-B | 80 | 20 | | | 80 | | | | |
| A-C | 410 | 102 | | | 410 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 130 | 33 | 627 | 0.208 | 131 | 0.4 | 0.3 | 7.259 | A |
| C-AB | 159 | 40 | 584 | 0.273 | 160 | 0.5 | 0.4 | 8.505 | A |
| C-A | 113 | 28 | | | 113 | | | | |
| A-B | 66 | 16 | | | 66 | | | | |
| A-C | 334 | 84 | | | 334 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 109 | 27 | 645 | 0.169 | 109 | 0.3 | 0.2 | 6.721 | A |
| C-AB | 133 | 33 | 600 | 0.222 | 134 | 0.4 | 0.3 | 7.731 | A |
| C-A | 95 | 24 | | | 95 | | | | |
| A-B | 55 | 14 | | | 55 | | | | |
| A-C | 280 | 70 | | | 280 | | | | |

# 2021 Base + CD, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.93 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D7 | 2021 Base + CD | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Welton Road | | ONE HOUR | ✓ | 920 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 212 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 249 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 117 | 803 |
| | B - Caldbeck Road (East) | 18 | 0 | 194 |
| | C - Caldbeck Road (West) | 169 | 80 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.50 | 15.13 | 1.0 | C | 195 | 292 |
| C-AB | 0.20 | 10.46 | 0.3 | B | 73 | 110 |
| C-A | | | | | 155 | 233 |
| A-B | | | | | 107 | 161 |
| A-C | | | | | 737 | 1105 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 160 | 40 | 556 | 0.287 | 158 | 0.0 | 0.4 | 9.012 | A |
| C-AB | 60 | 15 | 511 | 0.118 | 60 | 0.0 | 0.1 | 7.965 | A |
| C-A | 127 | 32 | | | 127 | | | | |
| A-B | 88 | 22 | | | 88 | | | | |
| A-C | 605 | 151 | | | 605 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 191 | 48 | 521 | 0.366 | 190 | 0.4 | 0.6 | 10.865 | B |
| C-AB | 72 | 18 | 478 | 0.150 | 72 | 0.1 | 0.2 | 8.858 | A |
| C-A | 152 | 38 | | | 152 | | | | |
| A-B | 105 | 26 | | | 105 | | | | |
| A-C | 722 | 180 | | | 722 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 233 | 58 | 471 | 0.495 | 232 | 0.6 | 1.0 | 14.945 | B |
| C-AB | 88 | 22 | 432 | 0.204 | 88 | 0.2 | 0.3 | 10.446 | B |
| C-A | 186 | 47 | | | 186 | | | | |
| A-B | 129 | 32 | | | 129 | | | | |
| A-C | 884 | 221 | | | 884 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 233 | 58 | 471 | 0.495 | 233 | 1.0 | 1.0 | 15.130 | C |
| C-AB | 88 | 22 | 432 | 0.204 | 88 | 0.3 | 0.3 | 10.465 | B |
| C-A | 186 | 47 | | | 186 | | | | |
| A-B | 129 | 32 | | | 129 | | | | |
| A-C | 884 | 221 | | | 884 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 191 | 48 | 521 | 0.366 | 192 | 1.0 | 0.6 | 11.010 | B |
| C-AB | 72 | 18 | 478 | 0.150 | 72 | 0.3 | 0.2 | 8.878 | A |
| C-A | 152 | 38 | | | 152 | | | | |
| A-B | 105 | 26 | | | 105 | | | | |
| A-C | 722 | 180 | | | 722 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 160 | 40 | 556 | 0.287 | 160 | 0.6 | 0.4 | 9.119 | A |
| C-AB | 60 | 15 | 511 | 0.118 | 60 | 0.2 | 0.1 | 7.990 | A |
| C-A | 127 | 32 | | | 127 | | | | |
| A-B | 88 | 22 | | | 88 | | | | |
| A-C | 605 | 151 | | | 605 | | | | |

# 2021 Base + CD + Dev, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.26 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D10 | 2021 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 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 - Welton Road | | ONE HOUR | ✓ | 454 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 145 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 303 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 74 | 380 |
| | B - Caldbeck Road (East) | 12 | 0 | 133 |
| | C - Caldbeck Road (West) | 126 | 177 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.27 | 8.18 | 0.4 | A | 133 | 200 |
| C-AB | 0.35 | 9.89 | 0.5 | A | 162 | 244 |
| C-A | | | | | 116 | 173 |
| A-B | | | | | 68 | 102 |
| A-C | | | | | 349 | 523 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 109 | 27 | 644 | 0.170 | 108 | 0.0 | 0.2 | 6.717 | A |
| C-AB | 133 | 33 | 598 | 0.223 | 132 | 0.0 | 0.3 | 7.710 | A |
| C-A | 95 | 24 | | | 95 | | | | |
| A-B | 56 | 14 | | | 56 | | | | |
| A-C | 286 | 72 | | | 286 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 130 | 33 | 625 | 0.209 | 130 | 0.2 | 0.3 | 7.268 | A |
| C-AB | 159 | 40 | 582 | 0.274 | 159 | 0.3 | 0.4 | 8.508 | A |
| C-A | 113 | 28 | | | 113 | | | | |
| A-B | 67 | 17 | | | 67 | | | | |
| A-C | 342 | 85 | | | 342 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 160 | 40 | 600 | 0.266 | 159 | 0.3 | 0.4 | 8.169 | A |
| C-AB | 195 | 49 | 559 | 0.349 | 194 | 0.4 | 0.5 | 9.853 | A |
| C-A | 139 | 35 | | | 139 | | | | |
| A-B | 81 | 20 | | | 81 | | | | |
| A-C | 418 | 105 | | | 418 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 160 | 40 | 599 | 0.266 | 160 | 0.4 | 0.4 | 8.185 | A |
| C-AB | 195 | 49 | 559 | 0.349 | 195 | 0.5 | 0.5 | 9.885 | A |
| C-A | 139 | 35 | | | 139 | | | | |
| A-B | 81 | 20 | | | 81 | | | | |
| A-C | 418 | 105 | | | 418 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 130 | 33 | 625 | 0.209 | 131 | 0.4 | 0.3 | 7.289 | A |
| C-AB | 159 | 40 | 582 | 0.274 | 160 | 0.5 | 0.4 | 8.547 | A |
| C-A | 113 | 28 | | | 113 | | | | |
| A-B | 67 | 17 | | | 67 | | | | |
| A-C | 342 | 85 | | | 342 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 109 | 27 | 643 | 0.170 | 109 | 0.3 | 0.2 | 6.743 | A |
| C-AB | 133 | 33 | 598 | 0.223 | 134 | 0.4 | 0.3 | 7.761 | A |
| C-A | 95 | 24 | | | 95 | | | | |
| A-B | 56 | 14 | | | 56 | | | | |
| A-C | 286 | 72 | | | 286 | | | | |

# 2021 Base + CD + Dev, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.95 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D11 | 2021 Base + CD + Dev | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Welton Road | | ONE HOUR | ✓ | 939 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 212 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 249 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 121 | 818 |
| | B - Caldbeck Road (East) | 18 | 0 | 194 |
| | C - Caldbeck Road (West) | 169 | 80 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.50 | 15.46 | 1.0 | C | 195 | 292 |
| C-AB | 0.21 | 10.62 | 0.3 | B | 73 | 110 |
| C-A | | | | | 155 | 233 |
| A-B | | | | | 111 | 167 |
| A-C | | | | | 751 | 1126 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 160 | 40 | 552 | 0.289 | 158 | 0.0 | 0.4 | 9.090 | A |
| C-AB | 60 | 15 | 508 | 0.119 | 60 | 0.0 | 0.1 | 8.024 | A |
| C-A | 127 | 32 | | | 127 | | | | |
| A-B | 91 | 23 | | | 91 | | | | |
| A-C | 616 | 154 | | | 616 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 191 | 48 | 516 | 0.369 | 190 | 0.4 | 0.6 | 10.999 | B |
| C-AB | 72 | 18 | 474 | 0.152 | 72 | 0.1 | 0.2 | 8.951 | A |
| C-A | 152 | 38 | | | 152 | | | | |
| A-B | 109 | 27 | | | 109 | | | | |
| A-C | 735 | 184 | | | 735 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 233 | 58 | 466 | 0.501 | 232 | 0.6 | 1.0 | 15.260 | C |
| C-AB | 88 | 22 | 427 | 0.206 | 88 | 0.2 | 0.3 | 10.606 | B |
| C-A | 186 | 47 | | | 186 | | | | |
| A-B | 133 | 33 | | | 133 | | | | |
| A-C | 901 | 225 | | | 901 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 233 | 58 | 466 | 0.501 | 233 | 1.0 | 1.0 | 15.456 | C |
| C-AB | 88 | 22 | 427 | 0.206 | 88 | 0.3 | 0.3 | 10.624 | B |
| C-A | 186 | 47 | | | 186 | | | | |
| A-B | 133 | 33 | | | 133 | | | | |
| A-C | 901 | 225 | | | 901 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 191 | 48 | 516 | 0.369 | 192 | 1.0 | 0.6 | 11.155 | B |
| C-AB | 72 | 18 | 474 | 0.152 | 72 | 0.3 | 0.2 | 8.971 | A |
| C-A | 152 | 38 | | | 152 | | | | |
| A-B | 109 | 27 | | | 109 | | | | |
| A-C | 735 | 184 | | | 735 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 160 | 40 | 552 | 0.289 | 160 | 0.6 | 0.4 | 9.199 | A |
| C-AB | 60 | 15 | 508 | 0.119 | 60 | 0.2 | 0.1 | 8.051 | A |
| C-A | 127 | 32 | | | 127 | | | | |
| A-B | 91 | 23 | | | 91 | | | | |
| A-C | 616 | 154 | | | 616 | | | | |

# 2026 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.94 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D18 | 2026 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Welton Road | | ONE HOUR | ✓ | 465 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 131 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 295 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 76 | 389 |
| | B - Caldbeck Road (East) | 13 | 0 | 118 |
| | C - Caldbeck Road (West) | 131 | 164 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.24 | 8.02 | 0.3 | A | 120 | 180 |
| C-AB | 0.32 | 9.59 | 0.5 | A | 151 | 226 |
| C-A | | | | | 120 | 180 |
| A-B | | | | | 70 | 105 |
| A-C | | | | | 357 | 535 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 99 | 25 | 639 | 0.154 | 98 | 0.0 | 0.2 | 6.647 | A |
| C-AB | 123 | 31 | 596 | 0.207 | 122 | 0.0 | 0.3 | 7.586 | A |
| C-A | 99 | 25 | | | 99 | | | | |
| A-B | 57 | 14 | | | 57 | | | | |
| A-C | 293 | 73 | | | 293 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 118 | 29 | 620 | 0.190 | 118 | 0.2 | 0.2 | 7.164 | A |
| C-AB | 147 | 37 | 579 | 0.255 | 147 | 0.3 | 0.3 | 8.327 | A |
| C-A | 118 | 29 | | | 118 | | | | |
| A-B | 68 | 17 | | | 68 | | | | |
| A-C | 350 | 87 | | | 350 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 144 | 36 | 593 | 0.243 | 144 | 0.2 | 0.3 | 8.006 | A |
| C-AB | 181 | 45 | 556 | 0.325 | 180 | 0.3 | 0.5 | 9.561 | A |
| C-A | 144 | 36 | | | 144 | | | | |
| A-B | 84 | 21 | | | 84 | | | | |
| A-C | 428 | 107 | | | 428 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 144 | 36 | 593 | 0.243 | 144 | 0.3 | 0.3 | 8.018 | A |
| C-AB | 181 | 45 | 556 | 0.325 | 181 | 0.5 | 0.5 | 9.589 | A |
| C-A | 144 | 36 | | | 144 | | | | |
| A-B | 84 | 21 | | | 84 | | | | |
| A-C | 428 | 107 | | | 428 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 118 | 29 | 620 | 0.190 | 118 | 0.3 | 0.2 | 7.182 | A |
| C-AB | 147 | 37 | 579 | 0.255 | 148 | 0.5 | 0.3 | 8.361 | A |
| C-A | 118 | 29 | | | 118 | | | | |
| A-B | 68 | 17 | | | 68 | | | | |
| A-C | 350 | 87 | | | 350 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 99 | 25 | 639 | 0.154 | 99 | 0.2 | 0.2 | 6.672 | A |
| C-AB | 123 | 31 | 596 | 0.207 | 124 | 0.3 | 0.3 | 7.630 | A |
| C-A | 99 | 25 | | | 99 | | | | |
| A-B | 57 | 14 | | | 57 | | | | |
| A-C | 293 | 73 | | | 293 | | | | |

# 2026 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.12 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D19 | 2026 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Welton Road | | ONE HOUR | ✓ | 961 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 180 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 218 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 122 | 839 |
| | B - Caldbeck Road (East) | 18 | 0 | 162 |
| | C - Caldbeck Road (West) | 176 | 42 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.43 | 13.78 | 0.7 | B | 165 | 248 |
| C-AB | 0.11 | 9.61 | 0.1 | A | 39 | 58 |
| C-A | | | | | 162 | 242 |
| A-B | | | | | 112 | 168 |
| A-C | | | | | 770 | 1155 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 136 | 34 | 547 | 0.248 | 134 | 0.0 | 0.3 | 8.691 | A |
| C-AB | 32 | 8 | 504 | 0.063 | 31 | 0.0 | 0.1 | 7.620 | A |
| C-A | 133 | 33 | | | 133 | | | | |
| A-B | 92 | 23 | | | 92 | | | | |
| A-C | 632 | 158 | | | 632 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 162 | 40 | 510 | 0.317 | 161 | 0.3 | 0.5 | 10.294 | B |
| C-AB | 38 | 9 | 469 | 0.081 | 38 | 0.1 | 0.1 | 8.349 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 110 | 27 | | | 110 | | | | |
| A-C | 754 | 189 | | | 754 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 198 | 50 | 459 | 0.431 | 197 | 0.5 | 0.7 | 13.667 | B |
| C-AB | 46 | 12 | 421 | 0.110 | 46 | 0.1 | 0.1 | 9.605 | A |
| C-A | 194 | 48 | | | 194 | | | | |
| A-B | 134 | 34 | | | 134 | | | | |
| A-C | 924 | 231 | | | 924 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 198 | 50 | 459 | 0.432 | 198 | 0.7 | 0.7 | 13.781 | B |
| C-AB | 46 | 12 | 421 | 0.110 | 46 | 0.1 | 0.1 | 9.608 | A |
| C-A | 194 | 48 | | | 194 | | | | |
| A-B | 134 | 34 | | | 134 | | | | |
| A-C | 924 | 231 | | | 924 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 162 | 40 | 510 | 0.317 | 163 | 0.7 | 0.5 | 10.390 | B |
| C-AB | 38 | 9 | 469 | 0.081 | 38 | 0.1 | 0.1 | 8.355 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 110 | 27 | | | 110 | | | | |
| A-C | 754 | 189 | | | 754 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 136 | 34 | 547 | 0.248 | 136 | 0.5 | 0.3 | 8.768 | A |
| C-AB | 32 | 8 | 504 | 0.063 | 32 | 0.1 | 0.1 | 7.632 | A |
| C-A | 133 | 33 | | | 133 | | | | |
| A-B | 92 | 23 | | | 92 | | | | |
| A-C | 632 | 158 | | | 632 | | | | |

# 2026 Base + CD, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.37 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D22 | 2026 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 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 - Welton Road | | ONE HOUR | ✓ | 465 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 151 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 315 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 76 | 389 |
| | B - Caldbeck Road (East) | 13 | 0 | 138 |
| | C - Caldbeck Road (West) | 131 | 184 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.28 | 8.40 | 0.4 | A | 139 | 208 |
| C-AB | 0.36 | 10.18 | 0.6 | B | 169 | 253 |
| C-A | | | | | 120 | 180 |
| A-B | | | | | 70 | 105 |
| A-C | | | | | 357 | 535 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 114 | 28 | 640 | 0.178 | 113 | 0.0 | 0.2 | 6.811 | A |
| C-AB | 139 | 35 | 596 | 0.232 | 137 | 0.0 | 0.3 | 7.831 | A |
| C-A | 99 | 25 | | | 99 | | | | |
| A-B | 57 | 14 | | | 57 | | | | |
| A-C | 293 | 73 | | | 293 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 136 | 34 | 621 | 0.218 | 135 | 0.2 | 0.3 | 7.404 | A |
| C-AB | 165 | 41 | 579 | 0.286 | 165 | 0.3 | 0.4 | 8.686 | A |
| C-A | 118 | 29 | | | 118 | | | | |
| A-B | 68 | 17 | | | 68 | | | | |
| A-C | 350 | 87 | | | 350 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 166 | 42 | 595 | 0.279 | 166 | 0.3 | 0.4 | 8.380 | A |
| C-AB | 203 | 51 | 556 | 0.364 | 202 | 0.4 | 0.6 | 10.145 | B |
| C-A | 144 | 36 | | | 144 | | | | |
| A-B | 84 | 21 | | | 84 | | | | |
| A-C | 428 | 107 | | | 428 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 166 | 42 | 595 | 0.279 | 166 | 0.4 | 0.4 | 8.397 | A |
| C-AB | 203 | 51 | 556 | 0.364 | 203 | 0.6 | 0.6 | 10.181 | B |
| C-A | 144 | 36 | | | 144 | | | | |
| A-B | 84 | 21 | | | 84 | | | | |
| A-C | 428 | 107 | | | 428 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 136 | 34 | 621 | 0.218 | 136 | 0.4 | 0.3 | 7.426 | A |
| C-AB | 165 | 41 | 579 | 0.286 | 166 | 0.6 | 0.4 | 8.730 | A |
| C-A | 118 | 29 | | | 118 | | | | |
| A-B | 68 | 17 | | | 68 | | | | |
| A-C | 350 | 87 | | | 350 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 114 | 28 | 640 | 0.178 | 114 | 0.3 | 0.2 | 6.841 | A |
| C-AB | 139 | 35 | 596 | 0.232 | 139 | 0.4 | 0.3 | 7.886 | A |
| C-A | 99 | 25 | | | 99 | | | | |
| A-B | 57 | 14 | | | 57 | | | | |
| A-C | 293 | 73 | | | 293 | | | | |

# 2026 Base + CD, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.12 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D23 | 2026 Base + CD | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Welton Road | | ONE HOUR | ✓ | 961 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 219 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 258 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 122 | 839 |
| | B - Caldbeck Road (East) | 18 | 0 | 201 |
| | C - Caldbeck Road (West) | 176 | 82 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.52 | 16.44 | 1.1 | C | 201 | 301 |
| C-AB | 0.21 | 10.89 | 0.3 | B | 75 | 113 |
| C-A | | | | | 161 | 242 |
| A-B | | | | | 112 | 168 |
| A-C | | | | | 770 | 1155 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 165 | 41 | 548 | 0.301 | 163 | 0.0 | 0.4 | 9.306 | A |
| C-AB | 62 | 15 | 504 | 0.123 | 61 | 0.0 | 0.1 | 8.128 | A |
| C-A | 133 | 33 | | | 133 | | | | |
| A-B | 92 | 23 | | | 92 | | | | |
| A-C | 632 | 158 | | | 632 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 197 | 49 | 511 | 0.385 | 196 | 0.4 | 0.6 | 11.388 | B |
| C-AB | 74 | 18 | 469 | 0.157 | 74 | 0.1 | 0.2 | 9.102 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 110 | 27 | | | 110 | | | | |
| A-C | 754 | 189 | | | 754 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 241 | 60 | 460 | 0.524 | 239 | 0.6 | 1.1 | 16.193 | C |
| C-AB | 90 | 23 | 421 | 0.215 | 90 | 0.2 | 0.3 | 10.866 | B |
| C-A | 194 | 48 | | | 194 | | | | |
| A-B | 134 | 34 | | | 134 | | | | |
| A-C | 924 | 231 | | | 924 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 241 | 60 | 460 | 0.524 | 241 | 1.1 | 1.1 | 16.442 | C |
| C-AB | 90 | 23 | 421 | 0.215 | 90 | 0.3 | 0.3 | 10.887 | B |
| C-A | 194 | 48 | | | 194 | | | | |
| A-B | 134 | 34 | | | 134 | | | | |
| A-C | 924 | 231 | | | 924 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 197 | 49 | 511 | 0.385 | 199 | 1.1 | 0.6 | 11.576 | B |
| C-AB | 74 | 18 | 469 | 0.157 | 74 | 0.3 | 0.2 | 9.124 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 110 | 27 | | | 110 | | | | |
| A-C | 754 | 189 | | | 754 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 165 | 41 | 548 | 0.301 | 166 | 0.6 | 0.4 | 9.428 | A |
| C-AB | 62 | 15 | 504 | 0.123 | 62 | 0.2 | 0.1 | 8.155 | A |
| C-A | 133 | 33 | | | 133 | | | | |
| A-B | 92 | 23 | | | 92 | | | | |
| A-C | 632 | 158 | | | 632 | | | | |

# 2026 Base + CD + Dev, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.37 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D24 | 2026 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 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 - Welton Road | | ONE HOUR | ✓ | 474 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 152 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 315 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 77 | 397 |
| | B - Caldbeck Road (East) | 13 | 0 | 139 |
| | C - Caldbeck Road (West) | 131 | 184 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.28 | 8.47 | 0.4 | A | 139 | 209 |
| C-AB | 0.37 | 10.25 | 0.6 | B | 169 | 253 |
| C-A | | | | | 120 | 180 |
| A-B | | | | | 71 | 106 |
| A-C | | | | | 364 | 546 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 114 | 29 | 639 | 0.179 | 114 | 0.0 | 0.2 | 6.842 | A |
| C-AB | 139 | 35 | 594 | 0.233 | 137 | 0.0 | 0.3 | 7.859 | A |
| C-A | 99 | 25 | | | 99 | | | | |
| A-B | 58 | 14 | | | 58 | | | | |
| A-C | 299 | 75 | | | 299 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 137 | 34 | 620 | 0.221 | 136 | 0.2 | 0.3 | 7.448 | A |
| C-AB | 165 | 41 | 577 | 0.287 | 165 | 0.3 | 0.4 | 8.728 | A |
| C-A | 118 | 29 | | | 118 | | | | |
| A-B | 69 | 17 | | | 69 | | | | |
| A-C | 357 | 89 | | | 357 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 167 | 42 | 593 | 0.282 | 167 | 0.3 | 0.4 | 8.449 | A |
| C-AB | 203 | 51 | 554 | 0.366 | 202 | 0.4 | 0.6 | 10.214 | B |
| C-A | 144 | 36 | | | 144 | | | | |
| A-B | 85 | 21 | | | 85 | | | | |
| A-C | 437 | 109 | | | 437 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 167 | 42 | 593 | 0.282 | 167 | 0.4 | 0.4 | 8.467 | A |
| C-AB | 203 | 51 | 554 | 0.366 | 203 | 0.6 | 0.6 | 10.252 | B |
| C-A | 144 | 36 | | | 144 | | | | |
| A-B | 85 | 21 | | | 85 | | | | |
| A-C | 437 | 109 | | | 437 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 137 | 34 | 619 | 0.221 | 137 | 0.4 | 0.3 | 7.467 | A |
| C-AB | 165 | 41 | 577 | 0.287 | 166 | 0.6 | 0.4 | 8.771 | A |
| C-A | 118 | 29 | | | 118 | | | | |
| A-B | 69 | 17 | | | 69 | | | | |
| A-C | 357 | 89 | | | 357 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 114 | 29 | 639 | 0.179 | 115 | 0.3 | 0.2 | 6.874 | A |
| C-AB | 139 | 35 | 594 | 0.233 | 139 | 0.4 | 0.3 | 7.913 | A |
| C-A | 99 | 25 | | | 99 | | | | |
| A-B | 58 | 14 | | | 58 | | | | |
| A-C | 299 | 75 | | | 299 | | | | |

# 2026 Base + CD + Dev, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.15 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D25 | 2026 Base + CD + Dev | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Welton Road | | ONE HOUR | ✓ | 980 | 100.000 |
| B - Caldbeck Road (East) | | ONE HOUR | ✓ | 219 | 100.000 |
| C - Caldbeck Road (West) | | ONE HOUR | ✓ | 258 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 126 | 854 |
| | B - Caldbeck Road (East) | 18 | 0 | 201 |
| | C - Caldbeck Road (West) | 176 | 82 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road | B - Caldbeck Road (East) | C - Caldbeck Road (West) |
| From | A - Welton Road | 0 | 0 | 0 |
| | B - Caldbeck Road (East) | 0 | 0 | 0 |
| | C - Caldbeck Road (West) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-AC | 0.53 | 16.83 | 1.1 | C | 201 | 301 |
| C-AB | 0.22 | 11.06 | 0.3 | B | 75 | 113 |
| C-A | | | | | 161 | 242 |
| A-B | | | | | 116 | 173 |
| A-C | | | | | 784 | 1175 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 165 | 41 | 545 | 0.303 | 163 | 0.0 | 0.4 | 9.390 | A |
| C-AB | 62 | 15 | 500 | 0.123 | 61 | 0.0 | 0.1 | 8.193 | A |
| C-A | 133 | 33 | | | 133 | | | | |
| A-B | 95 | 24 | | | 95 | | | | |
| A-C | 643 | 161 | | | 643 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 197 | 49 | 507 | 0.388 | 196 | 0.4 | 0.6 | 11.535 | B |
| C-AB | 74 | 18 | 465 | 0.159 | 74 | 0.1 | 0.2 | 9.199 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 113 | 28 | | | 113 | | | | |
| A-C | 768 | 192 | | | 768 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 241 | 60 | 455 | 0.530 | 239 | 0.6 | 1.1 | 16.560 | C |
| C-AB | 90 | 23 | 416 | 0.217 | 90 | 0.2 | 0.3 | 11.036 | B |
| C-A | 194 | 48 | | | 194 | | | | |
| A-B | 139 | 35 | | | 139 | | | | |
| A-C | 940 | 235 | | | 940 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 241 | 60 | 455 | 0.530 | 241 | 1.1 | 1.1 | 16.831 | C |
| C-AB | 90 | 23 | 416 | 0.217 | 90 | 0.3 | 0.3 | 11.060 | B |
| C-A | 194 | 48 | | | 194 | | | | |
| A-B | 139 | 35 | | | 139 | | | | |
| A-C | 940 | 235 | | | 940 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 197 | 49 | 507 | 0.388 | 199 | 1.1 | 0.6 | 11.736 | B |
| C-AB | 74 | 18 | 465 | 0.159 | 74 | 0.3 | 0.2 | 9.224 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 113 | 28 | | | 113 | | | | |
| A-C | 768 | 192 | | | 768 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-AC | 165 | 41 | 545 | 0.303 | 166 | 0.6 | 0.4 | 9.516 | A |
| C-AB | 62 | 15 | 500 | 0.123 | 62 | 0.2 | 0.1 | 8.221 | A |
| C-A | 133 | 33 | | | 133 | | | | |
| A-B | 95 | 24 | | | 95 | | | | |
| A-C | 643 | 161 | | | 643 | | | | |

# APPENDIX M

Welton Road / Stadium Road – PICADY Modelling

# Junctions 9

## PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947


For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk



**Filename:** 5_Welton Road_Stadium Road.j9
**Path:** C:\Users\manch\Dropbox (mode)\Project\Manchester\2. Projects\J325601_Croft Retail Park, Welton Road\4. Data\6. Junction Capacity Assessments\PICADY\5_Welton Road_Stadium Road
**Report generation date:** 28/05/2021 09:43:53

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»2018 Base, AM
»2018 Base, PM
»2021 Base, AM
»2021 Base, PM
»2021 Base + CD, AM
»2021 Base + CD, PM
»2021 Base + CD + Dev, AM
»2021 Base + CD + Dev, PM
»2026 Base, AM
»2026 Base, PM
»2026 Base + CD, AM
»2026 Base + CD, PM
»2026 Base + CD + Dev, AM
»2026 Base + CD + Dev, PM

## Summary of junction performance

| | AM | | | | PM | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Junction Delay (s) | Queue (PCU) | Delay (s) | RFC | Junction Delay (s) |
| | 2018 Base | | | | | | | |
| Stream B-C | 0.3 | 6.99 | 0.23 | 2.35 | 4.9 | 37.25 | 0.85 | 16.18 |
| Stream B-A | 0.1 | 12.23 | 0.09 | | 0.8 | 34.55 | 0.46 | |
| Stream C-AB | 0.2 | 6.07 | 0.20 | | 0.5 | 7.78 | 0.33 | |
| | 2021 Base | | | | | | | |
| Stream B-C | 0.3 | 7.10 | 0.24 | 2.39 | 6.5 | 48.06 | 0.89 | 21.02 |
| Stream B-A | 0.1 | 12.50 | 0.09 | | 1.2 | 52.08 | 0.58 | |
| Stream C-AB | 0.3 | 6.16 | 0.20 | | 0.5 | 7.99 | 0.34 | |
| | 2021 Base + CD | | | | | | | |
| Stream B-C | 0.3 | 7.17 | 0.24 | 2.34 | 7.3 | 54.11 | 0.90 | 23.13 |
| Stream B-A | 0.1 | 12.74 | 0.09 | | 1.6 | 68.36 | 0.65 | |
| Stream C-AB | 0.3 | 6.21 | 0.21 | | 0.5 | 8.15 | 0.35 | |
| | 2021 Base + CD + Dev | | | | | | | |
| Stream B-C | 0.3 | 7.20 | 0.24 | 2.36 | 8.4 | 61.10 | 0.92 | 27.22 |
| Stream B-A | 0.1 | 12.76 | 0.09 | | 2.2 | 95.46 | 0.75 | |
| Stream C-AB | 0.3 | 6.22 | 0.21 | | 0.5 | 8.17 | 0.35 | |
| | 2026 Base | | | | | | | |
| Stream B-C | 0.3 | 7.27 | 0.25 | 2.44 | 10.2 | 71.69 | 0.95 | 35.43 |
| Stream B-A | 0.1 | 12.86 | 0.10 | | 4.1 | 155.29 | 0.93 | |
| Stream C-AB | 0.3 | 6.27 | 0.21 | | 0.6 | 8.30 | 0.36 | |
| | 2026 Base + CD | | | | | | | |
| Stream B-C | 0.3 | 7.34 | 0.25 | 2.39 | 12.1 | 83.57 | 0.97 | 38.88 |
| Stream B-A | 0.1 | 13.11 | 0.10 | | 4.4 | 171.13 | 0.93 | |
| Stream C-AB | 0.3 | 6.32 | 0.22 | | 0.6 | 8.47 | 0.37 | |
| | 2026 Base + CD + Dev | | | | | | | |
| Stream B-C | 0.3 | 7.37 | 0.26 | 2.42 | 14.6 | 96.78 | 0.99 | 44.80 |
| Stream B-A | 0.1 | 13.14 | 0.10 | | 4.8 | 192.36 | 0.92 | |
| Stream C-AB | 0.3 | 6.34 | 0.22 | | 0.6 | 8.47 | 0.37 | |

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

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

## File summary

### File Description

| | |
|---|---|
| Title | (untitled) |
| Location | |
| Site number | |
| Date | 03/12/2018 |
| Version | |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | |
| Enumerator | DESKTOP-J595SBC\Manchester Mode |
| Description | |

## Units

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

## Analysis Options

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

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D1 | 2018 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D2 | 2018 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D4 | 2021 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D5 | 2021 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D6 | 2021 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D7 | 2021 Base + CD | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D8 | 2021 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D9 | 2021 Base + CD + Dev | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D20 | 2026 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D21 | 2026 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D22 | 2026 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D23 | 2026 Base + CD | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D24 | 2026 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D25 | 2026 Base + CD + Dev | 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 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.35 | A |

### Junction Network Options

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

## Arms

### Arms

| Arm | Name | Description | Arm type |
|---|---|---|---|
| A | Stadium Road (South) | | Major |
| B | Welton Road (West) | | Minor |
| C | Stadium Road (North) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right turn bay | Width for right turn (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|---|---|---|---|---|---|---|---|
| C - Stadium Road (North) | 6.90 | | ✓ | 3.40 | 250.0 | ✓ | 8.00 |

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

### Minor Arm Geometry

| Arm | Minor arm type | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate flare length | Flare length (PCU) | Visibility to left (m) | Visibility to right (m) |
|---|---|---|---|---|---|---|---|---|---|---|
| B - Welton Road (West) | One lane plus flare | 10.00 | 8.00 | 6.00 | 4.80 | 4.40 | | 3.00 | 42 | 37 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 462 | 0.081 | 0.205 | 0.129 | 0.292 |
| 1 | B-C | 748 | 0.110 | 0.279 | - | - |
| 1 | C-B | 813 | 0.303 | 0.303 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

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

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

# Traffic Demand

## Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D1 | 2018 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (South) | | ONE HOUR | ✓ | 227 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 165 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 491 | 100.000 |

# Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 30 | 197 |
| | B - Welton Road (West) | 25 | 0 | 140 |
| | C - Stadium Road (North) | 360 | 131 | 0 |

# Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.23 | 6.99 | 0.3 | A | 128 | 193 |
| B-A | 0.09 | 12.23 | 0.1 | B | 23 | 34 |
| C-AB | 0.20 | 6.07 | 0.2 | A | 120 | 180 |
| C-A | | | | | 330 | 496 |
| A-B | | | | | 28 | 41 |
| A-C | | | | | 181 | 271 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 105 | 26 | 696 | 0.152 | 105 | 0.0 | 0.2 | 6.085 | A |
| B-A | 19 | 5 | 367 | 0.051 | 19 | 0.0 | 0.1 | 10.340 | B |
| C-AB | 99 | 25 | 761 | 0.130 | 98 | 0.0 | 0.1 | 5.426 | A |
| C-A | 271 | 68 | | | 271 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 148 | 37 | | | 148 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 126 | 31 | 685 | 0.184 | 126 | 0.2 | 0.2 | 6.438 | A |
| B-A | 22 | 6 | 348 | 0.065 | 22 | 0.1 | 0.1 | 11.065 | B |
| C-AB | 118 | 29 | 751 | 0.157 | 118 | 0.1 | 0.2 | 5.683 | A |
| C-A | 324 | 81 | | | 324 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 177 | 44 | | | 177 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 154 | 39 | 669 | 0.230 | 154 | 0.2 | 0.3 | 6.979 | A |
| B-A | 28 | 7 | 322 | 0.086 | 27 | 0.1 | 0.1 | 12.221 | B |
| C-AB | 144 | 36 | 737 | 0.196 | 144 | 0.2 | 0.2 | 6.071 | A |
| C-A | 396 | 99 | | | 396 | | | | |
| A-B | 33 | 8 | | | 33 | | | | |
| A-C | 217 | 54 | | | 217 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 154 | 39 | 669 | 0.230 | 154 | 0.3 | 0.3 | 6.985 | A |
| B-A | 28 | 7 | 322 | 0.086 | 28 | 0.1 | 0.1 | 12.230 | B |
| C-AB | 144 | 36 | 737 | 0.196 | 144 | 0.2 | 0.2 | 6.072 | A |
| C-A | 396 | 99 | | | 396 | | | | |
| A-B | 33 | 8 | | | 33 | | | | |
| A-C | 217 | 54 | | | 217 | | | | |

### 09:15 - 09:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 126 | 31 | 685 | 0.184 | 126 | 0.3 | 0.2 | 6.449 | A |
| B-A | 22 | 6 | 348 | 0.065 | 23 | 0.1 | 0.1 | 11.075 | B |
| C-AB | 118 | 29 | 751 | 0.157 | 118 | 0.2 | 0.2 | 5.691 | A |
| C-A | 324 | 81 | | | 324 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 177 | 44 | | | 177 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 105 | 26 | 695 | 0.152 | 106 | 0.2 | 0.2 | 6.108 | A |
| B-A | 19 | 5 | 366 | 0.051 | 19 | 0.1 | 0.1 | 10.362 | B |
| C-AB | 99 | 25 | 761 | 0.130 | 99 | 0.2 | 0.1 | 5.437 | A |
| C-A | 271 | 68 | | | 271 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 148 | 37 | | | 148 | | | | |

# 2018 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 16.18 | C |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D2 | 2018 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (South) | | ONE HOUR | ✓ | 367 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 536 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 417 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 60 | 307 |
| | B - Welton Road (West) | 80 | 0 | 456 |
| | C - Stadium Road (North) | 210 | 207 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.85 | 37.25 | 4.9 | E | 418 | 628 |
| B-A | 0.46 | 34.55 | 0.8 | D | 73 | 110 |
| C-AB | 0.33 | 7.78 | 0.5 | A | 190 | 285 |
| C-A | | | | | 193 | 289 |
| A-B | | | | | 55 | 83 |
| A-C | | | | | 282 | 423 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 343 | 86 | 649 | 0.529 | 339 | 0.0 | 1.1 | 11.441 | B |
| B-A | 60 | 15 | 335 | 0.180 | 59 | 0.0 | 0.2 | 12.998 | B |
| C-AB | 156 | 39 | 729 | 0.214 | 155 | 0.0 | 0.3 | 6.257 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 45 | 11 | | | 45 | | | | |
| A-C | 231 | 58 | | | 231 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 410 | 102 | 627 | 0.653 | 407 | 1.1 | 1.8 | 16.123 | C |
| B-A | 72 | 18 | 295 | 0.244 | 72 | 0.2 | 0.3 | 16.103 | C |
| C-AB | 186 | 47 | 713 | 0.261 | 186 | 0.3 | 0.3 | 6.825 | A |
| C-A | 189 | 47 | | | 189 | | | | |
| A-B | 54 | 13 | | | 54 | | | | |
| A-C | 276 | 69 | | | 276 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 502 | 126 | 594 | 0.845 | 491 | 1.8 | 4.4 | 32.049 | D |
| B-A | 88 | 22 | 202 | 0.436 | 86 | 0.3 | 0.7 | 30.704 | D |
| C-AB | 228 | 57 | 690 | 0.330 | 227 | 0.3 | 0.5 | 7.765 | A |
| C-A | 231 | 58 | | | 231 | | | | |
| A-B | 66 | 17 | | | 66 | | | | |
| A-C | 338 | 85 | | | 338 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 502 | 126 | 593 | 0.846 | 500 | 4.4 | 4.9 | 37.246 | E |
| B-A | 88 | 22 | 191 | 0.460 | 88 | 0.7 | 0.8 | 34.548 | D |
| C-AB | 228 | 57 | 690 | 0.330 | 228 | 0.5 | 0.5 | 7.783 | A |
| C-A | 231 | 58 | | | 231 | | | | |
| A-B | 66 | 17 | | | 66 | | | | |
| A-C | 338 | 85 | | | 338 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 410 | 102 | 626 | 0.655 | 421 | 4.9 | 2.0 | 18.475 | C |
| B-A | 72 | 18 | 289 | 0.249 | 74 | 0.8 | 0.3 | 16.902 | C |
| C-AB | 186 | 47 | 713 | 0.261 | 187 | 0.5 | 0.4 | 6.847 | A |
| C-A | 189 | 47 | | | 189 | | | | |
| A-B | 54 | 13 | | | 54 | | | | |
| A-C | 276 | 69 | | | 276 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 343 | 86 | 649 | 0.529 | 347 | 2.0 | 1.2 | 12.046 | B |
| B-A | 60 | 15 | 334 | 0.180 | 61 | 0.3 | 0.2 | 13.202 | B |
| C-AB | 156 | 39 | 729 | 0.214 | 156 | 0.4 | 0.3 | 6.287 | A |
| C-A | 158 | 40 | | | 158 | | | | |
| A-B | 45 | 11 | | | 45 | | | | |
| A-C | 231 | 58 | | | 231 | | | | |

# 2021 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.39 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D4 | 2021 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (South) | | ONE HOUR | ✓ | 235 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 171 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 510 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 31 | 204 |
| | B - Welton Road (West) | 26 | 0 | 145 |
| | C - Stadium Road (North) | 374 | 136 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.24 | 7.10 | 0.3 | A | 133 | 200 |
| B-A | 0.09 | 12.50 | 0.1 | B | 24 | 36 |
| C-AB | 0.20 | 6.16 | 0.3 | A | 125 | 187 |
| C-A | | | | | 343 | 515 |
| A-B | | | | | 28 | 43 |
| A-C | | | | | 187 | 281 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 109 | 27 | 693 | 0.157 | 108 | 0.0 | 0.2 | 6.145 | A |
| B-A | 20 | 5 | 363 | 0.054 | 19 | 0.0 | 0.1 | 10.470 | B |
| C-AB | 102 | 26 | 759 | 0.135 | 102 | 0.0 | 0.2 | 5.472 | A |
| C-A | 282 | 70 | | | 282 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 154 | 38 | | | 154 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 130 | 33 | 682 | 0.191 | 130 | 0.2 | 0.2 | 6.520 | A |
| B-A | 23 | 6 | 344 | 0.068 | 23 | 0.1 | 0.1 | 11.239 | B |
| C-AB | 122 | 31 | 749 | 0.163 | 122 | 0.2 | 0.2 | 5.743 | A |
| C-A | 336 | 84 | | | 336 | | | | |
| A-B | 28 | 7 | | | 28 | | | | |
| A-C | 183 | 46 | | | 183 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 160 | 40 | 666 | 0.240 | 159 | 0.2 | 0.3 | 7.095 | A |
| B-A | 29 | 7 | 317 | 0.090 | 29 | 0.1 | 0.1 | 12.490 | B |
| C-AB | 150 | 37 | 734 | 0.204 | 149 | 0.2 | 0.3 | 6.152 | A |
| C-A | 412 | 103 | | | 412 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 225 | 56 | | | 225 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 160 | 40 | 666 | 0.240 | 160 | 0.3 | 0.3 | 7.104 | A |
| B-A | 29 | 7 | 317 | 0.090 | 29 | 0.1 | 0.1 | 12.500 | B |
| C-AB | 150 | 37 | 734 | 0.204 | 150 | 0.3 | 0.3 | 6.157 | A |
| C-A | 412 | 103 | | | 412 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 225 | 56 | | | 225 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 130 | 33 | 682 | 0.191 | 131 | 0.3 | 0.2 | 6.534 | A |
| B-A | 23 | 6 | 343 | 0.068 | 23 | 0.1 | 0.1 | 11.257 | B |
| C-AB | 122 | 31 | 749 | 0.163 | 122 | 0.3 | 0.2 | 5.752 | A |
| C-A | 336 | 84 | | | 336 | | | | |
| A-B | 28 | 7 | | | 28 | | | | |
| A-C | 183 | 46 | | | 183 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 109 | 27 | 693 | 0.157 | 109 | 0.2 | 0.2 | 6.169 | A |
| B-A | 20 | 5 | 363 | 0.054 | 20 | 0.1 | 0.1 | 10.493 | B |
| C-AB | 102 | 26 | 759 | 0.135 | 103 | 0.2 | 0.2 | 5.486 | A |
| C-A | 282 | 70 | | | 282 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 154 | 38 | | | 154 | | | | |

# 2021 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 21.02 | C |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D5 | 2021 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (South) | | ONE HOUR | ✓ | 380 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 555 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 431 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 62 | 318 |
| | B - Welton Road (West) | 83 | 0 | 472 |
| | C - Stadium Road (North) | 217 | 214 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.89 | 48.06 | 6.5 | E | 433 | 650 |
| B-A | 0.58 | 52.08 | 1.2 | F | 76 | 114 |
| C-AB | 0.34 | 7.99 | 0.5 | A | 196 | 295 |
| C-A | | | | | 199 | 299 |
| A-B | | | | | 57 | 85 |
| A-C | | | | | 292 | 438 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 355 | 89 | 646 | 0.550 | 351 | 0.0 | 1.2 | 12.022 | B |
| B-A | 62 | 16 | 329 | 0.190 | 62 | 0.0 | 0.2 | 13.396 | B |
| C-AB | 161 | 40 | 726 | 0.222 | 160 | 0.0 | 0.3 | 6.346 | A |
| C-A | 163 | 41 | | | 163 | | | | |
| A-B | 47 | 12 | | | 47 | | | | |
| A-C | 239 | 60 | | | 239 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 424 | 106 | 622 | 0.682 | 421 | 1.2 | 2.0 | 17.567 | C |
| B-A | 75 | 19 | 284 | 0.263 | 74 | 0.2 | 0.3 | 17.128 | C |
| C-AB | 192 | 48 | 709 | 0.271 | 192 | 0.3 | 0.4 | 6.955 | A |
| C-A | 195 | 49 | | | 195 | | | | |
| A-B | 56 | 14 | | | 56 | | | | |
| A-C | 286 | 71 | | | 286 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 520 | 130 | 587 | 0.885 | 505 | 2.0 | 5.6 | 38.491 | E |
| B-A | 91 | 23 | 176 | 0.520 | 89 | 0.3 | 1.0 | 40.339 | E |
| C-AB | 236 | 59 | 686 | 0.343 | 235 | 0.4 | 0.5 | 7.971 | A |
| C-A | 239 | 60 | | | 239 | | | | |
| A-B | 68 | 17 | | | 68 | | | | |
| A-C | 350 | 88 | | | 350 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 520 | 130 | 585 | 0.888 | 516 | 5.6 | 6.5 | 48.063 | E |
| B-A | 91 | 23 | 158 | 0.578 | 90 | 1.0 | 1.2 | 52.082 | F |
| C-AB | 236 | 59 | 686 | 0.343 | 236 | 0.5 | 0.5 | 7.991 | A |
| C-A | 239 | 60 | | | 239 | | | | |
| A-B | 68 | 17 | | | 68 | | | | |
| A-C | 350 | 88 | | | 350 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 424 | 106 | 620 | 0.684 | 441 | 6.5 | 2.3 | 21.703 | C |
| B-A | 75 | 19 | 274 | 0.273 | 78 | 1.2 | 0.4 | 18.696 | C |
| C-AB | 192 | 48 | 709 | 0.271 | 193 | 0.5 | 0.4 | 6.979 | A |
| C-A | 195 | 49 | | | 195 | | | | |
| A-B | 56 | 14 | | | 56 | | | | |
| A-C | 286 | 71 | | | 286 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 355 | 89 | 645 | 0.551 | 360 | 2.3 | 1.3 | 12.799 | B |
| B-A | 62 | 16 | 327 | 0.191 | 63 | 0.4 | 0.2 | 13.657 | B |
| C-AB | 161 | 40 | 726 | 0.222 | 161 | 0.4 | 0.3 | 6.382 | A |
| C-A | 163 | 41 | | | 163 | | | | |
| A-B | 47 | 12 | | | 47 | | | | |
| A-C | 239 | 60 | | | 239 | | | | |

# 2021 Base + CD, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.34 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D6 | 2021 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (South) | | ONE HOUR | ✓ | 249 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 171 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 526 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 31 | 218 |
| | B - Welton Road (West) | 26 | 0 | 145 |
| | C - Stadium Road (North) | 390 | 136 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.24 | 7.17 | 0.3 | A | 133 | 200 |
| B-A | 0.09 | 12.74 | 0.1 | B | 24 | 36 |
| C-AB | 0.21 | 6.21 | 0.3 | A | 125 | 187 |
| C-A | | | | | 358 | 537 |
| A-B | | | | | 28 | 43 |
| A-C | | | | | 200 | 300 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 109 | 27 | 691 | 0.158 | 108 | 0.0 | 0.2 | 6.177 | A |
| B-A | 20 | 5 | 359 | 0.054 | 19 | 0.0 | 0.1 | 10.584 | B |
| C-AB | 102 | 26 | 756 | 0.135 | 102 | 0.0 | 0.2 | 5.499 | A |
| C-A | 294 | 73 | | | 294 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 164 | 41 | | | 164 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 130 | 33 | 679 | 0.192 | 130 | 0.2 | 0.2 | 6.563 | A |
| B-A | 23 | 6 | 339 | 0.069 | 23 | 0.1 | 0.1 | 11.398 | B |
| C-AB | 122 | 31 | 745 | 0.164 | 122 | 0.2 | 0.2 | 5.779 | A |
| C-A | 351 | 88 | | | 351 | | | | |
| A-B | 28 | 7 | | | 28 | | | | |
| A-C | 196 | 49 | | | 196 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 160 | 40 | 662 | 0.241 | 159 | 0.2 | 0.3 | 7.158 | A |
| B-A | 29 | 7 | 311 | 0.092 | 29 | 0.1 | 0.1 | 12.734 | B |
| C-AB | 150 | 37 | 730 | 0.205 | 149 | 0.2 | 0.3 | 6.202 | A |
| C-A | 429 | 107 | | | 429 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 240 | 60 | | | 240 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 160 | 40 | 662 | 0.241 | 160 | 0.3 | 0.3 | 7.168 | A |
| B-A | 29 | 7 | 311 | 0.092 | 29 | 0.1 | 0.1 | 12.740 | B |
| C-AB | 150 | 37 | 730 | 0.205 | 150 | 0.3 | 0.3 | 6.206 | A |
| C-A | 429 | 107 | | | 429 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 240 | 60 | | | 240 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 130 | 33 | 678 | 0.192 | 131 | 0.3 | 0.2 | 6.577 | A |
| B-A | 23 | 6 | 339 | 0.069 | 23 | 0.1 | 0.1 | 11.413 | B |
| C-AB | 122 | 31 | 745 | 0.164 | 122 | 0.3 | 0.2 | 5.788 | A |
| C-A | 351 | 88 | | | 351 | | | | |
| A-B | 28 | 7 | | | 28 | | | | |
| A-C | 196 | 49 | | | 196 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 109 | 27 | 690 | 0.158 | 109 | 0.2 | 0.2 | 6.201 | A |
| B-A | 20 | 5 | 359 | 0.055 | 20 | 0.1 | 0.1 | 10.608 | B |
| C-AB | 102 | 26 | 756 | 0.135 | 103 | 0.2 | 0.2 | 5.513 | A |
| C-A | 294 | 73 | | | 294 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 164 | 41 | | | 164 | | | | |

# 2021 Base + CD, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 23.13 | C |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D7 | 2021 Base + CD | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (South) | | ONE HOUR | ✓ | 406 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 555 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 464 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 62 | 344 |
| | B - Welton Road (West) | 83 | 0 | 472 |
| | C - Stadium Road (North) | 250 | 214 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.90 | 54.11 | 7.3 | F | 433 | 650 |
| B-A | 0.65 | 68.36 | 1.6 | F | 76 | 114 |
| C-AB | 0.35 | 8.15 | 0.5 | A | 196 | 295 |
| C-A | | | | | 229 | 344 |
| A-B | | | | | 57 | 85 |
| A-C | | | | | 316 | 473 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 355 | 89 | 640 | 0.556 | 350 | 0.0 | 1.2 | 12.257 | B |
| B-A | 62 | 16 | 322 | 0.194 | 62 | 0.0 | 0.2 | 13.775 | B |
| C-AB | 161 | 40 | 720 | 0.224 | 160 | 0.0 | 0.3 | 6.413 | A |
| C-A | 188 | 47 | | | 188 | | | | |
| A-B | 47 | 12 | | | 47 | | | | |
| A-C | 259 | 65 | | | 259 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 424 | 106 | 615 | 0.690 | 421 | 1.2 | 2.1 | 18.185 | C |
| B-A | 75 | 19 | 274 | 0.272 | 74 | 0.2 | 0.4 | 17.931 | C |
| C-AB | 192 | 48 | 702 | 0.274 | 192 | 0.3 | 0.4 | 7.052 | A |
| C-A | 225 | 56 | | | 225 | | | | |
| A-B | 56 | 14 | | | 56 | | | | |
| A-C | 309 | 77 | | | 309 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 520 | 130 | 577 | 0.900 | 503 | 2.1 | 6.2 | 41.728 | E |
| B-A | 91 | 23 | 161 | 0.568 | 88 | 0.4 | 1.2 | 47.557 | E |
| C-AB | 236 | 59 | 677 | 0.348 | 235 | 0.4 | 0.5 | 8.125 | A |
| C-A | 275 | 69 | | | 275 | | | | |
| A-B | 68 | 17 | | | 68 | | | | |
| A-C | 379 | 95 | | | 379 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 520 | 130 | 574 | 0.905 | 515 | 6.2 | 7.3 | 54.113 | F |
| B-A | 91 | 23 | 140 | 0.652 | 90 | 1.2 | 1.6 | 68.358 | F |
| C-AB | 236 | 59 | 677 | 0.348 | 236 | 0.5 | 0.5 | 8.148 | A |
| C-A | 275 | 69 | | | 275 | | | | |
| A-B | 68 | 17 | | | 68 | | | | |
| A-C | 379 | 95 | | | 379 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 424 | 106 | 612 | 0.694 | 444 | 7.3 | 2.4 | 23.513 | C |
| B-A | 75 | 19 | 262 | 0.285 | 79 | 1.6 | 0.4 | 20.171 | C |
| C-AB | 192 | 48 | 702 | 0.274 | 193 | 0.5 | 0.4 | 7.077 | A |
| C-A | 225 | 56 | | | 225 | | | | |
| A-B | 56 | 14 | | | 56 | | | | |
| A-C | 309 | 77 | | | 309 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 355 | 89 | 639 | 0.556 | 360 | 2.4 | 1.3 | 13.110 | B |
| B-A | 62 | 16 | 320 | 0.195 | 63 | 0.4 | 0.2 | 14.069 | B |
| C-AB | 161 | 40 | 720 | 0.224 | 161 | 0.4 | 0.3 | 6.449 | A |
| C-A | 188 | 47 | | | 188 | | | | |
| A-B | 47 | 12 | | | 47 | | | | |
| A-C | 259 | 65 | | | 259 | | | | |

# 2021 Base + CD + Dev, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.36 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D8 | 2021 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (South) | | ONE HOUR | ✓ | 249 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 173 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 527 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 31 | 218 |
| | B - Welton Road (West) | 26 | 0 | 147 |
| | C - Stadium Road (North) | 390 | 137 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.24 | 7.20 | 0.3 | A | 135 | 202 |
| B-A | 0.09 | 12.76 | 0.1 | B | 24 | 36 |
| C-AB | 0.21 | 6.22 | 0.3 | A | 126 | 189 |
| C-A | | | | | 358 | 537 |
| A-B | | | | | 28 | 43 |
| A-C | | | | | 200 | 300 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 111 | 28 | 691 | 0.160 | 110 | 0.0 | 0.2 | 6.191 | A |
| B-A | 20 | 5 | 359 | 0.055 | 19 | 0.0 | 0.1 | 10.595 | B |
| C-AB | 103 | 26 | 756 | 0.136 | 103 | 0.0 | 0.2 | 5.505 | A |
| C-A | 294 | 73 | | | 294 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 164 | 41 | | | 164 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 132 | 33 | 679 | 0.195 | 132 | 0.2 | 0.2 | 6.582 | A |
| B-A | 23 | 6 | 339 | 0.069 | 23 | 0.1 | 0.1 | 11.412 | B |
| C-AB | 123 | 31 | 745 | 0.165 | 123 | 0.2 | 0.2 | 5.787 | A |
| C-A | 351 | 88 | | | 351 | | | | |
| A-B | 28 | 7 | | | 28 | | | | |
| A-C | 196 | 49 | | | 196 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 162 | 40 | 662 | 0.244 | 162 | 0.2 | 0.3 | 7.187 | A |
| B-A | 29 | 7 | 311 | 0.092 | 29 | 0.1 | 0.1 | 12.754 | B |
| C-AB | 151 | 38 | 730 | 0.207 | 151 | 0.2 | 0.3 | 6.213 | A |
| C-A | 429 | 107 | | | 429 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 240 | 60 | | | 240 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 162 | 40 | 662 | 0.244 | 162 | 0.3 | 0.3 | 7.197 | A |
| B-A | 29 | 7 | 311 | 0.092 | 29 | 0.1 | 0.1 | 12.761 | B |
| C-AB | 151 | 38 | 730 | 0.207 | 151 | 0.3 | 0.3 | 6.218 | A |
| C-A | 429 | 107 | | | 429 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 240 | 60 | | | 240 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 132 | 33 | 679 | 0.195 | 132 | 0.3 | 0.2 | 6.597 | A |
| B-A | 23 | 6 | 339 | 0.069 | 23 | 0.1 | 0.1 | 11.429 | B |
| C-AB | 123 | 31 | 745 | 0.165 | 123 | 0.3 | 0.2 | 5.794 | A |
| C-A | 351 | 88 | | | 351 | | | | |
| A-B | 28 | 7 | | | 28 | | | | |
| A-C | 196 | 49 | | | 196 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 111 | 28 | 690 | 0.160 | 111 | 0.2 | 0.2 | 6.215 | A |
| B-A | 20 | 5 | 359 | 0.055 | 20 | 0.1 | 0.1 | 10.617 | B |
| C-AB | 103 | 26 | 756 | 0.136 | 103 | 0.2 | 0.2 | 5.519 | A |
| C-A | 294 | 73 | | | 294 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 164 | 41 | | | 164 | | | | |

# 2021 Base + CD + Dev, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 27.22 | D |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D9 | 2021 Base + CD + Dev | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (South) | | ONE HOUR | ✓ | 406 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 564 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 465 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 62 | 344 |
| | B - Welton Road (West) | 83 | 0 | 481 |
| | C - Stadium Road (North) | 250 | 215 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.92 | 61.10 | 8.4 | F | 441 | 662 |
| B-A | 0.75 | 95.46 | 2.2 | F | 76 | 114 |
| C-AB | 0.35 | 8.17 | 0.5 | A | 197 | 296 |
| C-A | | | | | 229 | 344 |
| A-B | | | | | 57 | 85 |
| A-C | | | | | 316 | 473 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 362 | 91 | 640 | 0.566 | 357 | 0.0 | 1.3 | 12.522 | B |
| B-A | 62 | 16 | 320 | 0.195 | 62 | 0.0 | 0.2 | 13.862 | B |
| C-AB | 162 | 40 | 720 | 0.225 | 161 | 0.0 | 0.3 | 6.422 | A |
| C-A | 188 | 47 | | | 188 | | | | |
| A-B | 47 | 12 | | | 47 | | | | |
| A-C | 259 | 65 | | | 259 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 432 | 108 | 615 | 0.703 | 429 | 1.3 | 2.2 | 18.889 | C |
| B-A | 75 | 19 | 270 | 0.276 | 74 | 0.2 | 0.4 | 18.295 | C |
| C-AB | 193 | 48 | 702 | 0.275 | 193 | 0.3 | 0.4 | 7.064 | A |
| C-A | 225 | 56 | | | 225 | | | | |
| A-B | 56 | 14 | | | 56 | | | | |
| A-C | 309 | 77 | | | 309 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 530 | 132 | 577 | 0.918 | 511 | 2.2 | 6.9 | 45.149 | E |
| B-A | 91 | 23 | 148 | 0.615 | 87 | 0.4 | 1.4 | 55.790 | F |
| C-AB | 237 | 59 | 677 | 0.349 | 236 | 0.4 | 0.5 | 8.146 | A |
| C-A | 275 | 69 | | | 275 | | | | |
| A-B | 68 | 17 | | | 68 | | | | |
| A-C | 379 | 95 | | | 379 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 530 | 132 | 574 | 0.923 | 524 | 6.9 | 8.4 | 61.095 | F |
| B-A | 91 | 23 | 122 | 0.748 | 88 | 1.4 | 2.2 | 95.458 | F |
| C-AB | 237 | 59 | 677 | 0.349 | 237 | 0.5 | 0.5 | 8.168 | A |
| C-A | 275 | 69 | | | 275 | | | | |
| A-B | 68 | 17 | | | 68 | | | | |
| A-C | 379 | 95 | | | 379 | | | | |

**17:15 - 17:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 432 | 108 | 610 | 0.709 | 455 | 8.4 | 2.6 | 26.105 | D |
| B-A | 75 | 19 | 255 | 0.293 | 82 | 2.2 | 0.4 | 21.633 | C |
| C-AB | 193 | 48 | 702 | 0.275 | 194 | 0.5 | 0.4 | 7.089 | A |
| C-A | 225 | 56 | | | 225 | | | | |
| A-B | 56 | 14 | | | 56 | | | | |
| A-C | 309 | 77 | | | 309 | | | | |

**17:30 - 17:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 362 | 91 | 639 | 0.567 | 367 | 2.6 | 1.3 | 13.488 | B |
| B-A | 62 | 16 | 318 | 0.197 | 63 | 0.4 | 0.2 | 14.183 | B |
| C-AB | 162 | 40 | 720 | 0.225 | 162 | 0.4 | 0.3 | 6.456 | A |
| C-A | 188 | 47 | | | 188 | | | | |
| A-B | 47 | 12 | | | 47 | | | | |
| A-C | 259 | 65 | | | 259 | | | | |

# 2026 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.44 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D20 | 2026 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (South) | | ONE HOUR | ✓ | 247 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 179 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 533 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 33 | 214 |
| | B - Welton Road (West) | 27 | 0 | 152 |
| | C - Stadium Road (North) | 391 | 142 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.25 | 7.27 | 0.3 | A | 139 | 209 |
| B-A | 0.10 | 12.86 | 0.1 | B | 25 | 37 |
| C-AB | 0.21 | 6.27 | 0.3 | A | 130 | 195 |
| C-A | | | | | 359 | 538 |
| A-B | | | | | 30 | 45 |
| A-C | | | | | 196 | 295 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 114 | 29 | 691 | 0.166 | 114 | 0.0 | 0.2 | 6.229 | A |
| B-A | 20 | 5 | 358 | 0.057 | 20 | 0.0 | 0.1 | 10.637 | B |
| C-AB | 107 | 27 | 756 | 0.141 | 106 | 0.0 | 0.2 | 5.531 | A |
| C-A | 294 | 74 | | | 294 | | | | |
| A-B | 25 | 6 | | | 25 | | | | |
| A-C | 161 | 40 | | | 161 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 137 | 34 | 679 | 0.201 | 136 | 0.2 | 0.2 | 6.630 | A |
| B-A | 24 | 6 | 338 | 0.072 | 24 | 0.1 | 0.1 | 11.474 | B |
| C-AB | 128 | 32 | 745 | 0.171 | 127 | 0.2 | 0.2 | 5.824 | A |
| C-A | 352 | 88 | | | 352 | | | | |
| A-B | 30 | 7 | | | 30 | | | | |
| A-C | 192 | 48 | | | 192 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 167 | 42 | 662 | 0.253 | 167 | 0.2 | 0.3 | 7.264 | A |
| B-A | 30 | 7 | 310 | 0.096 | 30 | 0.1 | 0.1 | 12.845 | B |
| C-AB | 156 | 39 | 730 | 0.214 | 156 | 0.2 | 0.3 | 6.266 | A |
| C-A | 430 | 108 | | | 430 | | | | |
| A-B | 36 | 9 | | | 36 | | | | |
| A-C | 236 | 59 | | | 236 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 167 | 42 | 662 | 0.253 | 167 | 0.3 | 0.3 | 7.273 | A |
| B-A | 30 | 7 | 310 | 0.096 | 30 | 0.1 | 0.1 | 12.858 | B |
| C-AB | 156 | 39 | 730 | 0.214 | 156 | 0.3 | 0.3 | 6.271 | A |
| C-A | 430 | 108 | | | 430 | | | | |
| A-B | 36 | 9 | | | 36 | | | | |
| A-C | 236 | 59 | | | 236 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 137 | 34 | 679 | 0.201 | 137 | 0.3 | 0.3 | 6.649 | A |
| B-A | 24 | 6 | 338 | 0.072 | 24 | 0.1 | 0.1 | 11.493 | B |
| C-AB | 128 | 32 | 745 | 0.171 | 128 | 0.3 | 0.2 | 5.831 | A |
| C-A | 352 | 88 | | | 352 | | | | |
| A-B | 30 | 7 | | | 30 | | | | |
| A-C | 192 | 48 | | | 192 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 114 | 29 | 691 | 0.166 | 115 | 0.3 | 0.2 | 6.254 | A |
| B-A | 20 | 5 | 358 | 0.057 | 20 | 0.1 | 0.1 | 10.662 | B |
| C-AB | 107 | 27 | 756 | 0.141 | 107 | 0.2 | 0.2 | 5.547 | A |
| C-A | 294 | 74 | | | 294 | | | | |
| A-B | 25 | 6 | | | 25 | | | | |
| A-C | 161 | 40 | | | 161 | | | | |

# 2026 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 35.43 | E |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D21 | 2026 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (South) | | ONE HOUR | ✓ | 397 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 579 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 451 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 65 | 332 |
| | B - Welton Road (West) | 86 | 0 | 493 |
| | C - Stadium Road (North) | 227 | 224 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.95 | 71.69 | 10.2 | F | 452 | 679 |
| B-A | 0.93 | 155.29 | 4.1 | F | 79 | 118 |
| C-AB | 0.36 | 8.30 | 0.6 | A | 206 | 308 |
| C-A | | | | | 208 | 312 |
| A-B | | | | | 60 | 89 |
| A-C | | | | | 305 | 457 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 371 | 93 | 641 | 0.579 | 366 | 0.0 | 1.3 | 12.857 | B |
| B-A | 65 | 16 | 321 | 0.202 | 64 | 0.0 | 0.2 | 13.963 | B |
| C-AB | 169 | 42 | 722 | 0.234 | 167 | 0.0 | 0.3 | 6.474 | A |
| C-A | 171 | 43 | | | 171 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 250 | 62 | | | 250 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 443 | 111 | 616 | 0.719 | 439 | 1.3 | 2.4 | 19.815 | C |
| B-A | 77 | 19 | 268 | 0.289 | 77 | 0.2 | 0.4 | 18.786 | C |
| C-AB | 201 | 50 | 705 | 0.286 | 201 | 0.3 | 0.4 | 7.143 | A |
| C-A | 204 | 51 | | | 204 | | | | |
| A-B | 58 | 15 | | | 58 | | | | |
| A-C | 298 | 75 | | | 298 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 543 | 136 | 578 | 0.939 | 521 | 2.4 | 7.9 | 49.862 | E |
| B-A | 95 | 24 | 135 | 0.703 | 89 | 0.4 | 1.8 | 71.497 | F |
| C-AB | 247 | 62 | 680 | 0.362 | 246 | 0.4 | 0.6 | 8.274 | A |
| C-A | 250 | 62 | | | 250 | | | | |
| A-B | 72 | 18 | | | 72 | | | | |
| A-C | 366 | 91 | | | 366 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 543 | 136 | 573 | 0.948 | 534 | 7.9 | 10.2 | 71.685 | F |
| B-A | 95 | 24 | 102 | 0.930 | 86 | 1.8 | 4.1 | 155.292 | F |
| C-AB | 247 | 62 | 680 | 0.362 | 247 | 0.6 | 0.6 | 8.298 | A |
| C-A | 250 | 62 | | | 250 | | | | |
| A-B | 72 | 18 | | | 72 | | | | |
| A-C | 366 | 91 | | | 366 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 443 | 111 | 606 | 0.732 | 472 | 10.2 | 3.0 | 31.292 | D |
| B-A | 77 | 19 | 245 | 0.315 | 92 | 4.1 | 0.5 | 25.509 | D |
| C-AB | 201 | 50 | 705 | 0.286 | 202 | 0.6 | 0.4 | 7.170 | A |
| C-A | 204 | 51 | | | 204 | | | | |
| A-B | 58 | 15 | | | 58 | | | | |
| A-C | 298 | 75 | | | 298 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 371 | 93 | 640 | 0.580 | 377 | 3.0 | 1.4 | 14.021 | B |
| B-A | 65 | 16 | 317 | 0.204 | 66 | 0.5 | 0.3 | 14.347 | B |
| C-AB | 169 | 42 | 722 | 0.234 | 169 | 0.4 | 0.3 | 6.514 | A |
| C-A | 171 | 43 | | | 171 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 250 | 62 | | | 250 | | | | |

# 2026 Base + CD, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.39 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D22 | 2026 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (South) | | ONE HOUR | ✓ | 260 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 179 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 550 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 33 | 227 |
| | B - Welton Road (West) | 27 | 0 | 152 |
| | C - Stadium Road (North) | 408 | 142 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.25 | 7.34 | 0.3 | A | 139 | 209 |
| B-A | 0.10 | 13.11 | 0.1 | B | 25 | 37 |
| C-AB | 0.22 | 6.32 | 0.3 | A | 130 | 195 |
| C-A | | | | | 374 | 562 |
| A-B | | | | | 30 | 45 |
| A-C | | | | | 208 | 312 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 114 | 29 | 688 | 0.166 | 114 | 0.0 | 0.2 | 6.259 | A |
| B-A | 20 | 5 | 355 | 0.057 | 20 | 0.0 | 0.1 | 10.753 | B |
| C-AB | 107 | 27 | 753 | 0.142 | 106 | 0.0 | 0.2 | 5.557 | A |
| C-A | 307 | 77 | | | 307 | | | | |
| A-B | 25 | 6 | | | 25 | | | | |
| A-C | 171 | 43 | | | 171 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 137 | 34 | 676 | 0.202 | 136 | 0.2 | 0.3 | 6.673 | A |
| B-A | 24 | 6 | 334 | 0.073 | 24 | 0.1 | 0.1 | 11.636 | B |
| C-AB | 128 | 32 | 742 | 0.172 | 127 | 0.2 | 0.2 | 5.857 | A |
| C-A | 367 | 92 | | | 367 | | | | |
| A-B | 30 | 7 | | | 30 | | | | |
| A-C | 204 | 51 | | | 204 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 167 | 42 | 658 | 0.254 | 167 | 0.3 | 0.3 | 7.325 | A |
| B-A | 30 | 7 | 304 | 0.098 | 30 | 0.1 | 0.1 | 13.095 | B |
| C-AB | 156 | 39 | 726 | 0.215 | 156 | 0.2 | 0.3 | 6.313 | A |
| C-A | 449 | 112 | | | 449 | | | | |
| A-B | 36 | 9 | | | 36 | | | | |
| A-C | 250 | 62 | | | 250 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 167 | 42 | 658 | 0.254 | 167 | 0.3 | 0.3 | 7.335 | A |
| B-A | 30 | 7 | 304 | 0.098 | 30 | 0.1 | 0.1 | 13.108 | B |
| C-AB | 156 | 39 | 726 | 0.215 | 156 | 0.3 | 0.3 | 6.318 | A |
| C-A | 449 | 112 | | | 449 | | | | |
| A-B | 36 | 9 | | | 36 | | | | |
| A-C | 250 | 62 | | | 250 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 137 | 34 | 675 | 0.202 | 137 | 0.3 | 0.3 | 6.688 | A |
| B-A | 24 | 6 | 333 | 0.073 | 24 | 0.1 | 0.1 | 11.653 | B |
| C-AB | 128 | 32 | 742 | 0.172 | 128 | 0.3 | 0.2 | 5.867 | A |
| C-A | 367 | 92 | | | 367 | | | | |
| A-B | 30 | 7 | | | 30 | | | | |
| A-C | 204 | 51 | | | 204 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 114 | 29 | 688 | 0.166 | 115 | 0.3 | 0.2 | 6.282 | A |
| B-A | 20 | 5 | 354 | 0.057 | 20 | 0.1 | 0.1 | 10.779 | B |
| C-AB | 107 | 27 | 753 | 0.142 | 107 | 0.2 | 0.2 | 5.573 | A |
| C-A | 307 | 77 | | | 307 | | | | |
| A-B | 25 | 6 | | | 25 | | | | |
| A-C | 171 | 43 | | | 171 | | | | |

# 2026 Base + CD, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 38.88 | E |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D23 | 2026 Base + CD | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (South) | | ONE HOUR | ✓ | 424 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 579 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 484 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 65 | 359 |
| | B - Welton Road (West) | 86 | 0 | 493 |
| | C - Stadium Road (North) | 260 | 224 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.97 | 83.57 | 12.1 | F | 452 | 679 |
| B-A | 0.93 | 171.13 | 4.4 | F | 79 | 118 |
| C-AB | 0.37 | 8.47 | 0.6 | A | 206 | 308 |
| C-A | | | | | 239 | 358 |
| A-B | | | | | 60 | 89 |
| A-C | | | | | 329 | 494 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 371 | 93 | 635 | 0.585 | 366 | 0.0 | 1.4 | 13.135 | B |
| B-A | 65 | 16 | 313 | 0.207 | 64 | 0.0 | 0.3 | 14.386 | B |
| C-AB | 169 | 42 | 716 | 0.236 | 167 | 0.0 | 0.3 | 6.547 | A |
| C-A | 196 | 49 | | | 196 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 270 | 68 | | | 270 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 443 | 111 | 609 | 0.728 | 439 | 1.4 | 2.5 | 20.630 | C |
| B-A | 77 | 19 | 258 | 0.300 | 77 | 0.3 | 0.4 | 19.812 | C |
| C-AB | 201 | 50 | 697 | 0.289 | 201 | 0.3 | 0.4 | 7.246 | A |
| C-A | 234 | 58 | | | 234 | | | | |
| A-B | 58 | 15 | | | 58 | | | | |
| A-C | 323 | 81 | | | 323 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 543 | 136 | 567 | 0.957 | 517 | 2.5 | 8.9 | 54.795 | F |
| B-A | 95 | 24 | 118 | 0.802 | 86 | 0.4 | 2.5 | 96.398 | F |
| C-AB | 247 | 62 | 671 | 0.367 | 246 | 0.4 | 0.6 | 8.447 | A |
| C-A | 286 | 72 | | | 286 | | | | |
| A-B | 72 | 18 | | | 72 | | | | |
| A-C | 395 | 99 | | | 395 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 543 | 136 | 560 | 0.969 | 530 | 8.9 | 12.1 | 83.571 | F |
| B-A | 95 | 24 | 102 | 0.932 | 87 | 2.5 | 4.4 | 171.134 | F |
| C-AB | 247 | 62 | 671 | 0.367 | 247 | 0.6 | 0.6 | 8.473 | A |
| C-A | 286 | 72 | | | 286 | | | | |
| A-B | 72 | 18 | | | 72 | | | | |
| A-C | 395 | 99 | | | 395 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 443 | 111 | 597 | 0.743 | 479 | 12.1 | 3.2 | 36.788 | E |
| B-A | 77 | 19 | 228 | 0.339 | 93 | 4.4 | 0.5 | 29.304 | D |
| C-AB | 201 | 50 | 697 | 0.289 | 202 | 0.6 | 0.4 | 7.277 | A |
| C-A | 234 | 58 | | | 234 | | | | |
| A-B | 58 | 15 | | | 58 | | | | |
| A-C | 323 | 81 | | | 323 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 371 | 93 | 634 | 0.586 | 378 | 3.2 | 1.5 | 14.452 | B |
| B-A | 65 | 16 | 309 | 0.209 | 66 | 0.5 | 0.3 | 14.839 | B |
| C-AB | 169 | 42 | 716 | 0.236 | 169 | 0.4 | 0.3 | 6.585 | A |
| C-A | 196 | 49 | | | 196 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 270 | 68 | | | 270 | | | | |

# 2026 Base + CD + Dev, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.42 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D24 | 2026 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (South) | | ONE HOUR | ✓ | 260 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 181 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 552 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 33 | 227 |
| | B - Welton Road (West) | 27 | 0 | 154 |
| | C - Stadium Road (North) | 408 | 144 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.26 | 7.37 | 0.3 | A | 141 | 212 |
| B-A | 0.10 | 13.14 | 0.1 | B | 25 | 37 |
| C-AB | 0.22 | 6.34 | 0.3 | A | 132 | 198 |
| C-A | | | | | 374 | 562 |
| A-B | | | | | 30 | 45 |
| A-C | | | | | 208 | 312 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 116 | 29 | 688 | 0.168 | 115 | 0.0 | 0.2 | 6.272 | A |
| B-A | 20 | 5 | 354 | 0.057 | 20 | 0.0 | 0.1 | 10.771 | B |
| C-AB | 108 | 27 | 753 | 0.144 | 108 | 0.0 | 0.2 | 5.570 | A |
| C-A | 307 | 77 | | | 307 | | | | |
| A-B | 25 | 6 | | | 25 | | | | |
| A-C | 171 | 43 | | | 171 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 138 | 35 | 676 | 0.205 | 138 | 0.2 | 0.3 | 6.693 | A |
| B-A | 24 | 6 | 333 | 0.073 | 24 | 0.1 | 0.1 | 11.660 | B |
| C-AB | 129 | 32 | 742 | 0.174 | 129 | 0.2 | 0.2 | 5.875 | A |
| C-A | 367 | 92 | | | 367 | | | | |
| A-B | 30 | 7 | | | 30 | | | | |
| A-C | 204 | 51 | | | 204 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 170 | 42 | 658 | 0.258 | 169 | 0.3 | 0.3 | 7.356 | A |
| B-A | 30 | 7 | 304 | 0.098 | 30 | 0.1 | 0.1 | 13.131 | B |
| C-AB | 159 | 40 | 726 | 0.218 | 158 | 0.2 | 0.3 | 6.338 | A |
| C-A | 449 | 112 | | | 449 | | | | |
| A-B | 36 | 9 | | | 36 | | | | |
| A-C | 250 | 62 | | | 250 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 170 | 42 | 658 | 0.258 | 170 | 0.3 | 0.3 | 7.366 | A |
| B-A | 30 | 7 | 304 | 0.098 | 30 | 0.1 | 0.1 | 13.145 | B |
| C-AB | 159 | 40 | 726 | 0.218 | 159 | 0.3 | 0.3 | 6.343 | A |
| C-A | 449 | 112 | | | 449 | | | | |
| A-B | 36 | 9 | | | 36 | | | | |
| A-C | 250 | 62 | | | 250 | | | | |

### 09:15 - 09:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 138 | 35 | 676 | 0.205 | 139 | 0.3 | 0.3 | 6.709 | A |
| B-A | 24 | 6 | 333 | 0.073 | 24 | 0.1 | 0.1 | 11.680 | B |
| C-AB | 129 | 32 | 742 | 0.174 | 130 | 0.3 | 0.2 | 5.884 | A |
| C-A | 367 | 92 | | | 367 | | | | |
| A-B | 30 | 7 | | | 30 | | | | |
| A-C | 204 | 51 | | | 204 | | | | |

### 09:30 - 09:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 116 | 29 | 688 | 0.169 | 116 | 0.3 | 0.2 | 6.297 | A |
| B-A | 20 | 5 | 354 | 0.057 | 20 | 0.1 | 0.1 | 10.799 | B |
| C-AB | 108 | 27 | 753 | 0.144 | 109 | 0.2 | 0.2 | 5.586 | A |
| C-A | 307 | 77 | | | 307 | | | | |
| A-B | 25 | 6 | | | 25 | | | | |
| A-C | 171 | 43 | | | 171 | | | | |

# 2026 Base + CD + Dev, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 44.80 | E |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D25 | 2026 Base + CD + Dev | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (South) | | ONE HOUR | ✓ | 424 | 100.000 |
| B - Welton Road (West) | | ONE HOUR | ✓ | 588 | 100.000 |
| C - Stadium Road (North) | | ONE HOUR | ✓ | 484 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 65 | 359 |
| | B - Welton Road (West) | 86 | 0 | 502 |
| | C - Stadium Road (North) | 260 | 224 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (South) | B - Welton Road (West) | C - Stadium Road (North) |
| From | A - Stadium Road (South) | 0 | 0 | 0 |
| | B - Welton Road (West) | 0 | 0 | 0 |
| | C - Stadium Road (North) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.99 | 96.78 | 14.6 | F | 461 | 691 |
| B-A | 0.92 | 192.36 | 4.8 | F | 79 | 118 |
| C-AB | 0.37 | 8.47 | 0.6 | A | 206 | 308 |
| C-A | | | | | 239 | 358 |
| A-B | | | | | 60 | 89 |
| A-C | | | | | 329 | 494 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 378 | 94 | 635 | 0.595 | 372 | 0.0 | 1.4 | 13.435 | B |
| B-A | 65 | 16 | 311 | 0.208 | 64 | 0.0 | 0.3 | 14.485 | B |
| C-AB | 169 | 42 | 716 | 0.236 | 167 | 0.0 | 0.3 | 6.547 | A |
| C-A | 196 | 49 | | | 196 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 270 | 68 | | | 270 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 451 | 113 | 609 | 0.741 | 446 | 1.4 | 2.6 | 21.517 | C |
| B-A | 77 | 19 | 253 | 0.305 | 77 | 0.3 | 0.4 | 20.320 | C |
| C-AB | 201 | 50 | 697 | 0.289 | 201 | 0.3 | 0.4 | 7.246 | A |
| C-A | 234 | 58 | | | 234 | | | | |
| A-B | 58 | 15 | | | 58 | | | | |
| A-C | 323 | 81 | | | 323 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 553 | 138 | 567 | 0.974 | 523 | 2.6 | 10.0 | 59.566 | F |
| B-A | 95 | 24 | 103 | 0.923 | 82 | 0.4 | 3.6 | 133.578 | F |
| C-AB | 247 | 62 | 671 | 0.367 | 246 | 0.4 | 0.6 | 8.447 | A |
| C-A | 286 | 72 | | | 286 | | | | |
| A-B | 72 | 18 | | | 72 | | | | |
| A-C | 395 | 99 | | | 395 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 553 | 138 | 557 | 0.992 | 534 | 10.0 | 14.6 | 96.776 | F |
| B-A | 95 | 24 | 103 | 0.922 | 90 | 3.6 | 4.8 | 192.356 | F |
| C-AB | 247 | 62 | 671 | 0.367 | 247 | 0.6 | 0.6 | 8.473 | A |
| C-A | 286 | 72 | | | 286 | | | | |
| A-B | 72 | 18 | | | 72 | | | | |
| A-C | 395 | 99 | | | 395 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 451 | 113 | 596 | 0.758 | 495 | 14.6 | 3.5 | 45.201 | E |
| B-A | 77 | 19 | 212 | 0.364 | 94 | 4.8 | 0.6 | 34.418 | D |
| C-AB | 201 | 50 | 697 | 0.289 | 202 | 0.6 | 0.4 | 7.277 | A |
| C-A | 234 | 58 | | | 234 | | | | |
| A-B | 58 | 15 | | | 58 | | | | |
| A-C | 323 | 81 | | | 323 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 378 | 94 | 634 | 0.597 | 386 | 3.5 | 1.5 | 14.971 | B |
| B-A | 65 | 16 | 307 | 0.211 | 66 | 0.6 | 0.3 | 15.011 | C |
| C-AB | 169 | 42 | 716 | 0.236 | 169 | 0.4 | 0.3 | 6.585 | A |
| C-A | 196 | 49 | | | 196 | | | | |
| A-B | 49 | 12 | | | 49 | | | | |
| A-C | 270 | 68 | | | 270 | | | | |

# APPENDIX N

Stadium Road / Caldbeck Road – PICADY Modelling

# Junctions 9

## PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947


For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk



**Filename:** 4_Caldbeck Road_Stadium Road.j9
**Path:** C:\Users\manch\Dropbox (mode)\Project\Manchester\2. Projects\J325601_Croft Retail Park, Welton Road\4. Data\6. Junction Capacity Assessments\PICADY\4_Caldbeck Road_Stadium Road
**Report generation date:** 03/06/2021 09:50:58

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»2018 Base, AM
»2018 Base, PM
»2021 Base, AM
»2021 Base, PM
»2021 Base + CD, AM
»2021 Base + CD, PM
»2021 Base + CD + Dev, AM
»2021 Base + CD + Dev, PM
»2026 Base, AM
»2026 Base, PM
»2026 Base + CD, AM
»2026 Base + CD, PM
»2026 Base + CD + Dev, AM
»2026 Base + CD + Dev, PM

## Summary of junction performance

| | AM | | | | PM | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Junction Delay (s) | Queue (PCU) | Delay (s) | RFC | Junction Delay (s) |
| | 2018 Base | | | | | | | |
| Stream B-C | 0.3 | 8.65 | 0.25 | 3.13 | 0.2 | 7.59 | 0.18 | 2.60 |
| Stream B-A | 0.4 | 13.36 | 0.28 | | 0.3 | 11.73 | 0.21 | |
| Stream C-AB | 0.3 | 5.12 | 0.17 | | 0.3 | 5.04 | 0.17 | |
| | 2021 Base | | | | | | | |
| Stream B-C | 0.3 | 8.50 | 0.25 | 3.27 | 0.2 | 7.69 | 0.19 | 2.66 |
| Stream B-A | 0.4 | 13.07 | 0.29 | | 0.3 | 11.37 | 0.22 | |
| Stream C-AB | 0.3 | 5.02 | 0.17 | | 0.2 | 5.09 | 0.12 | |
| | 2021 Base + CD | | | | | | | |
| Stream B-C | 0.4 | 9.43 | 0.29 | 3.64 | 0.3 | 8.40 | 0.25 | 3.40 |
| Stream B-A | 0.5 | 14.82 | 0.33 | | 0.4 | 12.61 | 0.26 | |
| Stream C-AB | 0.4 | 5.38 | 0.21 | | 0.3 | 5.52 | 0.19 | |
| | 2021 Base + CD + Dev | | | | | | | |
| Stream B-C | 0.4 | 9.49 | 0.29 | 3.68 | 0.3 | 8.48 | 0.25 | 3.47 |
| Stream B-A | 0.5 | 14.94 | 0.33 | | 0.4 | 12.78 | 0.27 | |
| Stream C-AB | 0.4 | 5.38 | 0.21 | | 0.3 | 5.52 | 0.19 | |
| | 2026 Base | | | | | | | |
| Stream B-C | 0.4 | 9.26 | 0.28 | 3.37 | 0.3 | 7.88 | 0.20 | 2.73 |
| Stream B-A | 0.5 | 14.60 | 0.32 | | 0.3 | 11.74 | 0.23 | |
| Stream C-AB | 0.4 | 5.17 | 0.19 | | 0.2 | 5.10 | 0.13 | |
| | 2026 Base + CD | | | | | | | |
| Stream B-C | 0.4 | 9.85 | 0.31 | 3.80 | 0.3 | 8.64 | 0.26 | 3.47 |
| Stream B-A | 0.5 | 15.66 | 0.35 | | 0.4 | 13.06 | 0.28 | |
| Stream C-AB | 0.4 | 5.42 | 0.22 | | 0.4 | 5.54 | 0.20 | |
| | 2026 Base + CD + Dev | | | | | | | |
| Stream B-C | 0.4 | 9.88 | 0.31 | 3.83 | 0.4 | 8.73 | 0.26 | 3.54 |
| Stream B-A | 0.5 | 15.73 | 0.35 | | 0.4 | 13.25 | 0.29 | |
| Stream C-AB | 0.4 | 5.42 | 0.22 | | 0.4 | 5.54 | 0.20 | |

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

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

## File summary

### File Description

| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site number** | |
| **Date** | 03/12/2018 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | DESKTOP-J595SBC\Manchester Mode |
| **Description** | |

## Units

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

## Analysis Options

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

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D1 | 2018 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D2 | 2018 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D4 | 2021 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D5 | 2021 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D10 | 2021 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D11 | 2021 Base + CD | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D15 | 2021 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D16 | 2021 Base + CD + Dev | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D19 | 2026 Base | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D20 | 2026 Base | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D21 | 2026 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D22 | 2026 Base + CD | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D23 | 2026 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D24 | 2026 Base + CD + Dev | 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 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.13 | A |

### Junction Network Options

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

## Arms

### Arms

| Arm | Name | Description | Arm type |
|---|---|---|---|
| A | Stadium Road (S) | | Major |
| B | Caldbeck Road (W) | | Minor |
| C | Stadium Road (N) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right turn bay | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|---|---|---|---|---|---|---|
| C - Stadium Road (N) | 9.00 | | | 250.0 | ✓ | 0.00 |

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

### Minor Arm Geometry

| Arm | Minor arm type | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate flare length | Flare length (PCU) | Visibility to left (m) | Visibility to right (m) |
|---|---|---|---|---|---|---|---|---|---|---|
| B - Caldbeck Road (W) | One lane plus flare | 10.00 | 4.60 | 3.50 | 3.40 | 3.40 | ✓ | 1.00 | 40 | 30 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 531 | 0.084 | 0.213 | 0.134 | 0.304 |
| 1 | B-C | 694 | 0.092 | 0.234 | - | - |
| 1 | C-B | 719 | 0.242 | 0.242 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

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

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

# Traffic Demand

## Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D1 | 2018 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (S) | | ONE HOUR | ✓ | 348 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 221 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 385 | 100.000 |

# Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 34 | 314 |
| | B - Caldbeck Road (W) | 97 | 0 | 124 |
| | C - Stadium Road (N) | 307 | 78 | 0 |

# Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.25 | 8.65 | 0.3 | A | 114 | 171 |
| B-A | 0.28 | 13.36 | 0.4 | B | 89 | 134 |
| C-AB | 0.17 | 5.12 | 0.3 | A | 111 | 166 |
| C-A | | | | | 243 | 364 |
| A-B | | | | | 31 | 47 |
| A-C | | | | | 288 | 432 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 93 | 23 | 606 | 0.154 | 93 | 0.0 | 0.2 | 7.004 | A |
| B-A | 73 | 18 | 428 | 0.171 | 72 | 0.0 | 0.2 | 10.095 | B |
| C-AB | 82 | 21 | 802 | 0.103 | 82 | 0.0 | 0.2 | 4.995 | A |
| C-A | 207 | 52 | | | 207 | | | | |
| A-B | 26 | 6 | | | 26 | | | | |
| A-C | 236 | 59 | | | 236 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 111 | 28 | 585 | 0.191 | 111 | 0.2 | 0.2 | 7.594 | A |
| B-A | 87 | 22 | 407 | 0.214 | 87 | 0.2 | 0.3 | 11.245 | B |
| C-AB | 106 | 26 | 821 | 0.129 | 106 | 0.2 | 0.2 | 5.038 | A |
| C-A | 240 | 60 | | | 240 | | | | |
| A-B | 31 | 8 | | | 31 | | | | |
| A-C | 282 | 71 | | | 282 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 137 | 34 | 553 | 0.247 | 136 | 0.2 | 0.3 | 8.625 | A |
| B-A | 107 | 27 | 376 | 0.284 | 106 | 0.3 | 0.4 | 13.309 | B |
| C-AB | 143 | 36 | 847 | 0.169 | 143 | 0.2 | 0.3 | 5.121 | A |
| C-A | 281 | 70 | | | 281 | | | | |
| A-B | 37 | 9 | | | 37 | | | | |
| A-C | 346 | 86 | | | 346 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 137 | 34 | 553 | 0.247 | 137 | 0.3 | 0.3 | 8.649 | A |
| B-A | 107 | 27 | 376 | 0.284 | 107 | 0.4 | 0.4 | 13.359 | B |
| C-AB | 143 | 36 | 847 | 0.169 | 143 | 0.3 | 0.3 | 5.124 | A |
| C-A | 280 | 70 | | | 280 | | | | |
| A-B | 37 | 9 | | | 37 | | | | |
| A-C | 346 | 86 | | | 346 | | | | |

### 09:15 - 09:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 111 | 28 | 585 | 0.191 | 112 | 0.3 | 0.2 | 7.620 | A |
| B-A | 87 | 22 | 407 | 0.214 | 88 | 0.4 | 0.3 | 11.299 | B |
| C-AB | 106 | 27 | 821 | 0.129 | 106 | 0.3 | 0.2 | 5.048 | A |
| C-A | 240 | 60 | | | 240 | | | | |
| A-B | 31 | 8 | | | 31 | | | | |
| A-C | 282 | 71 | | | 282 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 93 | 23 | 605 | 0.154 | 94 | 0.2 | 0.2 | 7.041 | A |
| B-A | 73 | 18 | 428 | 0.171 | 73 | 0.3 | 0.2 | 10.159 | B |
| C-AB | 83 | 21 | 802 | 0.103 | 83 | 0.2 | 0.2 | 5.007 | A |
| C-A | 207 | 52 | | | 207 | | | | |
| A-B | 26 | 6 | | | 26 | | | | |
| A-C | 236 | 59 | | | 236 | | | | |

# 2018 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.60 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D2 | 2018 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (S) | | ONE HOUR | ✓ | 300 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 173 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 385 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 29 | 271 |
| | B - Caldbeck Road (W) | 76 | 0 | 97 |
| | C - Stadium Road (N) | 307 | 78 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.18 | 7.59 | 0.2 | A | 89 | 134 |
| B-A | 0.21 | 11.73 | 0.3 | B | 70 | 105 |
| C-AB | 0.17 | 5.04 | 0.3 | A | 110 | 165 |
| C-A | | | | | 243 | 365 |
| A-B | | | | | 27 | 40 |
| A-C | | | | | 249 | 373 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 73 | 18 | 621 | 0.118 | 72 | 0.0 | 0.1 | 6.554 | A |
| B-A | 57 | 14 | 436 | 0.131 | 57 | 0.0 | 0.1 | 9.467 | A |
| C-AB | 82 | 21 | 810 | 0.101 | 82 | 0.0 | 0.2 | 4.940 | A |
| C-A | 208 | 52 | | | 208 | | | | |
| A-B | 22 | 5 | | | 22 | | | | |
| A-C | 204 | 51 | | | 204 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 87 | 22 | 605 | 0.144 | 87 | 0.1 | 0.2 | 6.945 | A |
| B-A | 68 | 17 | 417 | 0.164 | 68 | 0.1 | 0.2 | 10.305 | B |
| C-AB | 105 | 26 | 829 | 0.127 | 105 | 0.2 | 0.2 | 4.972 | A |
| C-A | 241 | 60 | | | 241 | | | | |
| A-B | 26 | 7 | | | 26 | | | | |
| A-C | 244 | 61 | | | 244 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 107 | 27 | 581 | 0.184 | 107 | 0.2 | 0.2 | 7.577 | A |
| B-A | 84 | 21 | 391 | 0.214 | 83 | 0.2 | 0.3 | 11.705 | B |
| C-AB | 142 | 36 | 857 | 0.166 | 142 | 0.2 | 0.3 | 5.038 | A |
| C-A | 282 | 70 | | | 282 | | | | |
| A-B | 32 | 8 | | | 32 | | | | |
| A-C | 298 | 75 | | | 298 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 107 | 27 | 581 | 0.184 | 107 | 0.2 | 0.2 | 7.586 | A |
| B-A | 84 | 21 | 391 | 0.214 | 84 | 0.3 | 0.3 | 11.731 | B |
| C-AB | 142 | 36 | 857 | 0.166 | 142 | 0.3 | 0.3 | 5.043 | A |
| C-A | 282 | 70 | | | 282 | | | | |
| A-B | 32 | 8 | | | 32 | | | | |
| A-C | 298 | 75 | | | 298 | | | | |

**17:15 - 17:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 87 | 22 | 605 | 0.144 | 87 | 0.2 | 0.2 | 6.961 | A |
| B-A | 68 | 17 | 417 | 0.164 | 69 | 0.3 | 0.2 | 10.337 | B |
| C-AB | 105 | 26 | 830 | 0.127 | 106 | 0.3 | 0.2 | 4.980 | A |
| C-A | 241 | 60 | | | 241 | | | | |
| A-B | 26 | 7 | | | 26 | | | | |
| A-C | 244 | 61 | | | 244 | | | | |

**17:30 - 17:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 73 | 18 | 621 | 0.118 | 73 | 0.2 | 0.1 | 6.573 | A |
| B-A | 57 | 14 | 436 | 0.131 | 57 | 0.2 | 0.2 | 9.508 | A |
| C-AB | 82 | 21 | 810 | 0.102 | 83 | 0.2 | 0.2 | 4.952 | A |
| C-A | 207 | 52 | | | 207 | | | | |
| A-B | 22 | 5 | | | 22 | | | | |
| A-C | 204 | 51 | | | 204 | | | | |

# 2021 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.27 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D4 | 2021 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (S) | | ONE HOUR | ✓ | 297 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 228 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 399 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 35 | 262 |
| | B - Caldbeck Road (W) | 100 | 0 | 128 |
| | C - Stadium Road (N) | 319 | 80 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.25 | 8.50 | 0.3 | A | 117 | 176 |
| B-A | 0.29 | 13.07 | 0.4 | B | 92 | 138 |
| C-AB | 0.17 | 5.02 | 0.3 | A | 115 | 172 |
| C-A | | | | | 252 | 377 |
| A-B | | | | | 32 | 48 |
| A-C | | | | | 240 | 361 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 96 | 24 | 614 | 0.157 | 96 | 0.0 | 0.2 | 6.935 | A |
| B-A | 75 | 19 | 435 | 0.173 | 74 | 0.0 | 0.2 | 9.975 | A |
| C-AB | 85 | 21 | 816 | 0.105 | 85 | 0.0 | 0.2 | 4.920 | A |
| C-A | 215 | 54 | | | 215 | | | | |
| A-B | 26 | 7 | | | 26 | | | | |
| A-C | 197 | 49 | | | 197 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 115 | 29 | 595 | 0.194 | 115 | 0.2 | 0.2 | 7.499 | A |
| B-A | 90 | 22 | 414 | 0.217 | 90 | 0.2 | 0.3 | 11.074 | B |
| C-AB | 110 | 27 | 837 | 0.131 | 109 | 0.2 | 0.2 | 4.951 | A |
| C-A | 249 | 62 | | | 249 | | | | |
| A-B | 31 | 8 | | | 31 | | | | |
| A-C | 236 | 59 | | | 236 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 141 | 35 | 565 | 0.250 | 141 | 0.2 | 0.3 | 8.480 | A |
| B-A | 110 | 28 | 386 | 0.286 | 110 | 0.3 | 0.4 | 13.020 | B |
| C-AB | 149 | 37 | 866 | 0.172 | 148 | 0.2 | 0.3 | 5.017 | A |
| C-A | 291 | 73 | | | 291 | | | | |
| A-B | 39 | 10 | | | 39 | | | | |
| A-C | 288 | 72 | | | 288 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 141 | 35 | 564 | 0.250 | 141 | 0.3 | 0.3 | 8.502 | A |
| B-A | 110 | 28 | 385 | 0.286 | 110 | 0.4 | 0.4 | 13.070 | B |
| C-AB | 149 | 37 | 866 | 0.172 | 149 | 0.3 | 0.3 | 5.024 | A |
| C-A | 291 | 73 | | | 291 | | | | |
| A-B | 39 | 10 | | | 39 | | | | |
| A-C | 288 | 72 | | | 288 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 115 | 29 | 594 | 0.194 | 115 | 0.3 | 0.2 | 7.525 | A |
| B-A | 90 | 22 | 414 | 0.217 | 90 | 0.4 | 0.3 | 11.129 | B |
| C-AB | 110 | 27 | 837 | 0.131 | 110 | 0.3 | 0.2 | 4.961 | A |
| C-A | 249 | 62 | | | 249 | | | | |
| A-B | 31 | 8 | | | 31 | | | | |
| A-C | 236 | 59 | | | 236 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 96 | 24 | 613 | 0.157 | 97 | 0.2 | 0.2 | 6.969 | A |
| B-A | 75 | 19 | 434 | 0.173 | 76 | 0.3 | 0.2 | 10.041 | B |
| C-AB | 86 | 21 | 816 | 0.105 | 86 | 0.2 | 0.2 | 4.934 | A |
| C-A | 215 | 54 | | | 215 | | | | |
| A-B | 26 | 7 | | | 26 | | | | |
| A-C | 197 | 49 | | | 197 | | | | |

# 2021 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.66 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D5 | 2021 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (S) | | ONE HOUR | ✓ | 310 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 179 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 303 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 30 | 280 |
| | B - Caldbeck Road (W) | 79 | 0 | 100 |
| | C - Stadium Road (N) | 242 | 61 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.19 | 7.69 | 0.2 | A | 92 | 138 |
| B-A | 0.22 | 11.37 | 0.3 | B | 72 | 109 |
| C-AB | 0.12 | 5.09 | 0.2 | A | 79 | 118 |
| C-A | | | | | 199 | 299 |
| A-B | | | | | 28 | 41 |
| A-C | | | | | 257 | 385 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 75 | 19 | 619 | 0.122 | 75 | 0.0 | 0.1 | 6.606 | A |
| B-A | 59 | 15 | 445 | 0.134 | 59 | 0.0 | 0.2 | 9.315 | A |
| C-AB | 60 | 15 | 777 | 0.077 | 60 | 0.0 | 0.1 | 5.013 | A |
| C-A | 168 | 42 | | | 168 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 211 | 53 | | | 211 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 90 | 22 | 603 | 0.149 | 90 | 0.1 | 0.2 | 7.017 | A |
| B-A | 71 | 18 | 428 | 0.166 | 71 | 0.2 | 0.2 | 10.074 | B |
| C-AB | 76 | 19 | 790 | 0.096 | 76 | 0.1 | 0.1 | 5.039 | A |
| C-A | 197 | 49 | | | 197 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 252 | 63 | | | 252 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 110 | 28 | 579 | 0.190 | 110 | 0.2 | 0.2 | 7.675 | A |
| B-A | 87 | 22 | 404 | 0.216 | 87 | 0.2 | 0.3 | 11.352 | B |
| C-AB | 100 | 25 | 808 | 0.124 | 100 | 0.1 | 0.2 | 5.084 | A |
| C-A | 233 | 58 | | | 233 | | | | |
| A-B | 33 | 8 | | | 33 | | | | |
| A-C | 308 | 77 | | | 308 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 110 | 28 | 578 | 0.190 | 110 | 0.2 | 0.2 | 7.686 | A |
| B-A | 87 | 22 | 403 | 0.216 | 87 | 0.3 | 0.3 | 11.374 | B |
| C-AB | 100 | 25 | 809 | 0.124 | 100 | 0.2 | 0.2 | 5.089 | A |
| C-A | 233 | 58 | | | 233 | | | | |
| A-B | 33 | 8 | | | 33 | | | | |
| A-C | 308 | 77 | | | 308 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 90 | 22 | 602 | 0.149 | 90 | 0.2 | 0.2 | 7.033 | A |
| B-A | 71 | 18 | 428 | 0.166 | 71 | 0.3 | 0.2 | 10.101 | B |
| C-AB | 76 | 19 | 790 | 0.096 | 76 | 0.2 | 0.2 | 5.046 | A |
| C-A | 196 | 49 | | | 196 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 252 | 63 | | | 252 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 75 | 19 | 619 | 0.122 | 75 | 0.2 | 0.1 | 6.632 | A |
| B-A | 59 | 15 | 445 | 0.134 | 60 | 0.2 | 0.2 | 9.340 | A |
| C-AB | 60 | 15 | 777 | 0.077 | 60 | 0.2 | 0.1 | 5.023 | A |
| C-A | 168 | 42 | | | 168 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 211 | 53 | | | 211 | | | | |

# 2021 Base + CD, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.64 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D10 | 2021 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (S) | | ONE HOUR | ✓ | 364 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 249 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 416 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 38 | 326 |
| | B - Caldbeck Road (W) | 107 | 0 | 142 |
| | C - Stadium Road (N) | 319 | 97 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.29 | 9.43 | 0.4 | A | 130 | 195 |
| B-A | 0.33 | 14.82 | 0.5 | B | 98 | 147 |
| C-AB | 0.21 | 5.38 | 0.4 | A | 140 | 210 |
| C-A | | | | | 241 | 362 |
| A-B | | | | | 35 | 52 |
| A-C | | | | | 299 | 449 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 107 | 27 | 600 | 0.178 | 106 | 0.0 | 0.2 | 7.276 | A |
| B-A | 81 | 20 | 419 | 0.192 | 80 | 0.0 | 0.2 | 10.592 | B |
| C-AB | 104 | 26 | 806 | 0.129 | 103 | 0.0 | 0.2 | 5.123 | A |
| C-A | 209 | 52 | | | 209 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 245 | 61 | | | 245 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 128 | 32 | 576 | 0.221 | 127 | 0.2 | 0.3 | 8.013 | A |
| B-A | 96 | 24 | 395 | 0.243 | 96 | 0.2 | 0.3 | 12.017 | B |
| C-AB | 134 | 34 | 825 | 0.163 | 134 | 0.2 | 0.3 | 5.213 | A |
| C-A | 240 | 60 | | | 240 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 293 | 73 | | | 293 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 156 | 39 | 539 | 0.290 | 156 | 0.3 | 0.4 | 9.390 | A |
| B-A | 118 | 29 | 361 | 0.326 | 117 | 0.3 | 0.5 | 14.735 | B |
| C-AB | 182 | 46 | 852 | 0.214 | 182 | 0.3 | 0.4 | 5.376 | A |
| C-A | 276 | 69 | | | 276 | | | | |
| A-B | 42 | 10 | | | 42 | | | | |
| A-C | 359 | 90 | | | 359 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 156 | 39 | 538 | 0.291 | 156 | 0.4 | 0.4 | 9.429 | A |
| B-A | 118 | 29 | 361 | 0.327 | 118 | 0.5 | 0.5 | 14.819 | B |
| C-AB | 182 | 46 | 852 | 0.214 | 182 | 0.4 | 0.4 | 5.384 | A |
| C-A | 276 | 69 | | | 276 | | | | |
| A-B | 42 | 10 | | | 42 | | | | |
| A-C | 359 | 90 | | | 359 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 128 | 32 | 576 | 0.222 | 128 | 0.4 | 0.3 | 8.055 | A |
| B-A | 96 | 24 | 395 | 0.244 | 97 | 0.5 | 0.3 | 12.100 | B |
| C-AB | 134 | 34 | 825 | 0.163 | 135 | 0.4 | 0.3 | 5.225 | A |
| C-A | 240 | 60 | | | 240 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 293 | 73 | | | 293 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 107 | 27 | 599 | 0.178 | 107 | 0.3 | 0.2 | 7.321 | A |
| B-A | 81 | 20 | 418 | 0.193 | 81 | 0.3 | 0.2 | 10.680 | B |
| C-AB | 104 | 26 | 806 | 0.130 | 105 | 0.3 | 0.2 | 5.140 | A |
| C-A | 209 | 52 | | | 209 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 245 | 61 | | | 245 | | | | |

# 2021 Base + CD, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.40 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D11 | 2021 Base + CD | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (S) | | ONE HOUR | ✓ | 316 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 219 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 336 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 36 | 280 |
| | B - Caldbeck Road (W) | 92 | 0 | 127 |
| | C - Stadium Road (N) | 242 | 94 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.25 | 8.40 | 0.3 | A | 117 | 175 |
| B-A | 0.26 | 12.61 | 0.4 | B | 84 | 127 |
| C-AB | 0.19 | 5.52 | 0.3 | A | 121 | 182 |
| C-A | | | | | 187 | 280 |
| A-B | | | | | 33 | 50 |
| A-C | | | | | 257 | 385 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 96 | 24 | 616 | 0.155 | 95 | 0.0 | 0.2 | 6.895 | A |
| B-A | 69 | 17 | 434 | 0.159 | 69 | 0.0 | 0.2 | 9.818 | A |
| C-AB | 92 | 23 | 776 | 0.119 | 92 | 0.0 | 0.2 | 5.259 | A |
| C-A | 160 | 40 | | | 160 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 211 | 53 | | | 211 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 114 | 29 | 597 | 0.191 | 114 | 0.2 | 0.2 | 7.442 | A |
| B-A | 83 | 21 | 415 | 0.199 | 82 | 0.2 | 0.2 | 10.821 | B |
| C-AB | 117 | 29 | 789 | 0.148 | 117 | 0.2 | 0.2 | 5.355 | A |
| C-A | 185 | 46 | | | 185 | | | | |
| A-B | 32 | 8 | | | 32 | | | | |
| A-C | 252 | 63 | | | 252 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 140 | 35 | 569 | 0.246 | 139 | 0.2 | 0.3 | 8.375 | A |
| B-A | 101 | 25 | 387 | 0.262 | 101 | 0.2 | 0.3 | 12.572 | B |
| C-AB | 155 | 39 | 807 | 0.192 | 154 | 0.2 | 0.3 | 5.518 | A |
| C-A | 215 | 54 | | | 215 | | | | |
| A-B | 40 | 10 | | | 40 | | | | |
| A-C | 308 | 77 | | | 308 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 140 | 35 | 569 | 0.246 | 140 | 0.3 | 0.3 | 8.395 | A |
| B-A | 101 | 25 | 387 | 0.262 | 101 | 0.3 | 0.4 | 12.614 | B |
| C-AB | 155 | 39 | 807 | 0.192 | 155 | 0.3 | 0.3 | 5.524 | A |
| C-A | 215 | 54 | | | 215 | | | | |
| A-B | 40 | 10 | | | 40 | | | | |
| A-C | 308 | 77 | | | 308 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 114 | 29 | 597 | 0.191 | 115 | 0.3 | 0.2 | 7.469 | A |
| B-A | 83 | 21 | 415 | 0.199 | 83 | 0.4 | 0.3 | 10.867 | B |
| C-AB | 117 | 29 | 789 | 0.148 | 117 | 0.3 | 0.2 | 5.366 | A |
| C-A | 185 | 46 | | | 185 | | | | |
| A-B | 32 | 8 | | | 32 | | | | |
| A-C | 252 | 63 | | | 252 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 96 | 24 | 616 | 0.155 | 96 | 0.2 | 0.2 | 6.931 | A |
| B-A | 69 | 17 | 434 | 0.159 | 70 | 0.3 | 0.2 | 9.877 | A |
| C-AB | 93 | 23 | 777 | 0.119 | 93 | 0.2 | 0.2 | 5.271 | A |
| C-A | 160 | 40 | | | 160 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 211 | 53 | | | 211 | | | | |

# 2021 Base + CD + Dev, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.68 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D15 | 2021 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (S) | | ONE HOUR | ✓ | 364 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 251 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 416 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 38 | 326 |
| | B - Caldbeck Road (W) | 109 | 0 | 142 |
| | C - Stadium Road (N) | 319 | 97 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.29 | 9.49 | 0.4 | A | 130 | 195 |
| B-A | 0.33 | 14.94 | 0.5 | B | 100 | 150 |
| C-AB | 0.21 | 5.38 | 0.4 | A | 140 | 210 |
| C-A | | | | | 241 | 362 |
| A-B | | | | | 35 | 52 |
| A-C | | | | | 299 | 449 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 107 | 27 | 599 | 0.179 | 106 | 0.0 | 0.2 | 7.296 | A |
| B-A | 82 | 21 | 419 | 0.196 | 81 | 0.0 | 0.2 | 10.625 | B |
| C-AB | 104 | 26 | 806 | 0.129 | 103 | 0.0 | 0.2 | 5.123 | A |
| C-A | 209 | 52 | | | 209 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 245 | 61 | | | 245 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 128 | 32 | 575 | 0.222 | 127 | 0.2 | 0.3 | 8.042 | A |
| B-A | 98 | 24 | 395 | 0.248 | 98 | 0.2 | 0.3 | 12.077 | B |
| C-AB | 134 | 34 | 825 | 0.163 | 134 | 0.2 | 0.3 | 5.213 | A |
| C-A | 240 | 60 | | | 240 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 293 | 73 | | | 293 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 156 | 39 | 536 | 0.291 | 156 | 0.3 | 0.4 | 9.446 | A |
| B-A | 120 | 30 | 361 | 0.332 | 119 | 0.3 | 0.5 | 14.848 | B |
| C-AB | 182 | 46 | 852 | 0.214 | 182 | 0.3 | 0.4 | 5.376 | A |
| C-A | 276 | 69 | | | 276 | | | | |
| A-B | 42 | 10 | | | 42 | | | | |
| A-C | 359 | 90 | | | 359 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 156 | 39 | 536 | 0.292 | 156 | 0.4 | 0.4 | 9.487 | A |
| B-A | 120 | 30 | 361 | 0.333 | 120 | 0.5 | 0.5 | 14.944 | B |
| C-AB | 182 | 46 | 852 | 0.214 | 182 | 0.4 | 0.4 | 5.384 | A |
| C-A | 276 | 69 | | | 276 | | | | |
| A-B | 42 | 10 | | | 42 | | | | |
| A-C | 359 | 90 | | | 359 | | | | |

### 09:15 - 09:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 128 | 32 | 574 | 0.222 | 128 | 0.4 | 0.3 | 8.083 | A |
| B-A | 98 | 24 | 395 | 0.248 | 99 | 0.5 | 0.3 | 12.163 | B |
| C-AB | 134 | 34 | 825 | 0.163 | 135 | 0.4 | 0.3 | 5.225 | A |
| C-A | 240 | 60 | | | 240 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 293 | 73 | | | 293 | | | | |

### 09:30 - 09:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 107 | 27 | 598 | 0.179 | 107 | 0.3 | 0.2 | 7.341 | A |
| B-A | 82 | 21 | 419 | 0.196 | 82 | 0.3 | 0.2 | 10.717 | B |
| C-AB | 104 | 26 | 806 | 0.130 | 105 | 0.3 | 0.2 | 5.140 | A |
| C-A | 209 | 52 | | | 209 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 245 | 61 | | | 245 | | | | |

# 2021 Base + CD + Dev, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.47 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D16 | 2021 Base + CD + Dev | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (S) | | ONE HOUR | ✓ | 316 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 223 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 336 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 36 | 280 |
| | B - Caldbeck Road (W) | 96 | 0 | 127 |
| | C - Stadium Road (N) | 242 | 94 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.25 | 8.48 | 0.3 | A | 117 | 175 |
| B-A | 0.27 | 12.78 | 0.4 | B | 88 | 132 |
| C-AB | 0.19 | 5.52 | 0.3 | A | 121 | 182 |
| C-A | | | | | 187 | 280 |
| A-B | | | | | 33 | 50 |
| A-C | | | | | 257 | 385 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 96 | 24 | 613 | 0.156 | 95 | 0.0 | 0.2 | 6.931 | A |
| B-A | 72 | 18 | 435 | 0.166 | 71 | 0.0 | 0.2 | 9.872 | A |
| C-AB | 92 | 23 | 776 | 0.119 | 92 | 0.0 | 0.2 | 5.259 | A |
| C-A | 160 | 40 | | | 160 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 211 | 53 | | | 211 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 114 | 29 | 594 | 0.192 | 114 | 0.2 | 0.2 | 7.492 | A |
| B-A | 86 | 22 | 416 | 0.208 | 86 | 0.2 | 0.3 | 10.912 | B |
| C-AB | 117 | 29 | 789 | 0.148 | 117 | 0.2 | 0.2 | 5.355 | A |
| C-A | 185 | 46 | | | 185 | | | | |
| A-B | 32 | 8 | | | 32 | | | | |
| A-C | 252 | 63 | | | 252 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 140 | 35 | 565 | 0.248 | 139 | 0.2 | 0.3 | 8.456 | A |
| B-A | 106 | 26 | 387 | 0.273 | 105 | 0.3 | 0.4 | 12.737 | B |
| C-AB | 155 | 39 | 807 | 0.192 | 154 | 0.2 | 0.3 | 5.518 | A |
| C-A | 215 | 54 | | | 215 | | | | |
| A-B | 40 | 10 | | | 40 | | | | |
| A-C | 308 | 77 | | | 308 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 140 | 35 | 564 | 0.248 | 140 | 0.3 | 0.3 | 8.477 | A |
| B-A | 106 | 26 | 387 | 0.273 | 106 | 0.4 | 0.4 | 12.782 | B |
| C-AB | 155 | 39 | 807 | 0.192 | 155 | 0.3 | 0.3 | 5.524 | A |
| C-A | 215 | 54 | | | 215 | | | | |
| A-B | 40 | 10 | | | 40 | | | | |
| A-C | 308 | 77 | | | 308 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 114 | 29 | 594 | 0.192 | 115 | 0.3 | 0.2 | 7.519 | A |
| B-A | 86 | 22 | 416 | 0.208 | 87 | 0.4 | 0.3 | 10.962 | B |
| C-AB | 117 | 29 | 789 | 0.148 | 117 | 0.3 | 0.2 | 5.366 | A |
| C-A | 185 | 46 | | | 185 | | | | |
| A-B | 32 | 8 | | | 32 | | | | |
| A-C | 252 | 63 | | | 252 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 96 | 24 | 613 | 0.156 | 96 | 0.2 | 0.2 | 6.968 | A |
| B-A | 72 | 18 | 435 | 0.166 | 73 | 0.3 | 0.2 | 9.932 | A |
| C-AB | 93 | 23 | 777 | 0.119 | 93 | 0.2 | 0.2 | 5.271 | A |
| C-A | 160 | 40 | | | 160 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 211 | 53 | | | 211 | | | | |

# 2026 Base, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.37 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D19 | 2026 Base | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (S) | | ONE HOUR | ✓ | 376 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 239 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 416 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 36 | 340 |
| | B - Caldbeck Road (W) | 105 | 0 | 134 |
| | C - Stadium Road (N) | 332 | 84 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.28 | 9.26 | 0.4 | A | 123 | 184 |
| B-A | 0.32 | 14.60 | 0.5 | B | 96 | 145 |
| C-AB | 0.19 | 5.17 | 0.4 | A | 124 | 186 |
| C-A | | | | | 258 | 387 |
| A-B | | | | | 33 | 50 |
| A-C | | | | | 312 | 468 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 101 | 25 | 598 | 0.169 | 100 | 0.0 | 0.2 | 7.225 | A |
| B-A | 79 | 20 | 419 | 0.188 | 78 | 0.0 | 0.2 | 10.520 | B |
| C-AB | 91 | 23 | 810 | 0.113 | 91 | 0.0 | 0.2 | 5.004 | A |
| C-A | 222 | 55 | | | 222 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 256 | 64 | | | 256 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 120 | 30 | 574 | 0.210 | 120 | 0.2 | 0.3 | 7.929 | A |
| B-A | 94 | 24 | 396 | 0.238 | 94 | 0.2 | 0.3 | 11.909 | B |
| C-AB | 118 | 30 | 830 | 0.142 | 118 | 0.2 | 0.2 | 5.061 | A |
| C-A | 256 | 64 | | | 256 | | | | |
| A-B | 32 | 8 | | | 32 | | | | |
| A-C | 306 | 76 | | | 306 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 148 | 37 | 537 | 0.275 | 147 | 0.3 | 0.4 | 9.226 | A |
| B-A | 116 | 29 | 362 | 0.319 | 115 | 0.3 | 0.5 | 14.521 | B |
| C-AB | 162 | 40 | 859 | 0.188 | 161 | 0.2 | 0.4 | 5.166 | A |
| C-A | 296 | 74 | | | 296 | | | | |
| A-B | 40 | 10 | | | 40 | | | | |
| A-C | 374 | 94 | | | 374 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 148 | 37 | 536 | 0.275 | 148 | 0.4 | 0.4 | 9.260 | A |
| B-A | 116 | 29 | 362 | 0.319 | 116 | 0.5 | 0.5 | 14.598 | B |
| C-AB | 162 | 40 | 859 | 0.188 | 162 | 0.4 | 0.4 | 5.173 | A |
| C-A | 296 | 74 | | | 296 | | | | |
| A-B | 40 | 10 | | | 40 | | | | |
| A-C | 374 | 94 | | | 374 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 120 | 30 | 573 | 0.210 | 121 | 0.4 | 0.3 | 7.965 | A |
| B-A | 94 | 24 | 396 | 0.238 | 95 | 0.5 | 0.3 | 11.985 | B |
| C-AB | 118 | 30 | 830 | 0.143 | 119 | 0.4 | 0.3 | 5.068 | A |
| C-A | 256 | 64 | | | 256 | | | | |
| A-B | 32 | 8 | | | 32 | | | | |
| A-C | 306 | 76 | | | 306 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 101 | 25 | 597 | 0.169 | 101 | 0.3 | 0.2 | 7.270 | A |
| B-A | 79 | 20 | 419 | 0.189 | 79 | 0.3 | 0.2 | 10.603 | B |
| C-AB | 92 | 23 | 810 | 0.113 | 92 | 0.3 | 0.2 | 5.020 | A |
| C-A | 221 | 55 | | | 221 | | | | |
| A-B | 27 | 7 | | | 27 | | | | |
| A-C | 256 | 64 | | | 256 | | | | |

# 2026 Base, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 2.73 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D20 | 2026 Base | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (S) | | ONE HOUR | ✓ | 324 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 187 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 317 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 31 | 293 |
| | B - Caldbeck Road (W) | 82 | 0 | 105 |
| | C - Stadium Road (N) | 253 | 64 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.20 | 7.88 | 0.3 | A | 96 | 145 |
| B-A | 0.23 | 11.74 | 0.3 | B | 75 | 113 |
| C-AB | 0.13 | 5.10 | 0.2 | A | 84 | 126 |
| C-A | | | | | 207 | 310 |
| A-B | | | | | 28 | 43 |
| A-C | | | | | 269 | 403 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 79 | 20 | 616 | 0.128 | 78 | 0.0 | 0.1 | 6.692 | A |
| B-A | 62 | 15 | 441 | 0.140 | 61 | 0.0 | 0.2 | 9.460 | A |
| C-AB | 64 | 16 | 780 | 0.082 | 63 | 0.0 | 0.1 | 5.019 | A |
| C-A | 175 | 44 | | | 175 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 221 | 55 | | | 221 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 94 | 24 | 599 | 0.158 | 94 | 0.1 | 0.2 | 7.137 | A |
| B-A | 74 | 18 | 423 | 0.174 | 74 | 0.2 | 0.2 | 10.303 | B |
| C-AB | 81 | 20 | 794 | 0.102 | 81 | 0.1 | 0.2 | 5.050 | A |
| C-A | 204 | 51 | | | 204 | | | | |
| A-B | 28 | 7 | | | 28 | | | | |
| A-C | 263 | 66 | | | 263 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 116 | 29 | 573 | 0.202 | 115 | 0.2 | 0.3 | 7.864 | A |
| B-A | 90 | 23 | 397 | 0.227 | 90 | 0.2 | 0.3 | 11.713 | B |
| C-AB | 107 | 27 | 813 | 0.132 | 107 | 0.2 | 0.2 | 5.100 | A |
| C-A | 242 | 60 | | | 242 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 323 | 81 | | | 323 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 116 | 29 | 573 | 0.202 | 116 | 0.3 | 0.3 | 7.875 | A |
| B-A | 90 | 23 | 397 | 0.227 | 90 | 0.3 | 0.3 | 11.741 | B |
| C-AB | 108 | 27 | 813 | 0.132 | 107 | 0.2 | 0.2 | 5.104 | A |
| C-A | 242 | 60 | | | 242 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 323 | 81 | | | 323 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 94 | 24 | 598 | 0.158 | 95 | 0.3 | 0.2 | 7.152 | A |
| B-A | 74 | 18 | 423 | 0.174 | 74 | 0.3 | 0.2 | 10.334 | B |
| C-AB | 81 | 20 | 794 | 0.102 | 81 | 0.2 | 0.2 | 5.054 | A |
| C-A | 204 | 51 | | | 204 | | | | |
| A-B | 28 | 7 | | | 28 | | | | |
| A-C | 263 | 66 | | | 263 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 79 | 20 | 615 | 0.128 | 79 | 0.2 | 0.1 | 6.715 | A |
| B-A | 62 | 15 | 441 | 0.140 | 62 | 0.2 | 0.2 | 9.504 | A |
| C-AB | 64 | 16 | 780 | 0.082 | 64 | 0.2 | 0.1 | 5.027 | A |
| C-A | 175 | 44 | | | 175 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 221 | 55 | | | 221 | | | | |

# 2026 Base + CD, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.80 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D21 | 2026 Base + CD | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (S) | | ONE HOUR | ✓ | 380 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 259 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 432 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 40 | 340 |
| | B - Caldbeck Road (W) | 112 | 0 | 147 |
| | C - Stadium Road (N) | 332 | 100 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.31 | 9.85 | 0.4 | A | 135 | 202 |
| B-A | 0.35 | 15.66 | 0.5 | C | 103 | 154 |
| C-AB | 0.22 | 5.42 | 0.4 | A | 148 | 221 |
| C-A | | | | | 249 | 373 |
| A-B | | | | | 37 | 55 |
| A-C | | | | | 312 | 468 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 111 | 28 | 595 | 0.186 | 110 | 0.0 | 0.2 | 7.410 | A |
| B-A | 84 | 21 | 414 | 0.204 | 83 | 0.0 | 0.3 | 10.850 | B |
| C-AB | 109 | 27 | 809 | 0.135 | 108 | 0.0 | 0.2 | 5.132 | A |
| C-A | 216 | 54 | | | 216 | | | | |
| A-B | 30 | 8 | | | 30 | | | | |
| A-C | 256 | 64 | | | 256 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 132 | 33 | 569 | 0.232 | 132 | 0.2 | 0.3 | 8.225 | A |
| B-A | 101 | 25 | 389 | 0.259 | 100 | 0.3 | 0.3 | 12.435 | B |
| C-AB | 141 | 35 | 829 | 0.170 | 141 | 0.2 | 0.3 | 5.232 | A |
| C-A | 248 | 62 | | | 248 | | | | |
| A-B | 36 | 9 | | | 36 | | | | |
| A-C | 306 | 76 | | | 306 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 162 | 40 | 528 | 0.306 | 161 | 0.3 | 0.4 | 9.798 | A |
| B-A | 123 | 31 | 353 | 0.349 | 123 | 0.3 | 0.5 | 15.556 | C |
| C-AB | 192 | 48 | 858 | 0.224 | 192 | 0.3 | 0.4 | 5.412 | A |
| C-A | 283 | 71 | | | 283 | | | | |
| A-B | 44 | 11 | | | 44 | | | | |
| A-C | 374 | 94 | | | 374 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 162 | 40 | 527 | 0.307 | 162 | 0.4 | 0.4 | 9.848 | A |
| B-A | 123 | 31 | 353 | 0.349 | 123 | 0.5 | 0.5 | 15.665 | C |
| C-AB | 193 | 48 | 858 | 0.225 | 193 | 0.4 | 0.4 | 5.421 | A |
| C-A | 283 | 71 | | | 283 | | | | |
| A-B | 44 | 11 | | | 44 | | | | |
| A-C | 374 | 94 | | | 374 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 132 | 33 | 568 | 0.233 | 133 | 0.4 | 0.3 | 8.272 | A |
| B-A | 101 | 25 | 389 | 0.259 | 101 | 0.5 | 0.4 | 12.537 | B |
| C-AB | 141 | 35 | 830 | 0.170 | 142 | 0.4 | 0.3 | 5.245 | A |
| C-A | 247 | 62 | | | 247 | | | | |
| A-B | 36 | 9 | | | 36 | | | | |
| A-C | 306 | 76 | | | 306 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 111 | 28 | 594 | 0.186 | 111 | 0.3 | 0.2 | 7.461 | A |
| B-A | 84 | 21 | 414 | 0.204 | 85 | 0.4 | 0.3 | 10.949 | B |
| C-AB | 109 | 27 | 810 | 0.135 | 110 | 0.3 | 0.2 | 5.149 | A |
| C-A | 216 | 54 | | | 216 | | | | |
| A-B | 30 | 8 | | | 30 | | | | |
| A-C | 256 | 64 | | | 256 | | | | |

# 2026 Base + CD, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.47 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D22 | 2026 Base + CD | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (S) | | ONE HOUR | ✓ | 331 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 227 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 349 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 38 | 293 |
| | B - Caldbeck Road (W) | 95 | 0 | 132 |
| | C - Stadium Road (N) | 253 | 96 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.26 | 8.64 | 0.3 | A | 121 | 182 |
| B-A | 0.28 | 13.06 | 0.4 | B | 87 | 131 |
| C-AB | 0.20 | 5.54 | 0.4 | A | 126 | 189 |
| C-A | | | | | 194 | 291 |
| A-B | | | | | 35 | 52 |
| A-C | | | | | 269 | 403 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 99 | 25 | 613 | 0.162 | 99 | 0.0 | 0.2 | 6.993 | A |
| B-A | 72 | 18 | 430 | 0.166 | 71 | 0.0 | 0.2 | 9.988 | A |
| C-AB | 96 | 24 | 779 | 0.123 | 95 | 0.0 | 0.2 | 5.257 | A |
| C-A | 167 | 42 | | | 167 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 221 | 55 | | | 221 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 119 | 30 | 593 | 0.200 | 118 | 0.2 | 0.2 | 7.586 | A |
| B-A | 85 | 21 | 410 | 0.208 | 85 | 0.2 | 0.3 | 11.079 | B |
| C-AB | 121 | 30 | 793 | 0.153 | 121 | 0.2 | 0.2 | 5.364 | A |
| C-A | 192 | 48 | | | 192 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 263 | 66 | | | 263 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 145 | 36 | 562 | 0.258 | 145 | 0.2 | 0.3 | 8.617 | A |
| B-A | 105 | 26 | 380 | 0.275 | 104 | 0.3 | 0.4 | 13.015 | B |
| C-AB | 161 | 40 | 812 | 0.199 | 161 | 0.2 | 0.3 | 5.534 | A |
| C-A | 223 | 56 | | | 223 | | | | |
| A-B | 42 | 10 | | | 42 | | | | |
| A-C | 323 | 81 | | | 323 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 145 | 36 | 562 | 0.259 | 145 | 0.3 | 0.3 | 8.641 | A |
| B-A | 105 | 26 | 380 | 0.275 | 105 | 0.4 | 0.4 | 13.062 | B |
| C-AB | 161 | 40 | 812 | 0.199 | 161 | 0.3 | 0.4 | 5.543 | A |
| C-A | 223 | 56 | | | 223 | | | | |
| A-B | 42 | 10 | | | 42 | | | | |
| A-C | 323 | 81 | | | 323 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 119 | 30 | 592 | 0.200 | 119 | 0.3 | 0.3 | 7.612 | A |
| B-A | 85 | 21 | 410 | 0.208 | 86 | 0.4 | 0.3 | 11.133 | B |
| C-AB | 121 | 30 | 793 | 0.153 | 122 | 0.4 | 0.3 | 5.372 | A |
| C-A | 192 | 48 | | | 192 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 263 | 66 | | | 263 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 99 | 25 | 612 | 0.162 | 100 | 0.3 | 0.2 | 7.031 | A |
| B-A | 72 | 18 | 430 | 0.166 | 72 | 0.3 | 0.2 | 10.055 | B |
| C-AB | 96 | 24 | 779 | 0.123 | 96 | 0.3 | 0.2 | 5.275 | A |
| C-A | 167 | 42 | | | 167 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 221 | 55 | | | 221 | | | | |

# 2026 Base + CD + Dev, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.83 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D23 | 2026 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 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 - Stadium Road (S) | | ONE HOUR | ✓ | 380 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 260 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 432 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 40 | 340 |
| | B - Caldbeck Road (W) | 113 | 0 | 147 |
| | C - Stadium Road (N) | 332 | 100 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.31 | 9.88 | 0.4 | A | 135 | 202 |
| B-A | 0.35 | 15.73 | 0.5 | C | 104 | 156 |
| C-AB | 0.22 | 5.42 | 0.4 | A | 148 | 221 |
| C-A | | | | | 249 | 373 |
| A-B | | | | | 37 | 55 |
| A-C | | | | | 312 | 468 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 111 | 28 | 594 | 0.186 | 110 | 0.0 | 0.2 | 7.420 | A |
| B-A | 85 | 21 | 414 | 0.205 | 84 | 0.0 | 0.3 | 10.866 | B |
| C-AB | 109 | 27 | 809 | 0.135 | 108 | 0.0 | 0.2 | 5.132 | A |
| C-A | 216 | 54 | | | 216 | | | | |
| A-B | 30 | 8 | | | 30 | | | | |
| A-C | 256 | 64 | | | 256 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 132 | 33 | 568 | 0.232 | 132 | 0.2 | 0.3 | 8.241 | A |
| B-A | 102 | 25 | 390 | 0.261 | 101 | 0.3 | 0.3 | 12.467 | B |
| C-AB | 141 | 35 | 829 | 0.170 | 141 | 0.2 | 0.3 | 5.232 | A |
| C-A | 248 | 62 | | | 248 | | | | |
| A-B | 36 | 9 | | | 36 | | | | |
| A-C | 306 | 76 | | | 306 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 162 | 40 | 527 | 0.307 | 161 | 0.3 | 0.4 | 9.830 | A |
| B-A | 124 | 31 | 353 | 0.352 | 124 | 0.3 | 0.5 | 15.624 | C |
| C-AB | 192 | 48 | 858 | 0.224 | 192 | 0.3 | 0.4 | 5.412 | A |
| C-A | 283 | 71 | | | 283 | | | | |
| A-B | 44 | 11 | | | 44 | | | | |
| A-C | 374 | 94 | | | 374 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 162 | 40 | 526 | 0.308 | 162 | 0.4 | 0.4 | 9.880 | A |
| B-A | 124 | 31 | 353 | 0.352 | 124 | 0.5 | 0.5 | 15.735 | C |
| C-AB | 193 | 48 | 858 | 0.225 | 193 | 0.4 | 0.4 | 5.421 | A |
| C-A | 283 | 71 | | | 283 | | | | |
| A-B | 44 | 11 | | | 44 | | | | |
| A-C | 374 | 94 | | | 374 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 132 | 33 | 568 | 0.233 | 133 | 0.4 | 0.3 | 8.288 | A |
| B-A | 102 | 25 | 389 | 0.261 | 102 | 0.5 | 0.4 | 12.574 | B |
| C-AB | 141 | 35 | 830 | 0.170 | 142 | 0.4 | 0.3 | 5.245 | A |
| C-A | 247 | 62 | | | 247 | | | | |
| A-B | 36 | 9 | | | 36 | | | | |
| A-C | 306 | 76 | | | 306 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 111 | 28 | 593 | 0.187 | 111 | 0.3 | 0.2 | 7.471 | A |
| B-A | 85 | 21 | 414 | 0.205 | 85 | 0.4 | 0.3 | 10.968 | B |
| C-AB | 109 | 27 | 810 | 0.135 | 110 | 0.3 | 0.2 | 5.149 | A |
| C-A | 216 | 54 | | | 216 | | | | |
| A-B | 30 | 8 | | | 30 | | | | |
| A-C | 256 | 64 | | | 256 | | | | |

# 2026 Base + CD + Dev, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 3.54 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D24 | 2026 Base + CD + Dev | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Stadium Road (S) | | ONE HOUR | ✓ | 331 | 100.000 |
| B - Caldbeck Road (W) | | ONE HOUR | ✓ | 231 | 100.000 |
| C - Stadium Road (N) | | ONE HOUR | ✓ | 349 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 38 | 293 |
| | B - Caldbeck Road (W) | 99 | 0 | 132 |
| | C - Stadium Road (N) | 253 | 96 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Stadium Road (S) | B - Caldbeck Road (W) | C - Stadium Road (N) |
| From | A - Stadium Road (S) | 0 | 0 | 0 |
| | B - Caldbeck Road (W) | 0 | 0 | 0 |
| | C - Stadium Road (N) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.26 | 8.73 | 0.4 | A | 121 | 182 |
| B-A | 0.29 | 13.25 | 0.4 | B | 91 | 136 |
| C-AB | 0.20 | 5.54 | 0.4 | A | 126 | 189 |
| C-A | | | | | 194 | 291 |
| A-B | | | | | 35 | 52 |
| A-C | | | | | 269 | 403 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 99 | 25 | 610 | 0.163 | 99 | 0.0 | 0.2 | 7.030 | A |
| B-A | 75 | 19 | 431 | 0.173 | 74 | 0.0 | 0.2 | 10.046 | B |
| C-AB | 96 | 24 | 779 | 0.123 | 95 | 0.0 | 0.2 | 5.257 | A |
| C-A | 167 | 42 | | | 167 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 221 | 55 | | | 221 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 119 | 30 | 590 | 0.201 | 118 | 0.2 | 0.2 | 7.638 | A |
| B-A | 89 | 22 | 411 | 0.217 | 89 | 0.2 | 0.3 | 11.175 | B |
| C-AB | 121 | 30 | 793 | 0.153 | 121 | 0.2 | 0.2 | 5.364 | A |
| C-A | 192 | 48 | | | 192 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 263 | 66 | | | 263 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 145 | 36 | 558 | 0.260 | 145 | 0.2 | 0.3 | 8.705 | A |
| B-A | 109 | 27 | 381 | 0.286 | 109 | 0.3 | 0.4 | 13.196 | B |
| C-AB | 161 | 40 | 812 | 0.199 | 161 | 0.2 | 0.3 | 5.534 | A |
| C-A | 223 | 56 | | | 223 | | | | |
| A-B | 42 | 10 | | | 42 | | | | |
| A-C | 323 | 81 | | | 323 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 145 | 36 | 558 | 0.261 | 145 | 0.3 | 0.4 | 8.729 | A |
| B-A | 109 | 27 | 381 | 0.286 | 109 | 0.4 | 0.4 | 13.246 | B |
| C-AB | 161 | 40 | 812 | 0.199 | 161 | 0.3 | 0.4 | 5.543 | A |
| C-A | 223 | 56 | | | 223 | | | | |
| A-B | 42 | 10 | | | 42 | | | | |
| A-C | 323 | 81 | | | 323 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 119 | 30 | 589 | 0.201 | 119 | 0.4 | 0.3 | 7.668 | A |
| B-A | 89 | 22 | 410 | 0.217 | 89 | 0.4 | 0.3 | 11.233 | B |
| C-AB | 121 | 30 | 793 | 0.153 | 122 | 0.4 | 0.3 | 5.372 | A |
| C-A | 192 | 48 | | | 192 | | | | |
| A-B | 34 | 9 | | | 34 | | | | |
| A-C | 263 | 66 | | | 263 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 99 | 25 | 609 | 0.163 | 100 | 0.3 | 0.2 | 7.069 | A |
| B-A | 75 | 19 | 431 | 0.173 | 75 | 0.3 | 0.2 | 10.116 | B |
| C-AB | 96 | 24 | 779 | 0.123 | 96 | 0.3 | 0.2 | 5.275 | A |
| C-A | 167 | 42 | | | 167 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 221 | 55 | | | 221 | | | | |

# APPENDIX O

Proposed Access Road (Exit) – PICADY Modelling

# Junctions 9

## PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947


**Filename:** Site Exit_Welton Road (east).j9
**Path:** C:\Users\manch\Dropbox (mode)\Project\Manchester\2. Projects\J325601_Croft Retail Park, Welton Road\4. Data\6. Junction Capacity Assessments\PICADY\6_Welton Road (east)_Site Exit
**Report generation date:** 25/02/2021 12:11:03

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»2021 Base + CD + Dev, AM
»2021 Base + CD + Dev, PM
»2026 Base + CD + Dev, AM
»2026 Base + CD + Dev, PM

### Summary of junction performance

| | AM | | | | PM | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Junction Delay (s) | Queue (PCU) | Delay (s) | RFC | Junction Delay (s) |
| | 2021 Base + CD + Dev | | | | | | | |
| Stream B-C | 0.0 | 5.64 | 0.00 | 0.19 | 0.0 | 5.89 | 0.02 | 0.28 |
| Stream B-A | 0.0 | 8.54 | 0.03 | | 0.1 | 11.06 | 0.07 | |
| Stream C-B | 0.0 | 0.00 | 0.00 | | 0.0 | 0.00 | 0.00 | |
| | 2026 Base + CD + Dev | | | | | | | |
| Stream B-C | 0.0 | 5.65 | 0.00 | 0.18 | 0.0 | 5.92 | 0.02 | 0.27 |
| Stream B-A | 0.0 | 8.64 | 0.03 | | 0.1 | 11.36 | 0.07 | |
| Stream C-B | 0.0 | 0.00 | 0.00 | | 0.0 | 0.00 | 0.00 | |

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

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

### File summary

#### File Description

| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site number** | |
| **Date** | 20/12/2018 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | DESKTOP-J595SBC\Manchester Mode |
| **Description** | |

## Units

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

## Analysis Options

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

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D1 | 2021 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D2 | 2021 Base + CD + Dev | PM | ONE HOUR | 16:15 | 17:45 | 15 | ✓ |
| D4 | 2026 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 15 | ✓ |
| D5 | 2026 Base + CD + Dev | 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 |

# 2021 Base + CD + Dev, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.19 | A |

### Junction Network Options

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

## Arms

### Arms

| Arm | Name | Description | Arm type |
|---|---|---|---|
| A | Welton Road (south) | | Major |
| B | Site Exit | | Minor |
| C | Welton Road (north) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right turn bay | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|---|---|---|---|---|---|---|
| C - Welton Road (north) | 8.50 | | | 0.0 | | - |

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

### Minor Arm Geometry

| Arm | Minor arm type | Lane Width (Left) (m) | Lane Width (Right) (m) | Visibility to left (m) | Visibility to right (m) |
|---|---|---|---|---|---|
| B - Site Exit | Two lanes | 3.50 | 3.50 | 40 | 40 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 536 | 0.087 | 0.220 | 0.138 | 0.314 |
| 1 | B-C | 682 | 0.093 | 0.235 | - | - |
| 1 | C-B | 574 | 0.198 | 0.198 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

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

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

# Traffic Demand

## Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D1 | 2021 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 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 - Welton Road (south) | | ONE HOUR | ✓ | 138 | 100.000 |
| B - Site Exit | | ONE HOUR | ✓ | 14 | 100.000 |
| C - Welton Road (north) | | ONE HOUR | ✓ | 444 | 100.000 |

# Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road (south) | B - Site Exit | C - Welton Road (north) |
| From | A - Welton Road (south) | 0 | 0 | 138 |
| | B - Site Exit | 12 | 0 | 2 |
| | C - Welton Road (north) | 444 | 0 | 0 |

# Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road (south) | B - Site Exit | C - Welton Road (north) |
| From | A - Welton Road (south) | 0 | 0 | 0 |
| | B - Site Exit | 0 | 0 | 0 |
| | C - Welton Road (north) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.00 | 5.64 | 0.0 | A | 2 | 3 |
| B-A | 0.03 | 8.54 | 0.0 | A | 11 | 17 |
| C-A | | | | | 407 | 611 |
| C-B | 0.00 | 0.00 | 0.0 | A | 0 | 0 |
| A-B | | | | | 0 | 0 |
| A-C | | | | | 127 | 190 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.38 | 654 | 0.002 | 1 | 0.0 | 0.0 | 5.516 | A |
| B-A | 9 | 2 | 467 | 0.019 | 9 | 0.0 | 0.0 | 7.863 | A |
| C-A | 334 | 84 | | | 334 | | | | |
| C-B | 0 | 0 | 553 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 104 | 26 | | | 104 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.45 | 649 | 0.003 | 2 | 0.0 | 0.0 | 5.566 | A |
| B-A | 11 | 3 | 453 | 0.024 | 11 | 0.0 | 0.0 | 8.134 | A |
| C-A | 399 | 100 | | | 399 | | | | |
| C-B | 0 | 0 | 549 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 124 | 31 | | | 124 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.55 | 641 | 0.003 | 2 | 0.0 | 0.0 | 5.635 | A |
| B-A | 13 | 3 | 435 | 0.030 | 13 | 0.0 | 0.0 | 8.539 | A |
| C-A | 489 | 122 | | | 489 | | | | |
| C-B | 0 | 0 | 544 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 152 | 38 | | | 152 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.55 | 641 | 0.003 | 2 | 0.0 | 0.0 | 5.635 | A |
| B-A | 13 | 3 | 435 | 0.030 | 13 | 0.0 | 0.0 | 8.539 | A |
| C-A | 489 | 122 | | | 489 | | | | |
| C-B | 0 | 0 | 544 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 152 | 38 | | | 152 | | | | |

### 09:15 - 09:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.45 | 648 | 0.003 | 2 | 0.0 | 0.0 | 5.566 | A |
| B-A | 11 | 3 | 453 | 0.024 | 11 | 0.0 | 0.0 | 8.137 | A |
| C-A | 399 | 100 | | | 399 | | | | |
| C-B | 0 | 0 | 549 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 124 | 31 | | | 124 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.38 | 654 | 0.002 | 2 | 0.0 | 0.0 | 5.517 | A |
| B-A | 9 | 2 | 467 | 0.019 | 9 | 0.0 | 0.0 | 7.866 | A |
| C-A | 334 | 84 | | | 334 | | | | |
| C-B | 0 | 0 | 553 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 104 | 26 | | | 104 | | | | |

# 2021 Base + CD + Dev, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.28 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D2 | 2021 Base + CD + Dev | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Welton Road (south) | | ONE HOUR | ✓ | 186 | 100.000 |
| B - Site Exit | | ONE HOUR | ✓ | 33 | 100.000 |
| C - Welton Road (north) | | ONE HOUR | ✓ | 920 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road (south) | B - Site Exit | C - Welton Road (north) |
| From | A - Welton Road (south) | 0 | 0 | 186 |
| | B - Site Exit | 23 | 0 | 10 |
| | C - Welton Road (north) | 920 | 0 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road (south) | B - Site Exit | C - Welton Road (north) |
| From | A - Welton Road (south) | 0 | 0 | 0 |
| | B - Site Exit | 0 | 0 | 0 |
| | C - Welton Road (north) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.02 | 5.89 | 0.0 | A | 9 | 14 |
| B-A | 0.07 | 11.06 | 0.1 | B | 21 | 32 |
| C-A | | | | | 844 | 1266 |
| C-B | 0.00 | 0.00 | 0.0 | A | 0 | 0 |
| A-B | | | | | 0 | 0 |
| A-C | | | | | 171 | 256 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 8 | 2 | 642 | 0.012 | 7 | 0.0 | 0.0 | 5.675 | A |
| B-A | 17 | 4 | 409 | 0.042 | 17 | 0.0 | 0.0 | 9.178 | A |
| C-A | 693 | 173 | | | 693 | | | | |
| C-B | 0 | 0 | 546 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 140 | 35 | | | 140 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 9 | 2 | 634 | 0.014 | 9 | 0.0 | 0.0 | 5.763 | A |
| B-A | 21 | 5 | 385 | 0.054 | 21 | 0.0 | 0.1 | 9.888 | A |
| C-A | 827 | 207 | | | 827 | | | | |
| C-B | 0 | 0 | 541 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 167 | 42 | | | 167 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 11 | 3 | 622 | 0.018 | 11 | 0.0 | 0.0 | 5.892 | A |
| B-A | 25 | 6 | 351 | 0.072 | 25 | 0.1 | 0.1 | 11.059 | B |
| C-A | 1013 | 253 | | | 1013 | | | | |
| C-B | 0 | 0 | 533 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 205 | 51 | | | 205 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 11 | 3 | 622 | 0.018 | 11 | 0.0 | 0.0 | 5.893 | A |
| B-A | 25 | 6 | 351 | 0.072 | 25 | 0.1 | 0.1 | 11.064 | B |
| C-A | 1013 | 253 | | | 1013 | | | | |
| C-B | 0 | 0 | 533 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 205 | 51 | | | 205 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 9 | 2 | 633 | 0.014 | 9 | 0.0 | 0.0 | 5.764 | A |
| B-A | 21 | 5 | 385 | 0.054 | 21 | 0.1 | 0.1 | 9.896 | A |
| C-A | 827 | 207 | | | 827 | | | | |
| C-B | 0 | 0 | 541 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 167 | 42 | | | 167 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 8 | 2 | 642 | 0.012 | 8 | 0.0 | 0.0 | 5.676 | A |
| B-A | 17 | 4 | 409 | 0.042 | 17 | 0.1 | 0.0 | 9.188 | A |
| C-A | 693 | 173 | | | 693 | | | | |
| C-B | 0 | 0 | 546 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 140 | 35 | | | 140 | | | | |

# 2026 Base + CD + Dev, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.18 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D4 | 2026 Base + CD + Dev | AM | ONE HOUR | 08:15 | 09:45 | 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 - Welton Road (south) | | ONE HOUR | ✓ | 145 | 100.000 |
| B - Site Exit | | ONE HOUR | ✓ | 14 | 100.000 |
| C - Welton Road (north) | | ONE HOUR | ✓ | 465 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road (south) | B - Site Exit | C - Welton Road (north) |
| From | A - Welton Road (south) | 0 | 0 | 145 |
| | B - Site Exit | 12 | 0 | 2 |
| | C - Welton Road (north) | 465 | 0 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road (south) | B - Site Exit | C - Welton Road (north) |
| From | A - Welton Road (south) | 0 | 0 | 0 |
| | B - Site Exit | 0 | 0 | 0 |
| | C - Welton Road (north) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.00 | 5.65 | 0.0 | A | 2 | 3 |
| B-A | 0.03 | 8.64 | 0.0 | A | 11 | 17 |
| C-A | | | | | 427 | 640 |
| C-B | 0.00 | 0.00 | 0.0 | A | 0 | 0 |
| A-B | | | | | 0 | 0 |
| A-C | | | | | 133 | 200 |

## Main Results for each time segment

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.38 | 653 | 0.002 | 1 | 0.0 | 0.0 | 5.527 | A |
| B-A | 9 | 2 | 463 | 0.020 | 9 | 0.0 | 0.0 | 7.921 | A |
| C-A | 350 | 88 | | | 350 | | | | |
| C-B | 0 | 0 | 552 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 109 | 27 | | | 109 | | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.45 | 647 | 0.003 | 2 | 0.0 | 0.0 | 5.579 | A |
| B-A | 11 | 3 | 449 | 0.024 | 11 | 0.0 | 0.0 | 8.208 | A |
| C-A | 418 | 105 | | | 418 | | | | |
| C-B | 0 | 0 | 548 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 130 | 33 | | | 130 | | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.55 | 639 | 0.003 | 2 | 0.0 | 0.0 | 5.652 | A |
| B-A | 13 | 3 | 430 | 0.031 | 13 | 0.0 | 0.0 | 8.639 | A |
| C-A | 512 | 128 | | | 512 | | | | |
| C-B | 0 | 0 | 542 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 160 | 40 | | | 160 | | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.55 | 639 | 0.003 | 2 | 0.0 | 0.0 | 5.652 | A |
| B-A | 13 | 3 | 430 | 0.031 | 13 | 0.0 | 0.0 | 8.639 | A |
| C-A | 512 | 128 | | | 512 | | | | |
| C-B | 0 | 0 | 542 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 160 | 40 | | | 160 | | | | |

**09:15 - 09:30**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.45 | 647 | 0.003 | 2 | 0.0 | 0.0 | 5.579 | A |
| B-A | 11 | 3 | 449 | 0.024 | 11 | 0.0 | 0.0 | 8.211 | A |
| C-A | 418 | 105 | | | 418 | | | | |
| C-B | 0 | 0 | 548 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 130 | 33 | | | 130 | | | | |

**09:30 - 09:45**

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 2 | 0.38 | 653 | 0.002 | 2 | 0.0 | 0.0 | 5.527 | A |
| B-A | 9 | 2 | 463 | 0.020 | 9 | 0.0 | 0.0 | 7.923 | A |
| C-A | 350 | 88 | | | 350 | | | | |
| C-B | 0 | 0 | 552 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 109 | 27 | | | 109 | | | | |

# 2026 Base + CD + Dev, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. |

## Junction Network

### Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | 0.27 | A |

### Junction Network Options

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|
| D5 | 2026 Base + CD + Dev | 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 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| A - Welton Road (south) | | ONE HOUR | ✓ | 195 | 100.000 |
| B - Site Exit | | ONE HOUR | ✓ | 33 | 100.000 |
| C - Welton Road (north) | | ONE HOUR | ✓ | 961 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road (south) | B - Site Exit | C - Welton Road (north) |
| From | A - Welton Road (south) | 0 | 0 | 195 |
| | B - Site Exit | 23 | 0 | 10 |
| | C - Welton Road (north) | 961 | 0 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Welton Road (south) | B - Site Exit | C - Welton Road (north) |
| From | A - Welton Road (south) | 0 | 0 | 0 |
| | B - Site Exit | 0 | 0 | 0 |
| | C - Welton Road (north) | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| B-C | 0.02 | 5.92 | 0.0 | A | 9 | 14 |
| B-A | 0.07 | 11.36 | 0.1 | B | 21 | 32 |
| C-A | | | | | 882 | 1323 |
| C-B | 0.00 | 0.00 | 0.0 | A | 0 | 0 |
| A-B | | | | | 0 | 0 |
| A-C | | | | | 179 | 268 |

## Main Results for each time segment

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 8 | 2 | 640 | 0.012 | 7 | 0.0 | 0.0 | 5.690 | A |
| B-A | 17 | 4 | 403 | 0.043 | 17 | 0.0 | 0.0 | 9.315 | A |
| C-A | 723 | 181 | | | 723 | | | | |
| C-B | 0 | 0 | 545 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 147 | 37 | | | 147 | | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 9 | 2 | 632 | 0.014 | 9 | 0.0 | 0.0 | 5.782 | A |
| B-A | 21 | 5 | 378 | 0.055 | 21 | 0.0 | 0.1 | 10.078 | B |
| C-A | 864 | 216 | | | 864 | | | | |
| C-B | 0 | 0 | 539 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 175 | 44 | | | 175 | | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 11 | 3 | 619 | 0.018 | 11 | 0.0 | 0.0 | 5.917 | A |
| B-A | 25 | 6 | 342 | 0.074 | 25 | 0.1 | 0.1 | 11.353 | B |
| C-A | 1058 | 265 | | | 1058 | | | | |
| C-B | 0 | 0 | 531 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 215 | 54 | | | 215 | | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 11 | 3 | 619 | 0.018 | 11 | 0.0 | 0.0 | 5.917 | A |
| B-A | 25 | 6 | 342 | 0.074 | 25 | 0.1 | 0.1 | 11.358 | B |
| C-A | 1058 | 265 | | | 1058 | | | | |
| C-B | 0 | 0 | 531 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 215 | 54 | | | 215 | | | | |

### 17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 9 | 2 | 631 | 0.014 | 9 | 0.0 | 0.0 | 5.785 | A |
| B-A | 21 | 5 | 378 | 0.055 | 21 | 0.1 | 0.1 | 10.085 | B |
| C-A | 864 | 216 | | | 864 | | | | |
| C-B | 0 | 0 | 539 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 175 | 44 | | | 175 | | | | |

### 17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| B-C | 8 | 2 | 640 | 0.012 | 8 | 0.0 | 0.0 | 5.693 | A |
| B-A | 17 | 4 | 403 | 0.043 | 17 | 0.1 | 0.0 | 9.325 | A |
| C-A | 723 | 181 | | | 723 | | | | |
| C-B | 0 | 0 | 545 | 0.000 | 0 | 0.0 | 0.0 | 0.000 | A |
| A-B | 0 | 0 | | | 0 | | | | |
| A-C | 147 | 37 | | | 147 | | | | |

mode

transport planning

keep up with mode:


Birmingham
0121 794 8390

London
020 7293 0217

Manchester
0161 464 9495

Reading
0118 206 2945

info@modetransport.co.uk modetransport.co.uk @mode_transport