# APPENDIX BGH 16

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Swallow Hill Junction.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Swallow Hill - Dearne Hall
**Report generation date:** 05/03/2013 16:19:55

## Summary of junction performance

| | AM | | | |
|---|---|---|---|---|
| | Queue (Veh) | Delay (min) | RFC | LOS |
| | A1 - 2018 Base + CD + Dev | | | |
| **Stream B-AC** | 0.65 | 0.25 | 0.40 | C |
| **Stream C-AB** | 0.40 | 0.10 | 0.20 | A |
| **Stream C-A** | - | - | - | - |
| **Stream A-B** | - | - | - | - |
| **Stream A-C** | - | - | - | - |

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

*"D1 - 2013 Base, AM" model duration: 07:45 - 09:15*
*"D2 - 2013 Base, PM" model duration: 16:45 - 18:15*
*"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15*
*"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15*
*"D5 - 2018 Base + CD + Dev, AM " model duration: 07:45 - 09:15*
*"D6 - 2018 Base + CD + Dev, PM" model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 05/03/2013 16:19:54*

## File summary

### File Description

| | |
|---|---|
| **Title** | Barugh Green, Barnsley |
| **Location** | Swallow Hill Road |
| **Site Number** | |
| **Date** | 04/03/2013 |
| **Version** | |
| **Status** | |
| **Identifier** | |
| **Client** | CEG |
| **Jobnumber** | 08-241 |
| **Enumerator** | mcrabtree |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Hour | perMin |

# (Default Analysis Set) - 2018 Base + CD + Dev, AM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|
| (Default Analysis Set) | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD + Dev, AM | 2018 Base + CD + Dev | AM | | ONE HOUR | 07:45 | 09:15 | 90 | 15 | | |

# Junction Network

## Junctions

| Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|
| (untitled) | T-Junction | Two-way | A,B,C | 0.18 | B |

## Junction Network Options

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

# Arms

## Arms

| Arm | Name | Description | Arm Type |
|---|---|---|---|
| A | Spark Lane | | Major |
| B | Swallow Hill Road | | Minor |
| C | Dearne Hall Road | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 6.90 | | 0.00 | | 2.20 | 90.00 | ✓ | 0.00 |

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

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 2.20 | | | | | | | | | | 50 | 25 |

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| A | None |
| B | None |
| C | None |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 465.524 | 0.081 | 0.206 | 0.130 | 0.294 |
| 1 | B-C | 588.441 | 0.087 | 0.219 | - | - |
| 1 | C-B | 626.083 | 0.233 | 0.233 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*
*Streams may be combined, in which case capacity will be adjusted.*
*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | ONE HOUR | ✓ | 373.00 | 100.000 |
| B | ONE HOUR | ✓ | 142.00 | 100.000 |
| C | ONE HOUR | ✓ | 344.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 21.000 | 352.000 |
| | B | 65.000 | 0.000 | 77.000 |
| | C | 264.000 | 80.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.06 | 0.94 |
| | B | 0.46 | 0.00 | 0.54 |
| | C | 0.77 | 0.23 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.033 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.038 | 1.015 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 0.000 | 3.300 |
| | B | 0.000 | 0.000 | 0.000 |
| | C | 3.800 | 1.500 | 0.000 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (min) | Max Queue (Veh) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.40 | 0.25 | 0.65 | C |
| | | | | |

| | | | | |
|---|---|---|---|---|
| **C-AB** | 0.20 | 0.10 | 0.40 | A |
| **C-A** | - | - | - | - |
| **A-B** | - | - | - | - |
| **A-C** | - | - | - | - |

# Main Results for each time segment

## Main results: (07:45-08:00)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 106.91 | 105.63 | 0.00 | 436.83 | 0.245 | 0.32 | 0.180 | B |
| **C-AB** | 84.65 | 83.85 | 0.00 | 685.85 | 0.123 | 0.20 | 0.100 | A |
| **C-A** | 174.33 | 174.33 | 0.00 | - | - | - | - | - |
| **A-B** | 15.81 | 15.81 | 0.00 | - | - | - | - | - |
| **A-C** | 265.00 | 265.00 | 0.00 | - | - | - | - | - |

## Main results: (08:00-08:15)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 127.66 | 127.21 | 0.00 | 418.98 | 0.305 | 0.43 | 0.205 | B |
| **C-AB** | 108.67 | 108.40 | 0.00 | 701.01 | 0.155 | 0.27 | 0.101 | A |
| **C-A** | 200.57 | 200.57 | 0.00 | - | - | - | - | - |
| **A-B** | 18.88 | 18.88 | 0.00 | - | - | - | - | - |
| **A-C** | 316.44 | 316.44 | 0.00 | - | - | - | - | - |

## Main results: (08:15-08:30)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 156.34 | 155.50 | 0.00 | 394.03 | 0.397 | 0.64 | 0.251 | C |
| **C-AB** | 146.92 | 146.42 | 0.00 | 722.64 | 0.203 | 0.39 | 0.104 | A |
| **C-A** | 231.84 | 231.84 | 0.00 | - | - | - | - | - |
| **A-B** | 23.12 | 23.12 | 0.00 | - | - | - | - | - |
| **A-C** | 387.56 | 387.56 | 0.00 | - | - | - | - | - |

## Main results: (08:30-08:45)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 156.34 | 156.31 | 0.00 | 393.96 | 0.397 | 0.65 | 0.252 | C |
| **C-AB** | 147.08 | 147.06 | 0.00 | 722.80 | 0.203 | 0.40 | 0.104 | A |
| **C-A** | 231.68 | 231.68 | 0.00 | - | - | - | - | - |
| **A-B** | 23.12 | 23.12 | 0.00 | - | - | - | - | - |
| **A-C** | 387.56 | 387.56 | 0.00 | - | - | - | - | - |

## Main results: (08:45-09:00)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 127.66 | 128.46 | 0.00 | 418.87 | 0.305 | 0.45 | 0.207 | B |
| **C-AB** | 108.88 | 109.35 | 0.00 | 701.25 | 0.155 | 0.28 | 0.102 | A |
| **C-A** | 200.37 | 200.37 | 0.00 | - | - | - | - | - |
| **A-B** | 18.88 | 18.88 | 0.00 | - | - | - | - | - |
| **A-C** | 316.44 | 316.44 | 0.00 | - | - | - | - | - |

## Main results: (09:00-09:15)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 106.91 | 107.37 | 0.00 | 436.65 | 0.245 | 0.33 | 0.182 | B |
| **C-AB** | 84.95 | 85.24 | 0.00 | 686.06 | 0.124 | 0.21 | 0.100 | A |
| **C-A** | 174.03 | 174.03 | 0.00 | - | - | - | - | - |
| **A-B** | 15.81 | 15.81 | 0.00 | - | - | - | - | - |
| **A-C** | 265.00 | 265.00 | 0.00 | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Swallow Hill Junction.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Swallow Hill - Dearne Hall
**Report generation date:** 05/03/2013 16:20:26

## Summary of junction performance

| | PM | | | |
|---|---|---|---|---|
| | Queue (Veh) | Delay (min) | RFC | LOS |
| | A1 - 2018 Base + CD + Dev | | | |
| **Stream B-AC** | 0.33 | 0.21 | 0.25 | B |
| **Stream C-AB** | 1.22 | 0.14 | 0.45 | A |
| **Stream C-A** | - | - | - | - |
| **Stream A-B** | - | - | - | - |
| **Stream A-C** | - | - | - | - |

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

*"D1 - 2013 Base, AM" model duration: 07:45 - 09:15*
*"D2 - 2013 Base, PM" model duration: 16:45 - 18:15*
*"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15*
*"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15*
*"D5 - 2018 Base + CD + Dev, AM" model duration: 07:45 - 09:15*
*"D6 - 2018 Base + CD + Dev, PM " model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 05/03/2013 16:20:26*

## File summary

### File Description

| | |
|---|---|
| **Title** | Barugh Green, Barnsley |
| **Location** | Swallow Hill Road |
| **Site Number** | |
| **Date** | 04/03/2013 |
| **Version** | |
| **Status** | |
| **Identifier** | |
| **Client** | CEG |
| **Jobnumber** | 08-241 |
| **Enumerator** | mcrabtree |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Hour | perMin |

# (Default Analysis Set) - 2018 Base + CD + Dev, PM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|
| (Default Analysis Set) | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD + Dev, PM | 2018 Base + CD + Dev | PM | | ONE HOUR | 16:45 | 18:15 | 90 | 15 | | |

# Junction Network

## Junctions

| Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|
| (untitled) | T-Junction | Two-way | A,B,C | 0.16 | A |

## Junction Network Options

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

# Arms

## Arms

| Arm | Name | Description | Arm Type |
|---|---|---|---|
| A | Spark Lane | | Major |
| B | Swallow Hill Road | | Minor |
| C | Dearne Hall Road | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 6.90 | | 0.00 | | 2.20 | 90.00 | ✓ | 0.00 |

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

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 2.20 | | | | | | | | | | 50 | 25 |

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| A | None |
| B | None |
| C | None |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 465.524 | 0.081 | 0.206 | 0.130 | 0.294 |
| 1 | B-C | 588.441 | 0.087 | 0.219 | - | - |
| 1 | C-B | 626.083 | 0.233 | 0.233 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*
*Streams may be combined, in which case capacity will be adjusted.*
*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | ONE HOUR | ✓ | 385.00 | 100.000 |
| B | ONE HOUR | ✓ | 88.00 | 100.000 |
| C | ONE HOUR | ✓ | 498.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 68.000 | 317.000 |
| | B | 35.000 | 0.000 | 53.000 |
| | C | 327.000 | 171.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.18 | 0.82 |
| | B | 0.40 | 0.00 | 0.60 |
| | C | 0.66 | 0.34 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.011 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.010 | 1.008 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 0.000 | 1.100 |
| | B | 0.000 | 0.000 | 0.000 |
| | C | 1.000 | 0.800 | 0.000 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (min) | Max Queue (Veh) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.25 | 0.21 | 0.33 | B |
| | | | | |

| | | | | |
|---|---|---|---|---|
| **C-AB** | 0.45 | 0.14 | 1.22 | A |
| **C-A** | - | - | - | - |
| **A-B** | - | - | - | - |
| **A-C** | - | - | - | - |

# Main Results for each time segment

## Main results: (16:45-17:00)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 66.25 | 65.54 | 0.00 | 434.92 | 0.152 | 0.18 | 0.162 | A |
| **C-AB** | 194.56 | 192.55 | 0.00 | 722.83 | 0.269 | 0.50 | 0.113 | A |
| **C-A** | 180.36 | 180.36 | 0.00 | - | - | - | - | - |
| **A-B** | 51.19 | 51.19 | 0.00 | - | - | - | - | - |
| **A-C** | 238.65 | 238.65 | 0.00 | - | - | - | - | - |

## Main results: (17:00-17:15)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 79.11 | 78.89 | 0.00 | 414.24 | 0.191 | 0.23 | 0.179 | B |
| **C-AB** | 253.37 | 252.48 | 0.00 | 744.89 | 0.340 | 0.72 | 0.122 | A |
| **C-A** | 194.32 | 194.32 | 0.00 | - | - | - | - | - |
| **A-B** | 61.13 | 61.13 | 0.00 | - | - | - | - | - |
| **A-C** | 284.98 | 284.98 | 0.00 | - | - | - | - | - |

## Main results: (17:15-17:30)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 96.89 | 96.50 | 0.00 | 384.90 | 0.252 | 0.33 | 0.208 | B |
| **C-AB** | 351.84 | 349.92 | 0.00 | 777.21 | 0.453 | 1.20 | 0.141 | A |
| **C-A** | 196.47 | 196.47 | 0.00 | - | - | - | - | - |
| **A-B** | 74.87 | 74.87 | 0.00 | - | - | - | - | - |
| **A-C** | 349.02 | 349.02 | 0.00 | - | - | - | - | - |

## Main results: (17:30-17:45)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 96.89 | 96.88 | 0.00 | 384.62 | 0.252 | 0.33 | 0.209 | B |
| **C-AB** | 352.66 | 352.59 | 0.00 | 777.98 | 0.453 | 1.22 | 0.142 | A |
| **C-A** | 195.65 | 195.65 | 0.00 | - | - | - | - | - |
| **A-B** | 74.87 | 74.87 | 0.00 | - | - | - | - | - |
| **A-C** | 349.02 | 349.02 | 0.00 | - | - | - | - | - |

## Main results: (17:45-18:00)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 79.11 | 79.49 | 0.00 | 413.84 | 0.191 | 0.24 | 0.180 | B |
| **C-AB** | 254.28 | 256.14 | 0.00 | 745.99 | 0.341 | 0.76 | 0.123 | A |
| **C-A** | 193.41 | 193.41 | 0.00 | - | - | - | - | - |
| **A-B** | 61.13 | 61.13 | 0.00 | - | - | - | - | - |
| **A-C** | 284.98 | 284.98 | 0.00 | - | - | - | - | - |

## Main results: (18:00-18:15)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 66.25 | 66.48 | 0.00 | 434.46 | 0.152 | 0.18 | 0.163 | A |
| **C-AB** | 195.54 | 196.48 | 0.00 | 723.64 | 0.270 | 0.52 | 0.114 | A |
| **C-A** | 179.38 | 179.38 | 0.00 | - | - | - | - | - |
| **A-B** | 51.19 | 51.19 | 0.00 | - | - | - | - | - |
| **A-C** | 238.65 | 238.65 | 0.00 | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Barnsley Road-Dearne Hall Road.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Barnsley Road-Dearne Hall Road
**Report generation date:** 05/03/2013 16:03:55

## Summary of junction performance

| | AM | | | | |
|---|---|---|---|---|---|
| | **Queue (Veh)** | **Delay (min)** | **RFC** | **LOS** | **Network Residual Capacity** |
| | **A1 - 2018 Base + CD + Dev** | | | | |
| **Stream B-C** | 0.21 | 0.16 | 0.17 | A | 28 %<br>[Stream B-A] |
| **Stream B-A** | 0.24 | 0.32 | 0.19 | C | |
| **Stream C-AB** | 0.11 | 0.15 | 0.10 | A | |
| **Stream C-A** | - | - | - | - | |
| **Stream A-B** | - | - | - | - | |
| **Stream A-C** | - | - | - | - | |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.*

*"D1 - 2013 Base, AM" model duration: 07:45 - 09:15*
*"D2 - 2013 Base, PM" model duration: 16:45 - 18:15*
*"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15*
*"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15*
*"D5 - 2018 Base + CD + Dev, AM " model duration: 07:45 - 09:15*
*"D6 - 2018 Base + CD + Dev, PM" model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 05/03/2013 16:03:53*

## File summary

### File Description

| | |
|---|---|
| **Title** | Dearne Hall Road/Barnsley Road |
| **Location** | Barnsley |
| **Site Number** | |
| **Date** | 01/03/2013 |
| **Version** | |
| **Status** | |
| **Identifier** | |
| **Client** | CEG |
| **Jobnumber** | 08-241 |
| **Enumerator** | mcrabtree |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | ✓ | Delay | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Hour | perMin |

# (Default Analysis Set) - 2018 Base + CD + Dev, AM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Include In Report | Use Specific Demand Set(s) | Specific Demand Set(s) | Locked | Network Flow Scaling Factor (%) | Network Capacity Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | ✓ | | | | 100.000 | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Results For Central Hour Only | Single Time Segment Only | Locked | Run Automatically | Use Relationship | Relationship |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD + Dev, AM | 2018 Base + CD + Dev | AM | | ONE HOUR | 07:45 | 09:15 | 90 | 15 | | | | | | |

# Junction Network

## Junctions

| Name | Junction Type | Major Road Direction | Arm Order | Do Geometric Delay | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|---|
| untitled | T-Junction | Two-way | A,B,C | | 0.20 | B |

## Junction Network Options

| Driving Side | Lighting | Network Residual Capacity (%) | First Arm Reaching Threshold |
|---|---|---|---|
| Left | Normal/unknown | 28 | Stream B-A |

# Arms

## Arms

| Arm | Name | Description | Arm Type |
|---|---|---|---|
| A | Barnsley Road North | | Major |
| B | Dearne Hall Road | | Minor |
| C | Barnsley Road South | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 6.10 | | 0.00 | | 2.20 | 110.00 | ✓ | 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) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane plus flare | | | | 10.00 | 4.40 | 3.30 | 3.00 | 3.00 | | 1.00 | 19 | 12 |

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| A | None |
| B | None |
| C | None |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 505.020 | 0.092 | 0.231 | 0.146 | 0.331 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | B-C | 687.598 | 0.105 | 0.265 | - | - |
| 1 | C-B | 637.665 | 0.246 | 0.246 | - | - |

*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 Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | ONE HOUR | ✓ | 659.00 | 100.000 |
| B | ONE HOUR | ✓ | 113.00 | 100.000 |
| C | ONE HOUR | ✓ | 481.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 21.000 | 638.000 |
| | B | 41.000 | 0.000 | 72.000 |
| | C | 441.000 | 40.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.03 | 0.97 |
| | B | 0.36 | 0.00 | 0.64 |
| | C | 0.92 | 0.08 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.071 | 1.037 |
| | B | 1.048 | 1.000 | 1.019 |
| | C | 1.047 | 1.024 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 7.100 | 3.700 |
| | B | 4.800 | 0.000 | 1.900 |
| | C | 4.700 | 2.400 | 0.000 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (min) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) | Total Queueing Delay (Veh-hr) | Average Queueing Delay (min) | Rate Of Queueing Delay (Veh-hr/min) | Inclusive Total Queueing Delay (Veh-hr) | Inclusive Average Queueing Delay (min) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 0.17 | 0.16 | 0.21 | A | 66.07 | 99.10 | 0.23 | 0.14 | 0.00 | 0.23 | 0.14 |
| B-A | 0.19 | 0.32 | 0.24 | C | 37.62 | 56.43 | 0.25 | 0.26 | 0.00 | 0.25 | 0.26 |
| C-AB | 0.10 | 0.15 | 0.11 | A | 36.70 | 55.06 | 0.13 | 0.14 | 0.00 | 0.13 | 0.14 |
| C-A | - | - | - | - | 404.67 | 607.00 | - | - | - | - | - |
| A-B | - | - | - | - | 19.27 | 28.90 | - | - | - | - | - |
| A-C | - | - | - | - | 585.44 | 878.16 | - | - | - | - | - |

## Main Results for each time segment

### Main results: (07:45-08:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 54.21 | 13.55 | 53.75 | 0.00 | 529.34 | 0.102 | 0.00 | 0.11 | 0.126 | A |
| B-A | 30.87 | 7.72 | 30.43 | 0.00 | 311.97 | 0.099 | 0.00 | 0.11 | 0.213 | B |
| C-AB | 30.11 | 7.53 | 29.86 | 0.00 | 499.00 | 0.060 | 0.00 | 0.06 | 0.128 | A |
| C-A | 332.01 | 83.00 | 332.01 | 0.00 | - | - | - | - | - | - |
| A-B | 15.81 | 3.95 | 15.81 | 0.00 | - | - | - | - | - | - |
| A-C | 480.32 | 120.08 | 480.32 | 0.00 | - | - | - | - | - | - |

### Main results: (08:00-08:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 64.73 | 16.18 | 64.59 | 0.00 | 499.10 | 0.130 | 0.11 | 0.15 | 0.138 | A |
| B-A | 36.86 | 9.21 | 36.69 | 0.00 | 278.70 | 0.132 | 0.11 | 0.15 | 0.248 | B |
| C-AB | 35.96 | 8.99 | 35.89 | 0.00 | 474.98 | 0.076 | 0.06 | 0.08 | 0.137 | A |
| C-A | 396.45 | 99.11 | 396.45 | 0.00 | - | - | - | - | - | - |
| A-B | 18.88 | 4.72 | 18.88 | 0.00 | - | - | - | - | - | - |
| A-C | 573.55 | 143.39 | 573.55 | 0.00 | - | - | - | - | - | - |

### Main results: (08:15-08:30)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 79.27 | 19.82 | 79.03 | 0.00 | 455.09 | 0.174 | 0.15 | 0.21 | 0.159 | A |
| B-A | 45.14 | 11.29 | 44.80 | 0.00 | 232.38 | 0.194 | 0.15 | 0.24 | 0.319 | C |
| C-AB | 44.04 | 11.01 | 43.93 | 0.00 | 441.78 | 0.100 | 0.08 | 0.11 | 0.151 | A |
| C-A | 485.55 | 121.39 | 485.55 | 0.00 | - | - | - | - | - | - |
| A-B | 23.12 | 5.78 | 23.12 | 0.00 | - | - | - | - | - | - |
| A-C | 702.45 | 175.61 | 702.45 | 0.00 | - | - | - | - | - | - |

### Main results: (08:30-08:45)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 79.27 | 19.82 | 79.27 | 0.00 | 454.75 | 0.174 | 0.21 | 0.21 | 0.160 | A |
| B-A | 45.14 | 11.29 | 45.13 | 0.00 | 232.37 | 0.194 | 0.24 | 0.24 | 0.320 | C |
| C-AB | 44.04 | 11.01 | 44.04 | 0.00 | 441.78 | 0.100 | 0.11 | 0.11 | 0.151 | A |
| C-A | 485.55 | 121.39 | 485.55 | 0.00 | - | - | - | - | - | - |
| A-B | 23.12 | 5.78 | 23.12 | 0.00 | - | - | - | - | - | - |
| A-C | 702.45 | 175.61 | 702.45 | 0.00 | - | - | - | - | - | - |

### Main results: (08:45-09:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 64.73 | 16.18 | 64.96 | 0.00 | 498.62 | 0.130 | 0.21 | 0.15 | 0.138 | A |
| B-A | 36.86 | 9.21 | 37.19 | 0.00 | 278.73 | 0.132 | 0.24 | 0.16 | 0.249 | B |
| C-AB | 35.96 | 8.99 | 36.07 | 0.00 | 474.98 | 0.076 | 0.11 | 0.08 | 0.137 | A |
| C-A | 396.45 | 99.11 | 396.45 | 0.00 | - | - | - | - | - | - |
| A-B | 18.88 | 4.72 | 18.88 | 0.00 | - | - | - | - | - | - |
| A-C | 573.55 | 143.39 | 573.55 | 0.00 | - | - | - | - | - | - |

### Main results: (09:00-09:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 54.21 | 13.55 | 54.35 | 0.00 | 528.81 | 0.103 | 0.15 | 0.12 | 0.126 | A |
| B-A | 30.87 | 7.72 | 31.04 | 0.00 | 311.98 | 0.099 | 0.16 | 0.11 | 0.214 | B |
| C-AB | 30.11 | 7.53 | 30.19 | 0.00 | 499.00 | 0.060 | 0.08 | 0.06 | 0.128 | A |
| C-A | 332.01 | 83.00 | 332.01 | 0.00 | - | - | - | - | - | - |
| A-B | 15.81 | 3.95 | 15.81 | 0.00 | - | - | - | - | - | - |
| A-C | 480.32 | 120.08 | 480.32 | 0.00 | - | - | - | - | - | - |

# Queueing Delay Results for each time segment

## Queueing Delay results: (07:45-08:00)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.03 | 0.00 | 0.126 | A | A |
| B-A | 0.03 | 0.00 | 0.213 | B | B |
| C-AB | 0.02 | 0.00 | 0.128 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (08:00-08:15)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.04 | 0.00 | 0.138 | A | A |
| B-A | 0.04 | 0.00 | 0.248 | B | B |
| C-AB | 0.02 | 0.00 | 0.137 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (08:15-08:30)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.05 | 0.00 | 0.159 | A | A |
| B-A | 0.06 | 0.00 | 0.319 | C | B |
| C-AB | 0.03 | 0.00 | 0.151 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (08:30-08:45)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.05 | 0.00 | 0.160 | A | A |
| B-A | 0.06 | 0.00 | 0.320 | C | B |
| C-AB | 0.03 | 0.00 | 0.151 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (08:45-09:00)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.04 | 0.00 | 0.138 | A | A |
| B-A | 0.04 | 0.00 | 0.249 | B | B |
| C-AB | 0.02 | 0.00 | 0.137 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (09:00-09:15)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.03 | 0.00 | 0.126 | A | A |
| B-A | 0.03 | 0.00 | 0.214 | B | B |
| C-AB | 0.02 | 0.00 | 0.128 | A | A |
| C-A | - | - | - | - | - |

| | | | | | |
|---|---|---|---|---|---|
| **A-B** | - | - | - | - | - |
| **A-C** | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Barnsley Road-Dearne Hall Road.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Barnsley Road-Dearne Hall Road
**Report generation date:** 05/03/2013 16:05:45

## Summary of junction performance

| | PM | | | | |
|---|---|---|---|---|---|
| | **Queue (Veh)** | **Delay (min)** | **RFC** | **LOS** | **Network Residual Capacity** |
| | **A1 - 2018 Base + CD + Dev** | | | | |
| **Stream B-C** | 0.13 | 0.12 | 0.11 | A | 59 %<br>[Stream B-A] |
| **Stream B-A** | 0.11 | 0.25 | 0.10 | C | |
| **Stream C-AB** | 0.17 | 0.13 | 0.15 | A | |
| **Stream C-A** | - | - | - | - | |
| **Stream A-B** | - | - | - | - | |
| **Stream A-C** | - | - | - | - | |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.*

*"D1 - 2013 Base, AM" model duration: 07:45 - 09:15*
*"D2 - 2013 Base, PM" model duration: 16:45 - 18:15*
*"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15*
*"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15*
*"D5 - 2018 Base + CD + Dev, AM" model duration: 07:45 - 09:15*
*"D6 - 2018 Base + CD + Dev, PM " model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 05/03/2013 16:05:42*

## File summary

### File Description

| | |
|---|---|
| **Title** | Dearne Hall Road/Barnsley Road |
| **Location** | Barnsley |
| **Site Number** | |
| **Date** | 01/03/2013 |
| **Version** | |
| **Status** | |
| **Identifier** | |
| **Client** | CEG |
| **Jobnumber** | 08-241 |
| **Enumerator** | mcrabtree |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | ✓ | Delay | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Hour | perMin |

# (Default Analysis Set) - 2018 Base + CD + Dev, PM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Include In Report | Use Specific Demand Set(s) | Specific Demand Set(s) | Locked | Network Flow Scaling Factor (%) | Network Capacity Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | ✓ | | | | 100.000 | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Results For Central Hour Only | Single Time Segment Only | Locked | Run Automatically | Use Relationship | Relationship |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD + Dev, PM | 2018 Base + CD + Dev | PM | | ONE HOUR | 16:45 | 18:15 | 90 | 15 | | | | | | |

# Junction Network

## Junctions

| Name | Junction Type | Major Road Direction | Arm Order | Do Geometric Delay | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|---|
| untitled | T-Junction | Two-way | A,B,C | | 0.15 | A |

## Junction Network Options

| Driving Side | Lighting | Network Residual Capacity (%) | First Arm Reaching Threshold |
|---|---|---|---|
| Left | Normal/unknown | 59 | Stream B-A |

# Arms

## Arms

| Arm | Name | Description | Arm Type |
|---|---|---|---|
| A | Barnsley Road North | | Major |
| B | Dearne Hall Road | | Minor |
| C | Barnsley Road South | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 6.10 | | 0.00 | | 2.20 | 110.00 | ✓ | 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) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane plus flare | | | | 10.00 | 4.40 | 3.30 | 3.00 | 3.00 | | 1.00 | 19 | 12 |

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| A | None |
| B | None |
| C | None |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 497.878 | 0.090 | 0.228 | 0.144 | 0.326 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | B-C | 696.807 | 0.106 | 0.269 | - | - |
| 1 | C-B | 637.665 | 0.246 | 0.246 | - | - |

*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 Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | ONE HOUR | ✓ | 388.00 | 100.000 |
| B | ONE HOUR | ✓ | 82.00 | 100.000 |
| C | ONE HOUR | ✓ | 684.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 43.000 | 345.000 |
| | B | 24.000 | 0.000 | 58.000 |
| | C | 613.000 | 71.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.11 | 0.89 |
| | B | 0.29 | 0.00 | 0.71 |
| | C | 0.90 | 0.10 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.051 | 1.000 |
| | B | 1.067 | 1.000 | 1.015 |
| | C | 1.019 | 1.011 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 5.100 | 0.000 |
| | B | 6.700 | 0.000 | 1.500 |
| | C | 1.900 | 1.100 | 0.000 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (min) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) | Total Queueing Delay (Veh-hr) | Average Queueing Delay (min) | Rate Of Queueing Delay (Veh-hr/min) | Inclusive Total Queueing Delay (Veh-hr) | Inclusive Average Queueing Delay (min) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 0.11 | 0.12 | 0.13 | A | 53.22 | 79.83 | 0.15 | 0.11 | 0.00 | 0.15 | 0.11 |
| B-A | 0.10 | 0.25 | 0.11 | C | 22.02 | 33.03 | 0.12 | 0.22 | 0.00 | 0.12 | 0.22 |
| C-AB | 0.15 | 0.13 | 0.17 | A | 65.15 | 97.73 | 0.21 | 0.13 | 0.00 | 0.21 | 0.13 |
| C-A | - | - | - | - | 562.50 | 843.75 | - | - | - | - | - |
| A-B | - | - | - | - | 39.46 | 59.19 | - | - | - | - | - |
| A-C | - | - | - | - | 316.58 | 474.87 | - | - | - | - | - |

## Main Results for each time segment

### Main results: (16:45-17:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 43.67 | 10.92 | 43.36 | 0.00 | 605.57 | 0.072 | 0.00 | 0.08 | 0.107 | A |
| B-A | 18.07 | 4.52 | 17.84 | 0.00 | 328.27 | 0.055 | 0.00 | 0.06 | 0.193 | B |
| C-AB | 53.45 | 13.36 | 53.03 | 0.00 | 559.25 | 0.096 | 0.00 | 0.10 | 0.118 | A |
| C-A | 461.50 | 115.37 | 461.50 | 0.00 | - | - | - | - | - | - |
| A-B | 32.37 | 8.09 | 32.37 | 0.00 | - | - | - | - | - | - |
| A-C | 259.73 | 64.93 | 259.73 | 0.00 | - | - | - | - | - | - |

### Main results: (17:00-17:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 52.14 | 13.04 | 52.06 | 0.00 | 588.85 | 0.089 | 0.08 | 0.10 | 0.112 | A |
| B-A | 21.58 | 5.39 | 21.50 | 0.00 | 301.27 | 0.072 | 0.06 | 0.08 | 0.214 | B |
| C-AB | 63.83 | 15.96 | 63.72 | 0.00 | 545.38 | 0.117 | 0.10 | 0.13 | 0.125 | A |
| C-A | 551.07 | 137.77 | 551.07 | 0.00 | - | - | - | - | - | - |
| A-B | 38.66 | 9.66 | 38.66 | 0.00 | - | - | - | - | - | - |
| A-C | 310.15 | 77.54 | 310.15 | 0.00 | - | - | - | - | - | - |

### Main results: (17:15-17:30)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 63.86 | 15.96 | 63.74 | 0.00 | 565.16 | 0.113 | 0.10 | 0.13 | 0.120 | A |
| B-A | 26.42 | 6.61 | 26.29 | 0.00 | 263.95 | 0.100 | 0.08 | 0.11 | 0.252 | C |
| C-AB | 78.17 | 19.54 | 78.01 | 0.00 | 526.20 | 0.149 | 0.13 | 0.17 | 0.134 | A |
| C-A | 674.92 | 168.73 | 674.92 | 0.00 | - | - | - | - | - | - |
| A-B | 47.34 | 11.84 | 47.34 | 0.00 | - | - | - | - | - | - |
| A-C | 379.85 | 94.96 | 379.85 | 0.00 | - | - | - | - | - | - |

### Main results: (17:30-17:45)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 63.86 | 15.96 | 63.86 | 0.00 | 565.01 | 0.113 | 0.13 | 0.13 | 0.120 | A |
| B-A | 26.42 | 6.61 | 26.42 | 0.00 | 263.93 | 0.100 | 0.11 | 0.11 | 0.253 | C |
| C-AB | 78.17 | 19.54 | 78.17 | 0.00 | 526.20 | 0.149 | 0.17 | 0.17 | 0.134 | A |
| C-A | 674.92 | 168.73 | 674.92 | 0.00 | - | - | - | - | - | - |
| A-B | 47.34 | 11.84 | 47.34 | 0.00 | - | - | - | - | - | - |
| A-C | 379.85 | 94.96 | 379.85 | 0.00 | - | - | - | - | - | - |

### Main results: (17:45-18:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 52.14 | 13.04 | 52.26 | 0.00 | 588.60 | 0.089 | 0.13 | 0.10 | 0.112 | A |
| B-A | 21.58 | 5.39 | 21.70 | 0.00 | 301.27 | 0.072 | 0.11 | 0.08 | 0.215 | B |
| C-AB | 63.83 | 15.96 | 63.99 | 0.00 | 545.38 | 0.117 | 0.17 | 0.13 | 0.125 | A |
| C-A | 551.07 | 137.77 | 551.07 | 0.00 | - | - | - | - | - | - |
| A-B | 38.66 | 9.66 | 38.66 | 0.00 | - | - | - | - | - | - |
| A-C | 310.15 | 77.54 | 310.15 | 0.00 | - | - | - | - | - | - |

### Main results: (18:00-18:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 43.67 | 10.92 | 43.74 | 0.00 | 605.21 | 0.072 | 0.10 | 0.08 | 0.107 | A |
| B-A | 18.07 | 4.52 | 18.15 | 0.00 | 328.22 | 0.055 | 0.08 | 0.06 | 0.194 | B |
| C-AB | 53.45 | 13.36 | 53.56 | 0.00 | 559.25 | 0.096 | 0.13 | 0.11 | 0.119 | A |
| C-A | 461.50 | 115.37 | 461.50 | 0.00 | - | - | - | - | - | - |
| A-B | 32.37 | 8.09 | 32.37 | 0.00 | - | - | - | - | - | - |
| A-C | 259.73 | 64.93 | 259.73 | 0.00 | - | - | - | - | - | - |

## Queueing Delay Results for each time segment

### Queueing Delay results: (16:45-17:00)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.107 | A | A |
| B-A | 0.01 | 0.00 | 0.193 | B | B |
| C-AB | 0.03 | 0.00 | 0.118 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (17:00-17:15)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.112 | A | A |
| B-A | 0.02 | 0.00 | 0.214 | B | B |
| C-AB | 0.03 | 0.00 | 0.125 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (17:15-17:30)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.03 | 0.00 | 0.120 | A | A |
| B-A | 0.03 | 0.00 | 0.252 | C | B |
| C-AB | 0.04 | 0.00 | 0.134 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (17:30-17:45)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.03 | 0.00 | 0.120 | A | A |
| B-A | 0.03 | 0.00 | 0.253 | C | B |
| C-AB | 0.04 | 0.00 | 0.134 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (17:45-18:00)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.03 | 0.00 | 0.112 | A | A |
| B-A | 0.02 | 0.00 | 0.215 | B | B |
| C-AB | 0.03 | 0.00 | 0.125 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (18:00-18:15)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.107 | A | A |
| B-A | 0.02 | 0.00 | 0.194 | B | B |
| C-AB | 0.03 | 0.00 | 0.119 | A | A |
| C-A | - | - | - | - | - |

| | | | | | |
|---|---|---|---|---|---|
| **A-B** | - | - | - | - | - |
| **A-C** | - | - | - | - | - |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Exist.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Rbt
**Report generation date:** 05/03/2013 16:26:31

## Summary of junction performance

| | AM | | | |
|---|---|---|---|---|
| | Queue (Veh) | Delay (min) | RFC | LOS |
| | A1 - 2018 Base + CD | | | |
| Arm 1 | 189.19 | 12.40 | 1.33 | F |
| Arm 2 | 19.70 | 2.10 | 1.02 | F |
| Arm 3 | 7.74 | 1.64 | 0.94 | F |

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

*"D1 - 2013 Base, AM" model duration: 07:45 - 09:15*
*"D2 - 2013 Base, PM" model duration: 16:45 - 18:15*
*"D3 - 2018 Base + CD, AM " model duration: 07:45 - 09:15*
*"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 05/03/2013 16:26:31*

## File summary

### File Description

| | |
|---|---|
| **Title** | Barnsley Road/Claycliffe Road/Barugh Green |
| **Location** | |
| **Site Number** | |
| **Date** | 04/03/2013 |
| **Version** | |
| **Status** | |
| **Identifier** | |
| **Client** | CEG |
| **Jobnumber** | 08-241 |
| **Enumerator** | mcrabtree |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Hour | perMin |

# (Default Analysis Set) - 2018 Base + CD, AM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|
| | | | | |

| | | | | |
|---|---|---|---|---|
| (Default Analysis Set) | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD, AM | 2018 Base + CD | AM | | ONE HOUR | 07:45 | 09:15 | 90 | 15 | | |

# Junction Network

## Junctions

| Name | Junction Type | Arm Order | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|
| (untitled) | Mini-roundabout | 1,2,3 | 7.87 | F |

## Junction Network Options

| Driving Side | Lighting | Road Surface | In London |
|---|---|---|---|
| Left | Normal/unknown | Normal/unknown | |

# Arms

## Arms

| Arm | Name | Description |
|---|---|---|
| 1 | Barnsley Road (N) | |
| 2 | Claycliffe Road | |
| 3 | Barugh Lane | |

## Mini Roundabout Geometry

| Arm | Approach road half-width (m) | Minimum approach road half-width (m) | Entry width (m) | Effective flare length (m) | Distance to next arm (m) | Entry corner kerb line distance (m) | Gradient over 50m (%) | Kerbed central island |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.00 | 3.00 | 3.60 | 4.60 | 19.50 | 17.40 | 0.00 | |
| 2 | 3.20 | 3.20 | 3.80 | 3.00 | 13.50 | 7.50 | 0.00 | |
| 3 | 2.80 | 2.80 | 3.20 | 2.80 | 16.90 | 15.20 | 0.00 | |

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

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| 1 | None |
| 2 | None |
| 3 | None |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.682 | 931.576 |
| 2 | | (calculated) | (calculated) | 0.533 | 707.292 |
| 3 | | (calculated) | (calculated) | 0.560 | 633.883 |

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

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | ONE HOUR | ✓ | 1055.00 | 100.000 |
| 2 | ONE HOUR | ✓ | 515.00 | 100.000 |
| 3 | ONE HOUR | ✓ | 274.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| From | 1 | 0.000 | 781.000 | 274.000 |
| | 2 | 474.000 | 0.000 | 41.000 |
| | 3 | 240.000 | 34.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| From | 1 | 0.00 | 0.74 | 0.26 |
| | 2 | 0.92 | 0.00 | 0.08 |
| | 3 | 0.88 | 0.12 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| From | 1 | 1.000 | 1.023 | 1.051 |
| | 2 | 1.032 | 1.000 | 1.146 |
| | 3 | 1.054 | 1.205 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| From | 1 | 0.000 | 2.300 | 5.100 |
| | 2 | 3.200 | 0.000 | 14.600 |
| | 3 | 5.400 | 20.500 | 0.000 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (min) | Max Queue (Veh) | Max LOS |
|---|---|---|---|---|
| 1 | 1.33 | 12.40 | 189.19 | F |
| 2 | 1.02 | 2.10 | 19.70 | F |
| 3 | 0.94 | 1.64 | 7.74 | F |

## Main Results for each time segment

### Main results: (07:45-08:00)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 794.26 | 767.86 | 25.10 | 0.00 | 884.18 | 0.898 | 6.60 | 0.446 | D |
| **2** | 387.72 | 379.81 | 199.42 | 0.00 | 572.00 | 0.678 | 1.98 | 0.301 | C |
| **3** | 206.28 | 202.24 | 349.58 | 0.00 | 402.55 | 0.512 | 1.01 | 0.294 | C |

## Main results: (08:00-08:15)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 948.43 | 862.24 | 30.13 | 0.00 | 880.16 | 1.078 | 28.15 | 1.453 | F |
| **2** | 462.97 | 454.69 | 223.94 | 0.00 | 558.79 | 0.829 | 4.05 | 0.536 | D |
| **3** | 246.32 | 242.78 | 418.49 | 0.00 | 365.42 | 0.674 | 1.90 | 0.475 | D |

## Main results: (08:15-08:30)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 1161.58 | 874.80 | 35.50 | 0.00 | 875.87 | 1.326 | 99.84 | 4.557 | F |
| **2** | 567.02 | 528.69 | 227.20 | 0.00 | 557.04 | 1.018 | 13.63 | 1.300 | F |
| **3** | 301.68 | 286.07 | 486.60 | 0.00 | 328.72 | 0.918 | 5.80 | 1.127 | F |

## Main results: (08:30-08:45)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 1161.58 | 874.90 | 36.47 | 0.00 | 875.10 | 1.327 | 171.51 | 9.412 | F |
| **2** | 567.02 | 542.76 | 227.23 | 0.00 | 557.02 | 1.018 | 19.70 | 2.096 | F |
| **3** | 301.68 | 293.90 | 499.56 | 0.00 | 321.74 | 0.938 | 7.74 | 1.645 | F |

## Main results: (08:45-09:00)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 948.43 | 877.69 | 32.82 | 0.00 | 878.01 | 1.080 | 189.19 | 12.402 | F |
| **2** | 462.97 | 515.80 | 227.95 | 0.00 | 556.63 | 0.832 | 6.49 | 1.506 | F |
| **3** | 246.32 | 264.48 | 474.73 | 0.00 | 335.11 | 0.735 | 3.20 | 0.967 | F |

## Main results: (09:00-09:15)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 794.26 | 878.33 | 26.61 | 0.00 | 882.97 | 0.900 | 168.18 | 12.212 | F |
| **2** | 387.72 | 403.81 | 228.11 | 0.00 | 556.55 | 0.697 | 2.47 | 0.427 | D |
| **3** | 206.28 | 214.41 | 371.66 | 0.00 | 390.65 | 0.528 | 1.17 | 0.355 | C |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Exist.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Rbt
**Report generation date:** 05/03/2013 16:28:00

## Summary of junction performance

| | PM | | | |
|---|---|---|---|---|
| | Queue (Veh) | Delay (min) | RFC | LOS |
| | A1 - 2018 Base + CD | | | |
| Arm 1 | 7.83 | 0.63 | 0.90 | E |
| Arm 2 | 216.33 | 22.51 | 1.57 | F |
| Arm 3 | 28.70 | 5.55 | 1.12 | F |

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

*"D1 - 2013 Base, AM" model duration: 07:45 - 09:15*
*"D2 - 2013 Base, PM" model duration: 16:45 - 18:15*
*"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15*
*"D4 - 2018 Base + CD, PM " model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 05/03/2013 16:28:00*

## File summary

### File Description

| | |
|---|---|
| **Title** | Barnsley Road/Claycliffe Road/Barugh Green |
| **Location** | |
| **Site Number** | |
| **Date** | 04/03/2013 |
| **Version** | |
| **Status** | |
| **Identifier** | |
| **Client** | CEG |
| **Jobnumber** | 08-241 |
| **Enumerator** | mcrabtree |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Hour | perMin |

# (Default Analysis Set) - 2018 Base + CD, PM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|
| | | | | |

| | | | | |
|---|---|---|---|---|
| (Default Analysis Set) | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD, PM | 2018 Base + CD | PM | | ONE HOUR | 16:45 | 18:15 | 90 | 15 | | |

# Junction Network

## Junctions

| Name | Junction Type | Arm Order | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|
| (untitled) | Mini-roundabout | 1,2,3 | 10.43 | F |

## Junction Network Options

| Driving Side | Lighting | Road Surface | In London |
|---|---|---|---|
| Left | Normal/unknown | Normal/unknown | |

# Arms

## Arms

| Arm | Name | Description |
|---|---|---|
| 1 | Barnsley Road (N) | |
| 2 | Claycliffe Road | |
| 3 | Barugh Lane | |

## Mini Roundabout Geometry

| Arm | Approach road half-width (m) | Minimum approach road half-width (m) | Entry width (m) | Effective flare length (m) | Distance to next arm (m) | Entry corner kerb line distance (m) | Gradient over 50m (%) | Kerbed central island |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.00 | 3.00 | 3.60 | 4.60 | 19.50 | 17.40 | 0.00 | |
| 2 | 3.20 | 3.20 | 3.80 | 3.00 | 13.50 | 7.50 | 0.00 | |
| 3 | 2.80 | 2.80 | 3.20 | 2.80 | 16.90 | 15.20 | 0.00 | |

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

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| 1 | None |
| 2 | None |
| 3 | None |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.682 | 931.576 |
| 2 | | (calculated) | (calculated) | 0.533 | 707.292 |
| 3 | | (calculated) | (calculated) | 0.560 | 633.883 |

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

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | ONE HOUR | ✓ | 724.00 | 100.000 |
| 2 | ONE HOUR | ✓ | 741.00 | 100.000 |
| 3 | ONE HOUR | ✓ | 335.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| From | 1 | 0.000 | 424.000 | 300.000 |
| | 2 | 725.000 | 0.000 | 16.000 |
| | 3 | 309.000 | 26.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| From | 1 | 0.00 | 0.59 | 0.41 |
| | 2 | 0.98 | 0.00 | 0.02 |
| | 3 | 0.92 | 0.08 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| From | 1 | 1.000 | 1.026 | 1.043 |
| | 2 | 1.009 | 1.000 | 1.063 |
| | 3 | 1.033 | 1.192 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| From | 1 | 0.000 | 2.600 | 4.300 |
| | 2 | 0.900 | 0.000 | 6.300 |
| | 3 | 3.300 | 19.200 | 0.000 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (min) | Max Queue (Veh) | Max LOS |
|---|---|---|---|---|
| 1 | 0.90 | 0.63 | 7.83 | E |
| 2 | 1.57 | 22.51 | 216.33 | F |
| 3 | 1.12 | 5.55 | 28.70 | F |

## Main Results for each time segment

### Main results: (16:45-17:00)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 545.07 | 538.88 | 18.74 | 0.00 | 887.03 | 0.614 | 1.55 | 0.169 | B |
| **2** | 557.86 | 520.87 | 223.29 | 0.00 | 577.20 | 0.967 | 9.25 | 0.812 | E |
| **3** | 252.21 | 241.41 | 509.63 | 0.00 | 330.89 | 0.762 | 2.70 | 0.614 | E |

## Main results: (17:00-17:15)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 650.86 | 646.53 | 22.05 | 0.00 | 884.42 | 0.736 | 2.63 | 0.248 | B |
| **2** | 666.14 | 547.62 | 267.90 | 0.00 | 552.63 | 1.205 | 38.88 | 2.963 | F |
| **3** | 301.16 | 284.07 | 535.80 | 0.00 | 316.74 | 0.951 | 6.97 | 1.369 | F |

## Main results: (17:15-17:30)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 797.14 | 779.88 | 25.00 | 0.00 | 882.09 | 0.904 | 6.95 | 0.515 | D |
| **2** | 815.85 | 521.89 | 323.15 | 0.00 | 522.20 | 1.562 | 112.37 | 8.918 | F |
| **3** | 368.84 | 322.13 | 510.63 | 0.00 | 330.34 | 1.117 | 18.65 | 2.805 | F |

## Main results: (17:30-17:45)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 797.14 | 793.60 | 25.50 | 0.00 | 881.70 | 0.904 | 7.83 | 0.631 | E |
| **2** | 815.85 | 519.00 | 328.84 | 0.00 | 519.07 | 1.572 | 186.58 | 16.895 | F |
| **3** | 368.84 | 328.62 | 507.80 | 0.00 | 331.87 | 1.111 | 28.70 | 4.721 | F |

## Main results: (17:45-18:00)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 650.86 | 670.28 | 23.72 | 0.00 | 883.11 | 0.737 | 2.98 | 0.304 | C |
| **2** | 666.14 | 547.14 | 277.74 | 0.00 | 547.21 | 1.217 | 216.33 | 21.891 | F |
| **3** | 301.16 | 305.58 | 535.32 | 0.00 | 316.99 | 0.950 | 27.60 | 5.546 | F |

## Main results: (18:00-18:15)

| Arm | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Circulating Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| **1** | 545.07 | 550.36 | 22.76 | 0.00 | 883.86 | 0.617 | 1.66 | 0.183 | B |
| **2** | 557.86 | 571.93 | 228.05 | 0.00 | 574.58 | 0.971 | 212.81 | 22.511 | F |
| **3** | 252.21 | 293.25 | 559.58 | 0.00 | 303.88 | 0.830 | 17.34 | 4.687 | F |

# APPENDIX BGH 17

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES

Selected regions and areas:

| | | | |
|---|---|---|---|
| 03 | SOUTH WEST | | |
| | WL | WILTSHIRE | 1 days |
| 04 | EAST ANGLIA | | |
| | SF | SUFFOLK | 2 days |
| 05 | EAST MIDLANDS | | |
| | LN | LINCOLNSHIRE | 2 days |
| | NT | NOTTINGHAMSHIRE | 1 days |
| 06 | WEST MIDLANDS | | |
| | SH | SHROPSHIRE | 1 days |
| | WM | WEST MIDLANDS | 2 days |
| | WO | WORCESTERSHIRE | 2 days |
| 07 | YORKSHIRE & NORTH LINCOLNSHIRE | | |
| | NY | NORTH YORKSHIRE | 1 days |
| 08 | NORTH WEST | | |
| | CH | CHESHIRE | 1 days |
| | LC | LANCASHIRE | 2 days |
| 09 | NORTH | | |
| | CB | CUMBRIA | 1 days |
| | TV | TEES VALLEY | 1 days |

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

Filtering Stage 2 selection:

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

Parameter: Number of dwellings
Actual Range: 77 to 232 (units: )
Range Selected by User: 75 to 300 (units: )

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 22/09/12

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

Selected survey days:

| | |
|---|---|
| Monday | 3 days |
| Tuesday | 3 days |
| Wednesday | 2 days |
| Thursday | 5 days |
| Friday | 4 days |

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

Selected survey types:

| | |
|---|---|
| Manual count | 17 days |
| Directional ATC Count | 0 days |

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

Selected Locations:

| | |
|---|---|
| Suburban Area (PPS6 Out of Centre) | 8 |
| Edge of Town | 9 |

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

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

Filtering Stage 3 selection:

Use Class:

| | |
|---|---|
| C3 | 17 days |

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

Population within 1 mile:

| | |
|---|---|
| 1,001 to 5,000 | 1 days |
| 5,001 to 10,000 | 2 days |
| 10,001 to 15,000 | 2 days |
| 15,001 to 20,000 | 7 days |
| 20,001 to 25,000 | 3 days |
| 25,001 to 50,000 | 2 days |

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

Population within 5 miles:

| | |
|---|---|
| 5,001 to 25,000 | 1 days |
| 25,001 to 50,000 | 1 days |
| 75,001 to 100,000 | 4 days |
| 100,001 to 125,000 | 4 days |
| 125,001 to 250,000 | 5 days |
| 250,001 to 500,000 | 2 days |

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

Car ownership within 5 miles:

| | |
|---|---|
| 0.5 or Less | 1 days |
| 0.6 to 1.0 | 7 days |
| 1.1 to 1.5 | 9 days |

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

Travel Plan:

| | |
|---|---|
| No | 17 days |

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

LIST OF SITES relevant to selection parameters

1 CB-03-A-04 SEMI DETACHED, WORKINGTON CUMBRIA
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY 24/04/09 Survey Type: MANUAL

2 CH-03-A-06 SEMI-DET./BUNGALOWS,CREWE CHESHIRE
CREWE ROAD

CREWE
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 129
Survey date: TUESDAY 14/10/08 Survey Type: MANUAL

3 LC-03-A-22 BUNGALOWS, BLACKPOOL LANCASHIRE
CLIFTON DRIVE NORTH

BLACKPOOL
Edge of Town
Residential Zone
Total Number of dwellings: 98
Survey date: TUESDAY 18/10/05 Survey Type: MANUAL

4 LC-03-A-29 DETACHED/SEMI D., BLACKBURN LANCASHIRE
REVIDGE ROAD
FOUR LANE ENDS
BLACKBURN
Edge of Town
Residential Zone
Total Number of dwellings: 185
Survey date: THURSDAY 10/06/04 Survey Type: MANUAL

5 LN-03-A-01 MIXED HOUSES, LINCOLN LINCOLNSHIRE
BRANT ROAD
BRACEBRIDGE
LINCOLN
Edge of Town
Residential Zone
Total Number of dwellings: 150
Survey date: TUESDAY 15/05/07 Survey Type: MANUAL

6 LN-03-A-02 MIXED HOUSES, LINCOLN LINCOLNSHIRE
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186
Survey date: MONDAY 14/05/07 Survey Type: MANUAL

7 NT-03-A-03 SEMI DETACHED,KIRKBY-IN-ASHFD NOTTINGHAMSHIRE
B6018 SUTTON ROAD

KIRKBY-IN-ASHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 166
Survey date: WEDNESDAY 28/06/06 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 NY-03-A-06 BUNGALOWS/SEMI DET., BBDGE NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY 14/10/11 Survey Type: MANUAL

9 SF-03-A-01 SEMI DETACHED, IPSWICH SUFFOLK
A1156 FELIXSTOWE ROAD
RACECOURSE
IPSWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 77
Survey date: WEDNESDAY 23/05/07 Survey Type: MANUAL

10 SF-03-A-02 SEMI DET./TERRACED, IPSWICH SUFFOLK
STOKE PARK DRIVE
MAIDENHALL
IPSWICH
Edge of Town
Residential Zone
Total Number of dwellings: 230
Survey date: THURSDAY 24/05/07 Survey Type: MANUAL

11 SH-03-A-04 TERRACED, SHREWSBURY SHROPSHIRE
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108
Survey date: THURSDAY 11/06/09 Survey Type: MANUAL

12 TV-03-A-01 MIXED HOUSES/FLATS, HARTLEPL TEES VALLEY
POWLETT ROAD

HARTLEPOOL
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 225
Survey date: THURSDAY 14/04/05 Survey Type: MANUAL

13 WL-03-A-01 SEMI D./TERRACED W. BASSETT WILTSHIRE
MAPLE DRIVE

WOOTTON BASSETT
Edge of Town
Residential Zone
Total Number of dwellings: 99
Survey date: MONDAY 02/10/06 Survey Type: MANUAL

14 WM-03-A-01 TERRACED, COVENTRY WEST MIDLANDS
FOLESHILL ROAD
FOLESHILL
COVENTRY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 79
Survey date: FRIDAY 03/02/06 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 WM-03-A-03 MIXED HOUSING, COVENTRY WEST MIDLANDS
BASELEY WAY
ROWLEYS GREEN
COVENTRY
Edge of Town
Residential Zone
Total Number of dwellings: 84
Survey date: MONDAY 24/09/07 Survey Type: MANUAL

16 WO-03-A-03 DETACHED, KIDDERMINSTER WORCESTERSHIRE
BLAKEBROOK
BLAKEBROOK
KIDDERMINSTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 138
Survey date: FRIDAY 05/05/06 Survey Type: MANUAL

17 WO-03-A-06 DET./TERRACED, BROMSGROVE WORCESTERSHIRE
ST GODWALDS ROAD
ASTON FIELDS
BROMSGROVE
Edge of Town
No Sub Category
Total Number of dwellings: 232
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 17 | 140 | 0.078 | 17 | 140 | 0.292 | 17 | 140 | 0.370 |
| 08:00 - 09:00 | 17 | 140 | 0.164 | 17 | 140 | 0.424 | 17 | 140 | 0.588 |
| 09:00 - 10:00 | 17 | 140 | 0.186 | 17 | 140 | 0.229 | 17 | 140 | 0.415 |
| 10:00 - 11:00 | 17 | 140 | 0.168 | 17 | 140 | 0.204 | 17 | 140 | 0.372 |
| 11:00 - 12:00 | 17 | 140 | 0.208 | 17 | 140 | 0.195 | 17 | 140 | 0.403 |
| 12:00 - 13:00 | 17 | 140 | 0.215 | 17 | 140 | 0.205 | 17 | 140 | 0.420 |
| 13:00 - 14:00 | 17 | 140 | 0.194 | 17 | 140 | 0.176 | 17 | 140 | 0.370 |
| 14:00 - 15:00 | 17 | 140 | 0.189 | 17 | 140 | 0.191 | 17 | 140 | 0.380 |
| 15:00 - 16:00 | 17 | 140 | 0.288 | 17 | 140 | 0.222 | 17 | 140 | 0.510 |
| 16:00 - 17:00 | 17 | 140 | 0.326 | 17 | 140 | 0.191 | 17 | 140 | 0.517 |
| 17:00 - 18:00 | 17 | 140 | 0.410 | 17 | 140 | 0.244 | 17 | 140 | 0.654 |
| 18:00 - 19:00 | 17 | 140 | 0.295 | 17 | 140 | 0.241 | 17 | 140 | 0.536 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 2.721 | | | 2.814 | | | 5.535 |

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

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

Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 77 - 232 (units: ) |
| Survey date date range: | 01/01/04 - 22/09/12 |
| Number of weekdays (Monday-Friday): | 17 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys manually removed from selection: | 0 |

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 17 | 140 | 0.003 | 17 | 140 | 0.003 | 17 | 140 | 0.006 |
| 08:00 - 09:00 | 17 | 140 | 0.002 | 17 | 140 | 0.003 | 17 | 140 | 0.005 |
| 09:00 - 10:00 | 17 | 140 | 0.006 | 17 | 140 | 0.003 | 17 | 140 | 0.009 |
| 10:00 - 11:00 | 17 | 140 | 0.003 | 17 | 140 | 0.005 | 17 | 140 | 0.008 |
| 11:00 - 12:00 | 17 | 140 | 0.001 | 17 | 140 | 0.002 | 17 | 140 | 0.003 |
| 12:00 - 13:00 | 17 | 140 | 0.006 | 17 | 140 | 0.004 | 17 | 140 | 0.010 |
| 13:00 - 14:00 | 17 | 140 | 0.003 | 17 | 140 | 0.005 | 17 | 140 | 0.008 |
| 14:00 - 15:00 | 17 | 140 | 0.002 | 17 | 140 | 0.003 | 17 | 140 | 0.005 |
| 15:00 - 16:00 | 17 | 140 | 0.002 | 17 | 140 | 0.001 | 17 | 140 | 0.003 |
| 16:00 - 17:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 17:00 - 18:00 | 17 | 140 | 0.001 | 17 | 140 | 0.001 | 17 | 140 | 0.002 |
| 18:00 - 19:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.029 | | | 0.030 | | | 0.059 |

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

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

Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 77 - 232 (units: ) |
| Survey date date range: | 01/01/04 - 22/09/12 |
| Number of weekdays (Monday-Friday): | 17 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys manually removed from selection: | 0 |

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 08:00 - 09:00 | 17 | 140 | 0.001 | 17 | 140 | 0.001 | 17 | 140 | 0.002 |
| 09:00 - 10:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 10:00 - 11:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 11:00 - 12:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 12:00 - 13:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 13:00 - 14:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 14:00 - 15:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 15:00 - 16:00 | 17 | 140 | 0.001 | 17 | 140 | 0.000 | 17 | 140 | 0.001 |
| 16:00 - 17:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 17:00 - 18:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 18:00 - 19:00 | 17 | 140 | 0.000 | 17 | 140 | 0.000 | 17 | 140 | 0.000 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.002 | | | 0.001 | | | 0.003 |

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

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

Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 77 - 232 (units: ) |
| Survey date date range: | 01/01/04 - 22/09/12 |
| Number of weekdays (Monday-Friday): | 17 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys manually removed from selection: | 0 |

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 17 | 140 | 0.007 | 17 | 140 | 0.010 | 17 | 140 | 0.017 |
| 08:00 - 09:00 | 17 | 140 | 0.005 | 17 | 140 | 0.016 | 17 | 140 | 0.021 |
| 09:00 - 10:00 | 17 | 140 | 0.005 | 17 | 140 | 0.003 | 17 | 140 | 0.008 |
| 10:00 - 11:00 | 17 | 140 | 0.001 | 17 | 140 | 0.005 | 17 | 140 | 0.006 |
| 11:00 - 12:00 | 17 | 140 | 0.005 | 17 | 140 | 0.003 | 17 | 140 | 0.008 |
| 12:00 - 13:00 | 17 | 140 | 0.005 | 17 | 140 | 0.005 | 17 | 140 | 0.010 |
| 13:00 - 14:00 | 17 | 140 | 0.005 | 17 | 140 | 0.004 | 17 | 140 | 0.009 |
| 14:00 - 15:00 | 17 | 140 | 0.003 | 17 | 140 | 0.003 | 17 | 140 | 0.006 |
| 15:00 - 16:00 | 17 | 140 | 0.016 | 17 | 140 | 0.010 | 17 | 140 | 0.026 |
| 16:00 - 17:00 | 17 | 140 | 0.012 | 17 | 140 | 0.009 | 17 | 140 | 0.021 |
| 17:00 - 18:00 | 17 | 140 | 0.013 | 17 | 140 | 0.011 | 17 | 140 | 0.024 |
| 18:00 - 19:00 | 17 | 140 | 0.009 | 17 | 140 | 0.007 | 17 | 140 | 0.016 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.086 | | | 0.086 | | | 0.172 |

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

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

Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 77 - 232 (units: ) |
| Survey date date range: | 01/01/04 - 22/09/12 |
| Number of weekdays (Monday-Friday): | 17 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys manually removed from selection: | 0 |

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 17 | 140 | 0.088 | 17 | 140 | 0.346 | 17 | 140 | 0.434 |
| 08:00 - 09:00 | 17 | 140 | 0.201 | 17 | 140 | 0.621 | 17 | 140 | 0.822 |
| 09:00 - 10:00 | 17 | 140 | 0.221 | 17 | 140 | 0.294 | 17 | 140 | 0.515 |
| 10:00 - 11:00 | 17 | 140 | 0.212 | 17 | 140 | 0.265 | 17 | 140 | 0.477 |
| 11:00 - 12:00 | 17 | 140 | 0.259 | 17 | 140 | 0.244 | 17 | 140 | 0.503 |
| 12:00 - 13:00 | 17 | 140 | 0.262 | 17 | 140 | 0.261 | 17 | 140 | 0.523 |
| 13:00 - 14:00 | 17 | 140 | 0.249 | 17 | 140 | 0.219 | 17 | 140 | 0.468 |
| 14:00 - 15:00 | 17 | 140 | 0.243 | 17 | 140 | 0.248 | 17 | 140 | 0.491 |
| 15:00 - 16:00 | 17 | 140 | 0.449 | 17 | 140 | 0.290 | 17 | 140 | 0.739 |
| 16:00 - 17:00 | 17 | 140 | 0.441 | 17 | 140 | 0.264 | 17 | 140 | 0.705 |
| 17:00 - 18:00 | 17 | 140 | 0.548 | 17 | 140 | 0.327 | 17 | 140 | 0.875 |
| 18:00 - 19:00 | 17 | 140 | 0.399 | 17 | 140 | 0.351 | 17 | 140 | 0.750 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 3.572 | | | 3.730 | | | 7.302 |

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

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

Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 77 - 232 (units: ) |
| Survey date date range: | 01/01/04 - 22/09/12 |
| Number of weekdays (Monday-Friday): | 17 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys manually removed from selection: | 0 |

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 17 | 140 | 0.026 | 17 | 140 | 0.044 | 17 | 140 | 0.070 |
| 08:00 - 09:00 | 17 | 140 | 0.034 | 17 | 140 | 0.160 | 17 | 140 | 0.194 |
| 09:00 - 10:00 | 17 | 140 | 0.031 | 17 | 140 | 0.049 | 17 | 140 | 0.080 |
| 10:00 - 11:00 | 17 | 140 | 0.035 | 17 | 140 | 0.041 | 17 | 140 | 0.076 |
| 11:00 - 12:00 | 17 | 140 | 0.046 | 17 | 140 | 0.044 | 17 | 140 | 0.090 |
| 12:00 - 13:00 | 17 | 140 | 0.042 | 17 | 140 | 0.034 | 17 | 140 | 0.076 |
| 13:00 - 14:00 | 17 | 140 | 0.037 | 17 | 140 | 0.039 | 17 | 140 | 0.076 |
| 14:00 - 15:00 | 17 | 140 | 0.049 | 17 | 140 | 0.041 | 17 | 140 | 0.090 |
| 15:00 - 16:00 | 17 | 140 | 0.162 | 17 | 140 | 0.070 | 17 | 140 | 0.232 |
| 16:00 - 17:00 | 17 | 140 | 0.076 | 17 | 140 | 0.050 | 17 | 140 | 0.126 |
| 17:00 - 18:00 | 17 | 140 | 0.068 | 17 | 140 | 0.049 | 17 | 140 | 0.117 |
| 18:00 - 19:00 | 17 | 140 | 0.050 | 17 | 140 | 0.051 | 17 | 140 | 0.101 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.656 | | | 0.672 | | | 1.328 |

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

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

Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 77 - 232 (units: ) |
| Survey date date range: | 01/01/04 - 22/09/12 |
| Number of weekdays (Monday-Friday): | 17 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys manually removed from selection: | 0 |

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 17 | 140 | 0.001 | 17 | 140 | 0.011 | 17 | 140 | 0.012 |
| 08:00 - 09:00 | 17 | 140 | 0.010 | 17 | 140 | 0.022 | 17 | 140 | 0.032 |
| 09:00 - 10:00 | 17 | 140 | 0.006 | 17 | 140 | 0.008 | 17 | 140 | 0.014 |
| 10:00 - 11:00 | 17 | 140 | 0.005 | 17 | 140 | 0.007 | 17 | 140 | 0.012 |
| 11:00 - 12:00 | 17 | 140 | 0.007 | 17 | 140 | 0.008 | 17 | 140 | 0.015 |
| 12:00 - 13:00 | 17 | 140 | 0.005 | 17 | 140 | 0.009 | 17 | 140 | 0.014 |
| 13:00 - 14:00 | 17 | 140 | 0.005 | 17 | 140 | 0.003 | 17 | 140 | 0.008 |
| 14:00 - 15:00 | 17 | 140 | 0.005 | 17 | 140 | 0.005 | 17 | 140 | 0.010 |
| 15:00 - 16:00 | 17 | 140 | 0.016 | 17 | 140 | 0.013 | 17 | 140 | 0.029 |
| 16:00 - 17:00 | 17 | 140 | 0.017 | 17 | 140 | 0.004 | 17 | 140 | 0.021 |
| 17:00 - 18:00 | 17 | 140 | 0.018 | 17 | 140 | 0.005 | 17 | 140 | 0.023 |
| 18:00 - 19:00 | 17 | 140 | 0.010 | 17 | 140 | 0.004 | 17 | 140 | 0.014 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.105 | | | 0.099 | | | 0.204 |

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

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

Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 77 - 232 (units: ) |
| Survey date date range: | 01/01/04 - 22/09/12 |
| Number of weekdays (Monday-Friday): | 17 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys manually removed from selection: | 0 |

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 17 | 140 | 0.122 | 17 | 140 | 0.411 | 17 | 140 | 0.533 |
| 08:00 - 09:00 | 17 | 140 | 0.249 | 17 | 140 | 0.820 | 17 | 140 | 1.069 |
| 09:00 - 10:00 | 17 | 140 | 0.262 | 17 | 140 | 0.354 | 17 | 140 | 0.616 |
| 10:00 - 11:00 | 17 | 140 | 0.253 | 17 | 140 | 0.317 | 17 | 140 | 0.570 |
| 11:00 - 12:00 | 17 | 140 | 0.317 | 17 | 140 | 0.299 | 17 | 140 | 0.616 |
| 12:00 - 13:00 | 17 | 140 | 0.314 | 17 | 140 | 0.309 | 17 | 140 | 0.623 |
| 13:00 - 14:00 | 17 | 140 | 0.295 | 17 | 140 | 0.265 | 17 | 140 | 0.560 |
| 14:00 - 15:00 | 17 | 140 | 0.300 | 17 | 140 | 0.296 | 17 | 140 | 0.596 |
| 15:00 - 16:00 | 17 | 140 | 0.644 | 17 | 140 | 0.382 | 17 | 140 | 1.026 |
| 16:00 - 17:00 | 17 | 140 | 0.546 | 17 | 140 | 0.328 | 17 | 140 | 0.874 |
| 17:00 - 18:00 | 17 | 140 | 0.645 | 17 | 140 | 0.392 | 17 | 140 | 1.037 |
| 18:00 - 19:00 | 17 | 140 | 0.467 | 17 | 140 | 0.413 | 17 | 140 | 0.880 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 4.414 | | | 4.586 | | | 9.000 |

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

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

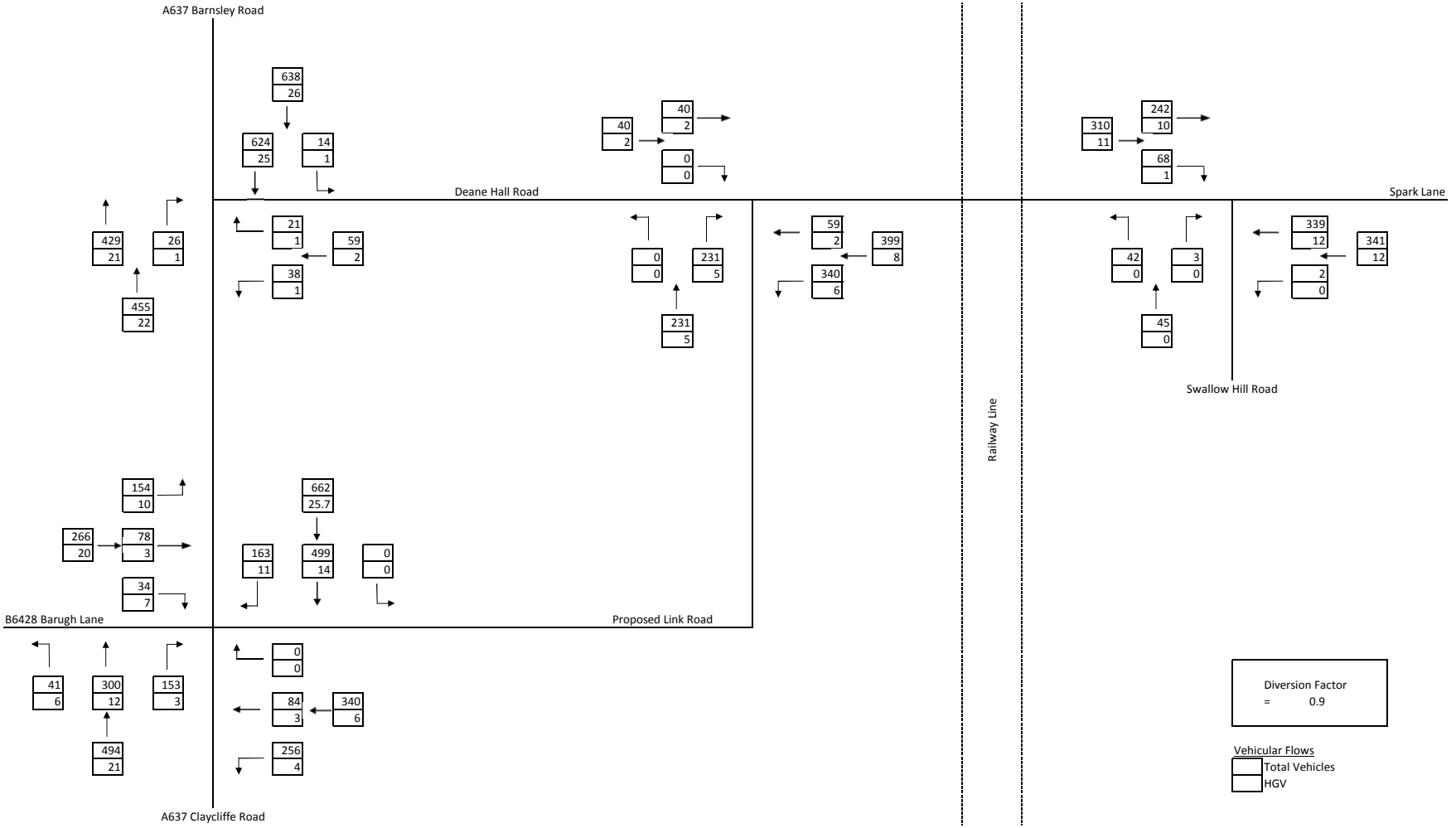
Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 77 - 232 (units: ) |
| Survey date date range: | 01/01/04 - 22/09/12 |
| Number of weekdays (Monday-Friday): | 17 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys manually removed from selection: | 0 |

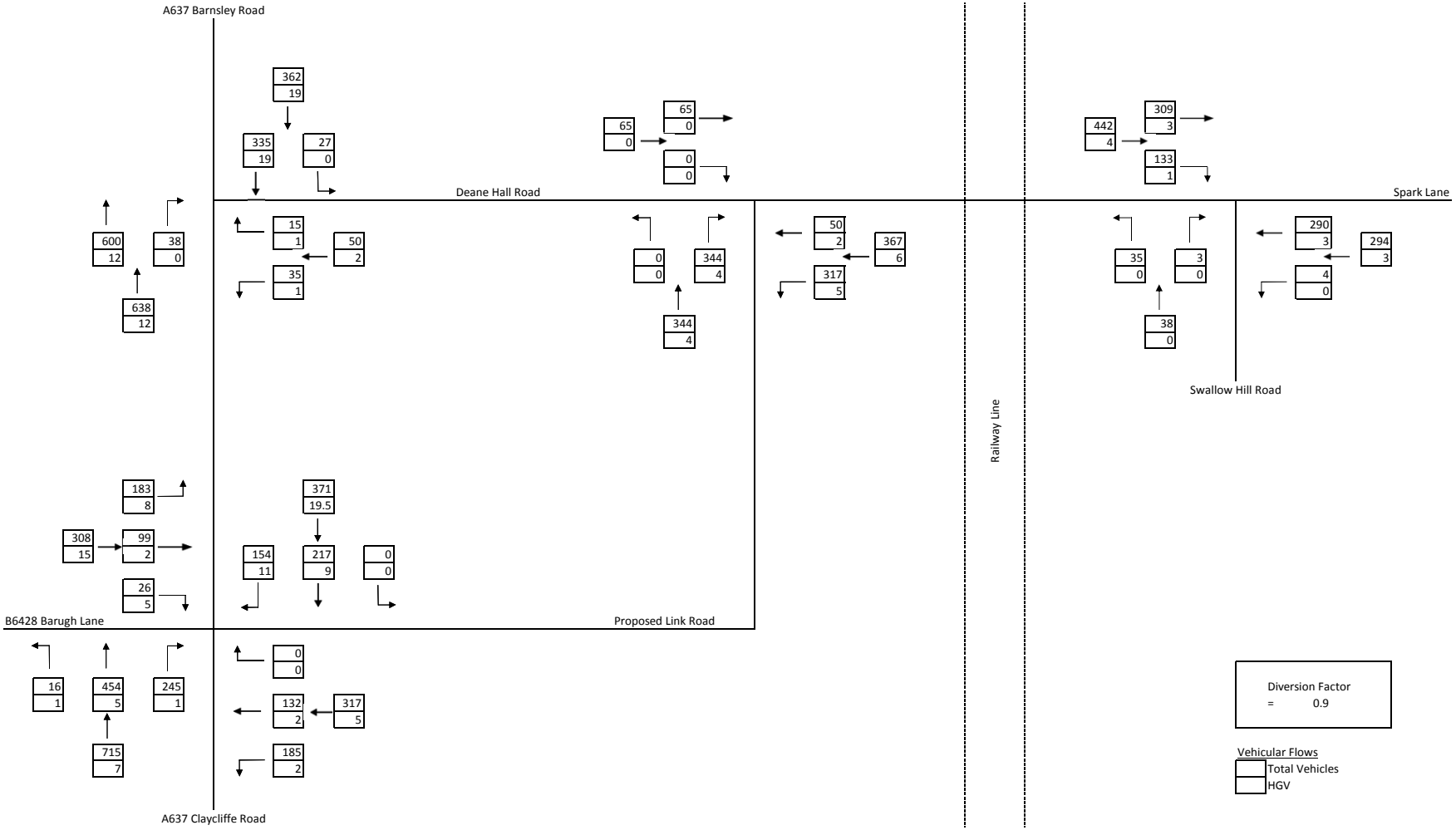
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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

# APPENDIX BGH 18

**2018 GROWTHED VEHICULAR FLOWS WITH LINK ROAD**
**BARNSLEY**
**8:00 am to 9:00 am**

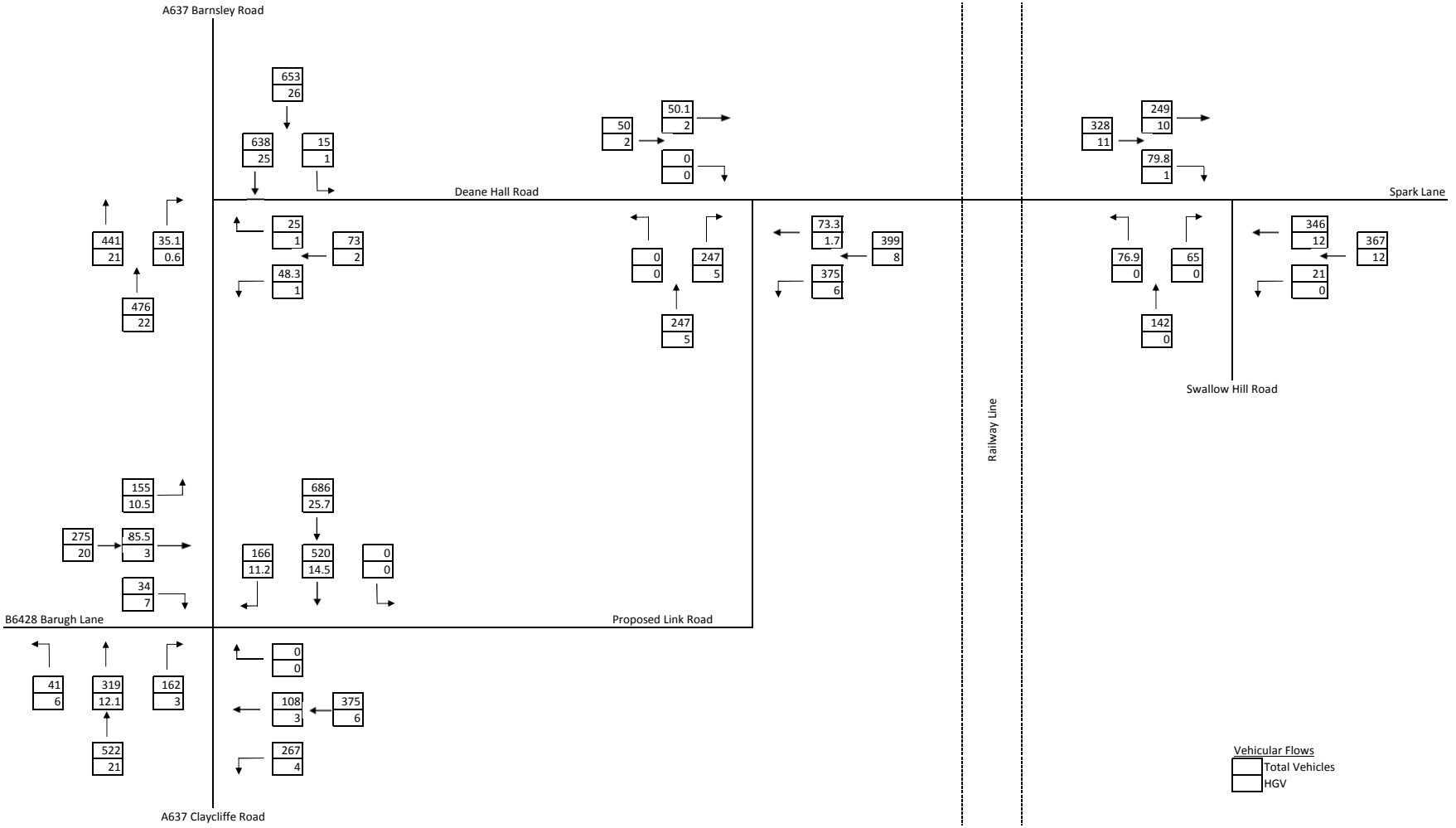


**2018 GROWTHED VEHICULAR FLOWS WITH LINK ROAD**
**BARNSLEY**
**5:00 pm to 6:00 pm**

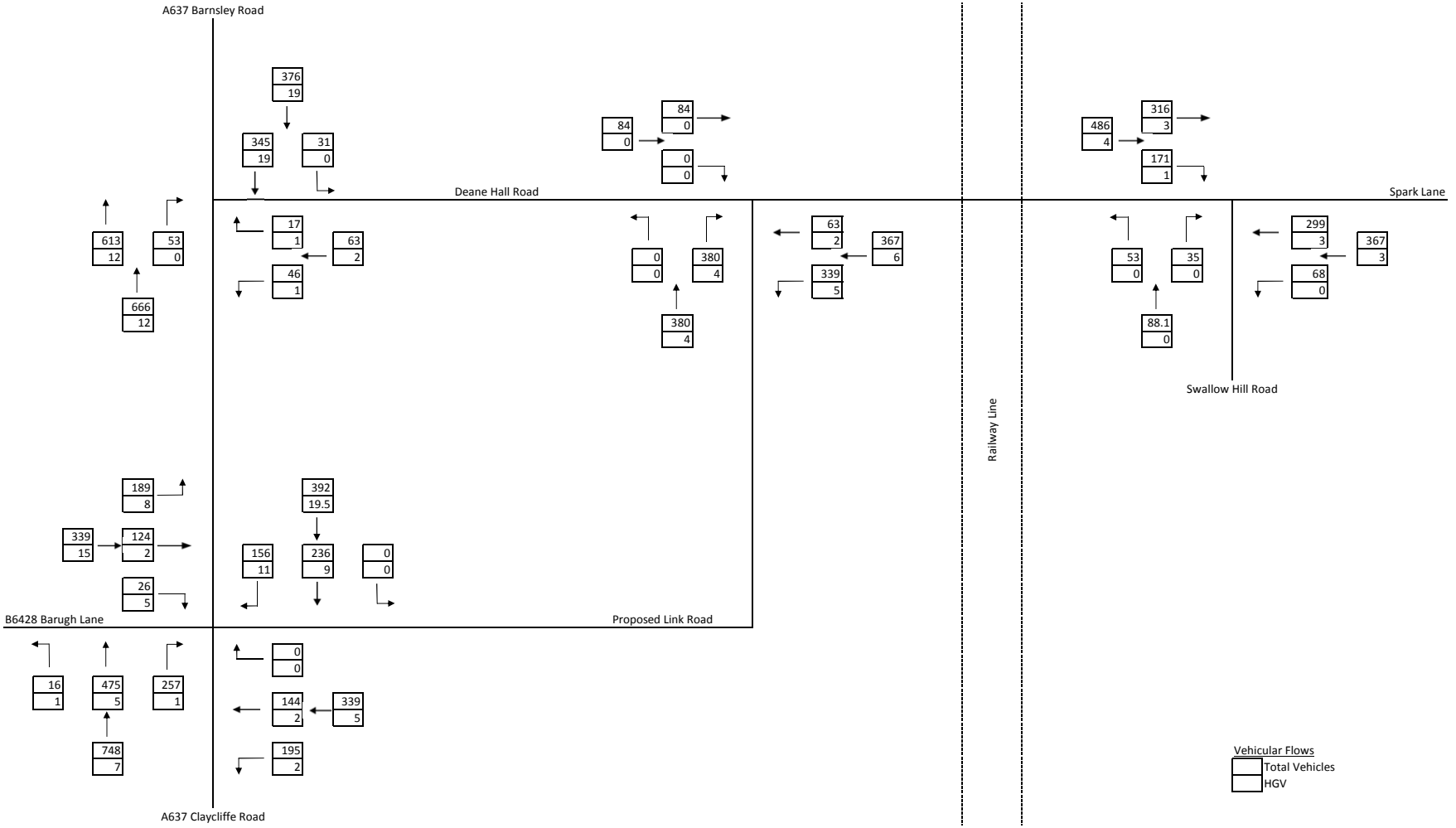


# APPENDIX BGH 19

## 2018 GROWTHED VEHICULAR FLOWS WITH LINK ROAD AND COMMITTED DEVELOPMENT
## BARNSLEY
## 8:00 am to 9:00 am

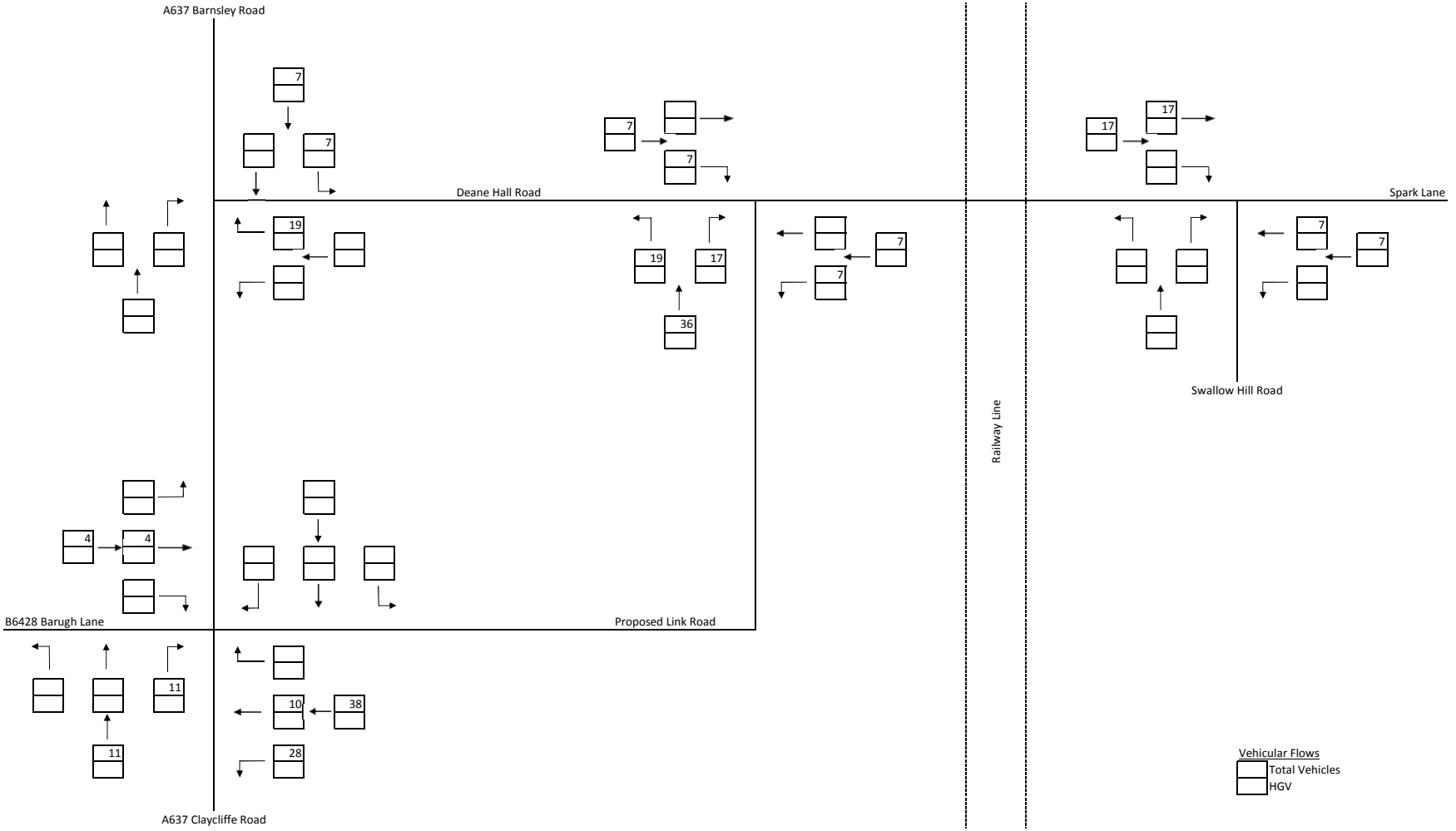


**2018 GROWTHED VEHICULAR FLOWS WITH LINK ROAD AND COMMITTED DEVELOPMENT**
**BARNSLEY**
**17:00 pm to 18:00 pm**

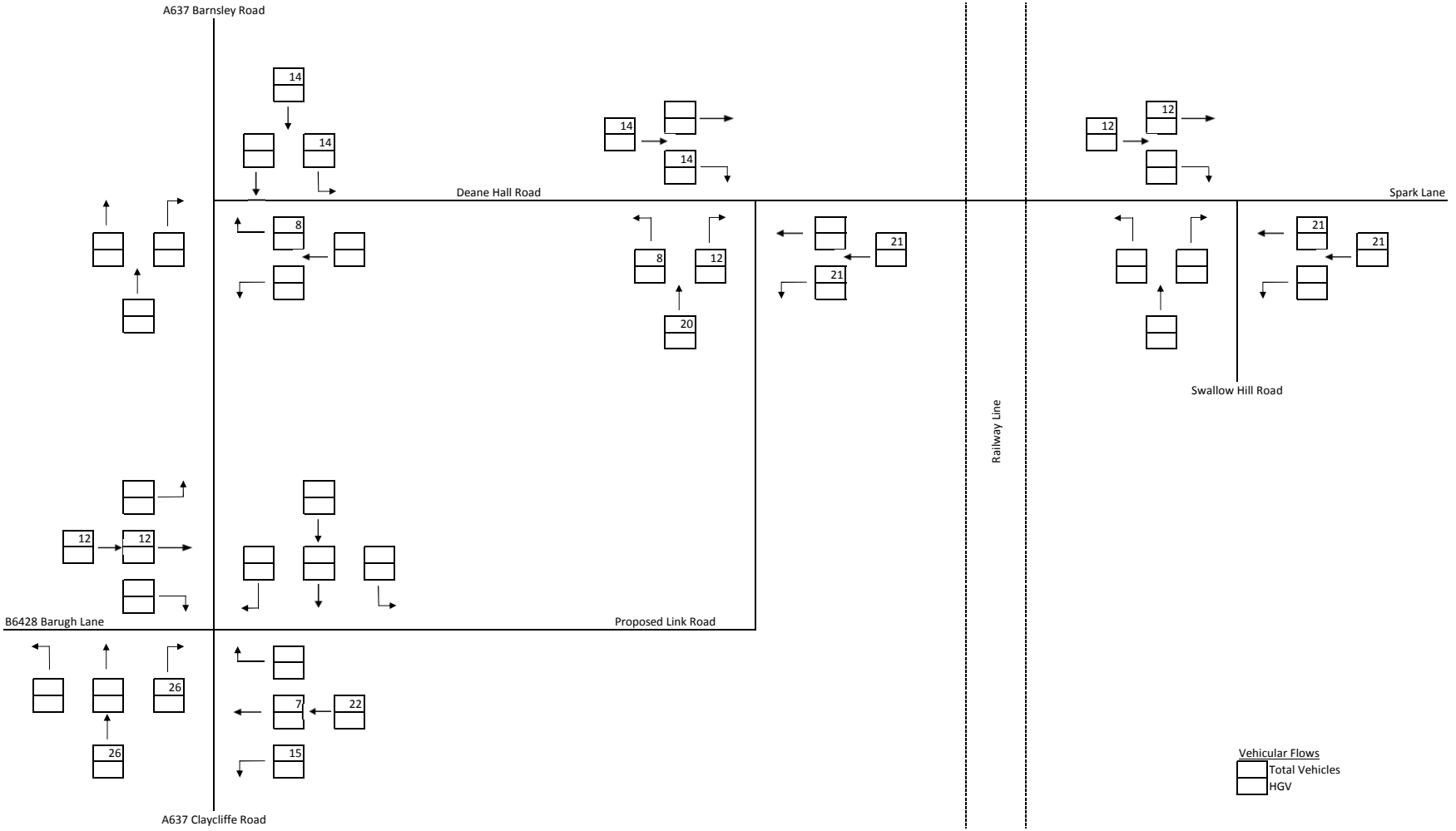


# APPENDIX BGH 20

**GENERATED FLOWS - 185 DWELLINGS**
**BARNSLEY**
**8:00 am to 9:00 am**

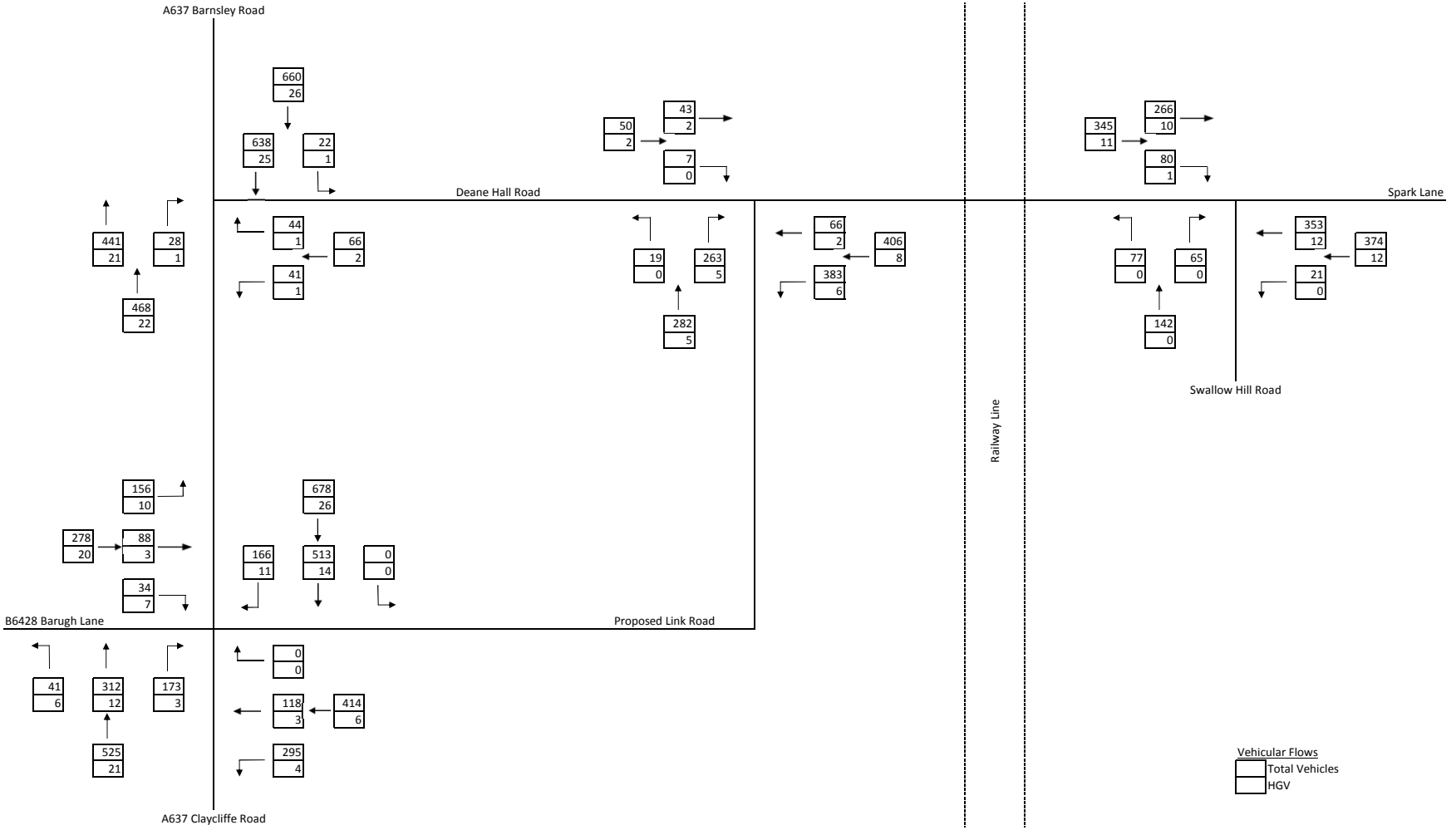


**GENERATED FLOWS - 185 DWELLINGS**
**BARNSLEY**
**5:00 pm to 6:00 pm**

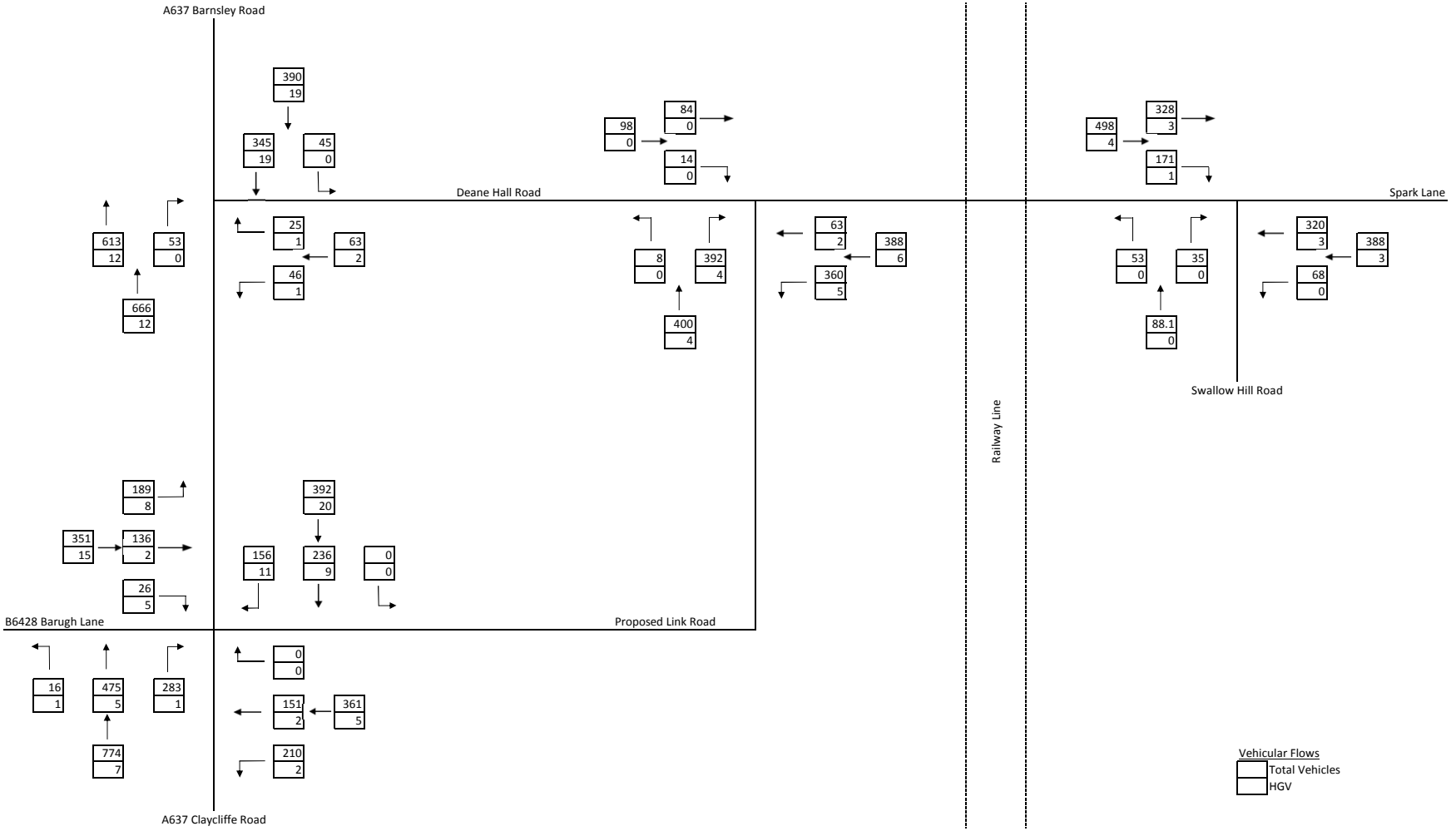


# APPENDIX BGH 21

## 2018 PREDICTED VEHICULAR FLOWS WITH LINK ROAD AND COMMITTED DEVELOPMENT
## BARNSLEY
## 8:00 am to 9:00 am



**2018 PREDICTED VEHICULAR FLOWS WITH LINK ROAD AND COMMITTED DEVELOPMENT**
**BARNSLEY**
**5:00 pm to 6:00 pm**



# APPENDIX BGH 22

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** 08-241 28m ICD Rdbt - PredOp 175 dwellings.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Rbt
**Report generation date:** 27/09/2013 16:36:57

## Summary of junction performance

| | AM | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (min) | RFC | LOS |
| | PredOp - PredOp | | | |
| Arm 1 | 4.17 | 0.35 | 0.81 | C |
| Arm 2 | 4.19 | 0.59 | 0.82 | E |
| Arm 3 | 1.24 | 0.13 | 0.55 | A |
| Arm 4 | 0.87 | 0.17 | 0.45 | B |

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

*"D1 - PredOp, AM " model duration: 07:45 - 09:15*
*"D2 - PredOp, PM" model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 27/09/2013 16:36:57*

## File summary

### File Description

| | |
|---|---|
| **Title** | 08-241-TR-025 PredOp (RIS Flows) |
| **Location** | Barnsley |
| **Site Number** | |
| **Date** | 03/09/2012 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | BRYANGHALL\acooper |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 0.60 | 20.00 |

## 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 | min | -Min | perMin |

# PredOp - PredOp, AM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|
| PredOp | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| PredOp, AM | PredOp | AM | | ONE HOUR | 07:45 | 09:15 | 90 | 15 | | |

# Junction Network

## Junctions

| Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|---|
| (untitled) | Roundabout | 1,2,3,4 | | | 0.31 | C |

## Junction Network Options

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

# Arms

## Arms

| Arm | Name | Description |
|---|---|---|
| 1 | Barnsley Road (N) | |
| 2 | Site Access | |
| 3 | Barnsley Road (S) | |
| 4 | B6428 | |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 3.20 | 4.50 | 2.30 | 10.00 | 32.00 | 20.00 | |
| 2 | 3.00 | 3.00 | 0.00 | 20.00 | 32.00 | 12.00 | |
| 3 | 3.20 | 4.50 | 6.00 | 15.00 | 32.00 | 17.00 | |
| 4 | 2.80 | 3.00 | 4.50 | 20.00 | 32.00 | 13.00 | |

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

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| 1 | None |
| 2 | None |
| 3 | None |
| 4 | None |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.528 | 1094.083 |
| 2 | | (calculated) | (calculated) | 0.525 | 965.776 |
| 3 | | (calculated) | (calculated) | 0.570 | 1236.854 |
| 4 | | (calculated) | (calculated) | 0.522 | 954.631 |

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

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | ONE HOUR | ✓ | 679.00 | 100.000 |
| 2 | ONE HOUR | ✓ | 413.00 | 100.000 |
| 3 | ONE HOUR | ✓ | 526.00 | 100.000 |
| 4 | ONE HOUR | ✓ | 278.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 513.000 | 166.000 |
| | 2 | 0.000 | 0.000 | 295.000 | 118.000 |
| | 3 | 312.000 | 173.000 | 0.000 | 41.000 |
| | 4 | 156.000 | 88.000 | 34.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.76 | 0.24 |
| | 2 | 0.00 | 0.00 | 0.71 | 0.29 |
| | 3 | 0.59 | 0.33 | 0.00 | 0.08 |
| | 4 | 0.56 | 0.32 | 0.12 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.027 | 1.059 |
| | 2 | 1.000 | 1.000 | 1.013 | 1.026 |
| | 3 | 1.038 | 1.017 | 1.000 | 1.146 |
| | 4 | 1.062 | 1.021 | 1.205 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 2.700 | 5.900 |
| | 2 | 0.000 | 0.000 | 1.300 | 2.600 |
| | 3 | 3.800 | 1.700 | 0.000 | 14.600 |
| | 4 | 6.200 | 2.100 | 20.500 | 0.000 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (min) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.81 | 0.35 | 4.17 | C |
| 2 | 0.82 | 0.59 | 4.19 | E |
| 3 | 0.55 | 0.13 | 1.24 | A |
| 4 | 0.45 | 0.17 | 0.87 | B |

# Main Results for each time segment

## Main results: (07:45-08:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 511.19 | 506.73 | 220.65 | 0.00 | 977.64 | 0.523 | 1.11 | 0.131 | A |
| 2 | 310.93 | 307.62 | 532.14 | 0.00 | 686.27 | 0.453 | 0.83 | 0.160 | A |
| 3 | 396.00 | 393.74 | 211.78 | 0.00 | 1116.11 | 0.355 | 0.57 | 0.086 | A |
| 4 | 209.29 | 207.71 | 363.05 | 0.00 | 765.16 | 0.274 | 0.40 | 0.114 | A |

## Main results: (08:00-08:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 610.41 | 607.74 | 264.64 | 0.00 | 954.42 | 0.640 | 1.78 | 0.178 | B |
| 2 | 371.28 | 368.96 | 638.23 | 0.00 | 630.54 | 0.589 | 1.41 | 0.231 | B |
| 3 | 472.86 | 471.99 | 254.00 | 0.00 | 1092.04 | 0.433 | 0.78 | 0.100 | A |
| 4 | 249.92 | 249.30 | 435.20 | 0.00 | 727.50 | 0.344 | 0.55 | 0.133 | A |

## Main results: (08:15-08:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 747.59 | 738.83 | 323.67 | 0.00 | 923.27 | 0.810 | 3.97 | 0.322 | C |
| 2 | 454.72 | 445.17 | 776.12 | 0.00 | 558.12 | 0.815 | 3.79 | 0.502 | D |
| 3 | 579.14 | 577.37 | 307.82 | 0.00 | 1061.35 | 0.546 | 1.22 | 0.128 | A |
| 4 | 306.08 | 304.84 | 532.37 | 0.00 | 676.79 | 0.452 | 0.86 | 0.171 | B |

## Main results: (08:30-08:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 747.59 | 746.79 | 324.76 | 0.00 | 922.70 | 0.810 | 4.17 | 0.349 | C |
| 2 | 454.72 | 453.15 | 784.22 | 0.00 | 553.87 | 0.821 | 4.19 | 0.587 | E |
| 3 | 579.14 | 579.07 | 312.04 | 0.00 | 1058.95 | 0.547 | 1.24 | 0.130 | A |
| 4 | 306.08 | 306.04 | 533.94 | 0.00 | 675.97 | 0.453 | 0.87 | 0.172 | B |

## Main results: (08:45-09:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 610.41 | 619.49 | 266.30 | 0.00 | 953.55 | 0.640 | 1.90 | 0.191 | B |
| 2 | 371.28 | 381.83 | 650.21 | 0.00 | 624.26 | 0.595 | 1.55 | 0.262 | C |
| 3 | 472.86 | 474.60 | 260.55 | 0.00 | 1088.31 | 0.434 | 0.81 | 0.102 | A |
| 4 | 249.92 | 251.14 | 437.60 | 0.00 | 726.25 | 0.344 | 0.57 | 0.135 | A |

## Main results: (09:00-09:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 511.19 | 514.16 | 222.67 | 0.00 | 976.57 | 0.523 | 1.16 | 0.135 | A |
| 2 | 310.93 | 313.66 | 539.83 | 0.00 | 682.23 | 0.456 | 0.87 | 0.167 | B |
| 3 | 396.00 | 396.92 | 215.32 | 0.00 | 1114.09 | 0.355 | 0.58 | 0.087 | A |
| 4 | 209.29 | 209.93 | 365.98 | 0.00 | 763.63 | 0.274 | 0.41 | 0.115 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** 08-241 28m ICD Rdbt - PredOp 175 dwellings.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Rbt
**Report generation date:** 27/09/2013 16:37:42

## Summary of junction performance

| | PM | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (min) | RFC | LOS |
| | PredOp - PredOp | | | |
| Arm 1 | 1.11 | 0.16 | 0.52 | A |
| Arm 2 | 1.21 | 0.19 | 0.55 | B |
| Arm 3 | 4.24 | 0.31 | 0.82 | C |
| Arm 4 | 2.83 | 0.46 | 0.74 | D |

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

*"D1 - PredOp, AM" model duration: 07:45 - 09:15*
*"D2 - PredOp, PM " model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 27/09/2013 16:37:41*

## File summary

### File Description

| | |
|---|---|
| **Title** | 08-241-TR-025 PredOp (RIS Flows) |
| **Location** | Barnsley |
| **Site Number** | |
| **Date** | 03/09/2012 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | BRYANGHALL\acooper |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 0.60 | 20.00 |

## 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 | min | -Min | perMin |

# PredOp - PredOp, PM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|
| PredOp | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| PredOp, PM | PredOp | PM | | ONE HOUR | 16:45 | 18:15 | 90 | 15 | | |

# Junction Network

## Junctions

| Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|---|
| (untitled) | Roundabout | 1,2,3,4 | | | 0.28 | C |

## Junction Network Options

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

# Arms

## Arms

| Arm | Name | Description |
|---|---|---|
| 1 | Barnsley Road (N) | |
| 2 | Site Access | |
| 3 | Barnsley Road (S) | |
| 4 | B6428 | |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 3.20 | 4.50 | 2.30 | 10.00 | 32.00 | 20.00 | |
| 2 | 3.00 | 3.00 | 0.00 | 20.00 | 32.00 | 12.00 | |
| 3 | 3.20 | 4.50 | 6.00 | 15.00 | 32.00 | 17.00 | |
| 4 | 2.80 | 3.00 | 4.50 | 20.00 | 32.00 | 13.00 | |

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

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| 1 | None |
| 2 | None |
| 3 | None |
| 4 | None |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.528 | 1094.083 |
| 2 | | (calculated) | (calculated) | 0.525 | 965.776 |
| 3 | | (calculated) | (calculated) | 0.570 | 1236.854 |
| 4 | | (calculated) | (calculated) | 0.522 | 954.631 |

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

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | ONE HOUR | ✓ | 392.00 | 100.000 |
| 2 | ONE HOUR | ✓ | 361.00 | 100.000 |
| 3 | ONE HOUR | ✓ | 774.00 | 100.000 |
| 4 | ONE HOUR | ✓ | 351.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 236.000 | 156.000 |
| | 2 | 0.000 | 0.000 | 210.000 | 151.000 |
| | 3 | 475.000 | 283.000 | 0.000 | 16.000 |
| | 4 | 189.000 | 136.000 | 26.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.60 | 0.40 |
| | 2 | 0.00 | 0.00 | 0.58 | 0.42 |
| | 3 | 0.61 | 0.37 | 0.00 | 0.02 |
| | 4 | 0.54 | 0.39 | 0.07 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.038 | 1.066 |
| | 2 | 1.000 | 1.000 | 1.010 | 1.013 |
| | 3 | 1.010 | 1.000 | 1.000 | 1.063 |
| | 4 | 1.038 | 1.015 | 1.192 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 3.800 | 6.600 |
| | 2 | 0.000 | 0.000 | 1.000 | 1.300 |
| | 3 | 1.000 | 0.000 | 0.000 | 6.300 |
| | 4 | 3.800 | 1.500 | 19.200 | 0.000 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (min) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.52 | 0.16 | 1.11 | A |
| 2 | 0.55 | 0.19 | 1.21 | B |
| 3 | 0.82 | 0.31 | 4.24 | C |
| 4 | 0.74 | 0.46 | 2.83 | D |

# Main Results for each time segment

## Main results: (16:45-17:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 295.12 | 293.15 | 332.14 | 0.00 | 918.80 | 0.321 | 0.49 | 0.100 | A |
| 2 | 271.78 | 269.73 | 312.52 | 0.00 | 801.62 | 0.339 | 0.51 | 0.114 | A |
| 3 | 582.71 | 578.29 | 229.49 | 0.00 | 1106.02 | 0.527 | 1.10 | 0.114 | A |
| 4 | 264.25 | 261.52 | 566.34 | 0.00 | 659.06 | 0.401 | 0.68 | 0.156 | A |

## Main results: (17:00-17:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 352.40 | 351.62 | 398.26 | 0.00 | 883.91 | 0.399 | 0.69 | 0.118 | A |
| 2 | 324.53 | 323.67 | 374.86 | 0.00 | 768.88 | 0.422 | 0.73 | 0.136 | A |
| 3 | 695.81 | 693.12 | 275.32 | 0.00 | 1079.88 | 0.644 | 1.78 | 0.155 | A |
| 4 | 315.54 | 313.80 | 678.80 | 0.00 | 600.37 | 0.526 | 1.12 | 0.216 | B |

## Main results: (17:15-17:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 431.60 | 429.99 | 483.81 | 0.00 | 838.76 | 0.515 | 1.09 | 0.153 | A |
| 2 | 397.47 | 395.60 | 458.16 | 0.00 | 725.13 | 0.548 | 1.20 | 0.183 | B |
| 3 | 852.19 | 843.11 | 336.59 | 0.00 | 1044.95 | 0.816 | 4.05 | 0.287 | C |
| 4 | 386.46 | 380.33 | 825.68 | 0.00 | 523.71 | 0.738 | 2.65 | 0.418 | D |

## Main results: (17:30-17:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 431.60 | 431.53 | 489.33 | 0.00 | 835.85 | 0.516 | 1.11 | 0.156 | A |
| 2 | 397.47 | 397.40 | 460.10 | 0.00 | 724.11 | 0.549 | 1.21 | 0.186 | B |
| 3 | 852.19 | 851.41 | 337.96 | 0.00 | 1044.17 | 0.816 | 4.24 | 0.310 | C |
| 4 | 386.46 | 385.72 | 833.81 | 0.00 | 519.47 | 0.744 | 2.83 | 0.460 | D |

## Main results: (17:45-18:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 352.40 | 353.98 | 406.49 | 0.00 | 879.57 | 0.401 | 0.71 | 0.120 | A |
| 2 | 324.53 | 326.37 | 377.84 | 0.00 | 767.32 | 0.423 | 0.75 | 0.138 | A |
| 3 | 695.81 | 705.24 | 277.39 | 0.00 | 1078.70 | 0.645 | 1.88 | 0.166 | A |
| 4 | 315.54 | 322.03 | 690.66 | 0.00 | 594.18 | 0.531 | 1.21 | 0.234 | B |

## Main results: (18:00-18:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 295.12 | 295.95 | 337.02 | 0.00 | 916.23 | 0.322 | 0.50 | 0.102 | A |
| 2 | 271.78 | 272.69 | 315.67 | 0.00 | 799.97 | 0.340 | 0.53 | 0.115 | A |
| 3 | 582.71 | 585.67 | 231.83 | 0.00 | 1104.68 | 0.527 | 1.14 | 0.117 | A |
| 4 | 264.25 | 266.25 | 573.56 | 0.00 | 655.29 | 0.403 | 0.71 | 0.161 | A |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction - 175 Dwellings.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Dearne Hall Road - Link Road
**Report generation date:** 27/09/2013 16:43:37

## Summary of junction performance

| | AM | | | | |
|---|---|---|---|---|---|
| | **Queue (Veh)** | **Delay (min)** | **RFC** | **LOS** | **Network Residual Capacity** |
| | **A1 - 2018 Base + CD + Dev** | | | | |
| **Stream B-AC** | 0.10 | 0.11 | 0.09 | A | 183 % [Stream B-AC] |
| **Stream C-AB** | 0.16 | 0.13 | 0.14 | A | |
| **Stream C-A** | - | - | - | - | |
| **Stream A-B** | - | - | - | - | |
| **Stream A-C** | - | - | - | - | |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.*

*"D1 - 2018 Base + CD + Dev, AM " model duration: 07:45 - 09:15*
*"D2 - 2018 Base + CD + Dev, PM" model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 27/09/2013 16:43:34*

## File summary

### File Description

| | |
|---|---|
| **Title** | Dearne Hall Road/Barnsley Road - 2011 Existing, 2016 Base and 2016 Predicted |
| **Location** | Barnsley |
| **Site Number** | |
| **Date** | 21/06/2011 |
| **Version** | |
| **Status** | |
| **Identifier** | |
| **Client** | CEG |
| **Jobnumber** | 08-241 |
| **Enumerator** | rspencer |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | ✓ | Delay | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Min | perMin |

# (Default Analysis Set) - 2018 Base + CD + Dev, AM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Include In Report | Use Specific Demand Set(s) | Specific Demand Set(s) | Locked | Network Flow Scaling Factor (%) | Network Capacity Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | ✓ | | | | 100.000 | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Results For Central Hour Only | Single Time Segment Only | Locked | Run Automatically | Use Relationship | Relationship |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD + Dev, AM | 2018 Base + CD + Dev | AM | | Varies by Arm | 07:45 | 09:15 | 90 | 15 | | | | ✓ | | |

# Junction Network

## Junctions

| Name | Junction Type | Major Road Direction | Arm Order | Do Geometric Delay | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|---|
| untitled | T-Junction | Two-way | A,B,C | | 0.12 | A |

## Junction Network Options

| Driving Side | Lighting | Network Residual Capacity (%) | First Arm Reaching Threshold |
|---|---|---|---|
| Left | Normal/unknown | 183 | Stream B-AC |

# Arms

## Arms

| Arm | Name | Description | Arm Type |
|---|---|---|---|
| A | Link Road | | Major |
| B | Old Dearne Hall Road | | Minor |
| C | Dearne Hall Road (Southbound) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 6.00 | | 0.00 | ✓ | 2.20 | 75.00 | ✓ | 5.00 |

*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) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 3.50 | | | | | | | | | | 90 | 90 |

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| A | None |
| B | None |
| C | None |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 579.816 | 0.106 | 0.267 | 0.168 | 0.381 |
| 1 | B-C | 714.664 | 0.110 | 0.277 | - | - |
| 1 | C-B | 617.397 | 0.239 | 0.239 | - | - |

*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 Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | ONE HOUR | ✓ | 282.00 | 100.000 |
| B | ONE HOUR | ✓ | 50.00 | 100.000 |
| C | ONE HOUR | ✓ | 449.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 19.000 | 263.000 |
| | B | 7.000 | 0.000 | 43.000 |
| | C | 383.000 | 66.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.07 | 0.93 |
| | B | 0.14 | 0.00 | 0.86 |
| | C | 0.85 | 0.15 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.010 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.014 | 1.026 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 0.000 | 1.000 |
| | B | 0.000 | 0.000 | 0.000 |
| | C | 1.400 | 2.600 | 0.000 |

# Results

## Results Summary for whole modelled period

| Stream | Max | Max Delay | Max Queue | Max | Average Demand | Total Junction | Total Queueing | Average Queueing | Rate Of Queueing Delay (Veh- | Inclusive Total Queueing Delay | Inclusive Average Queueing Delay |
|---|---|---|---|---|---|---|---|---|---|---|---|

| | RFC | (min) | (Veh) | LOS | (Veh/hr) | Arrivals (Veh) | Delay (Veh-min) | Delay (min) | min/min) | (Veh-min) | (min) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0.09 | 0.11 | 0.10 | A | 45.88 | 68.82 | 7.41 | 0.11 | 0.08 | 7.41 | 0.11 |
| C-AB | 0.14 | 0.13 | 0.16 | A | 60.56 | 90.85 | 11.41 | 0.13 | 0.13 | 11.41 | 0.13 |
| C-A | - | - | - | - | 351.45 | 527.17 | - | - | - | - | - |
| A-B | - | - | - | - | 17.43 | 26.15 | - | - | - | - | - |
| A-C | - | - | - | - | 241.33 | 362.00 | - | - | - | - | - |

## Main Results for each time segment

### Main results: (07:45-08:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 37.64 | 9.41 | 37.39 | 0.00 | 619.46 | 0.061 | 0.00 | 0.06 | 0.103 | A |
| C-AB | 49.69 | 12.42 | 49.30 | 0.00 | 551.79 | 0.090 | 0.00 | 0.10 | 0.119 | A |
| C-A | 288.34 | 72.09 | 288.34 | 0.00 | - | - | - | - | - | - |
| A-B | 14.30 | 3.58 | 14.30 | 0.00 | - | - | - | - | - | - |
| A-C | 198.00 | 49.50 | 198.00 | 0.00 | - | - | - | - | - | - |

### Main results: (08:00-08:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 44.95 | 11.24 | 44.89 | 0.00 | 604.68 | 0.074 | 0.06 | 0.08 | 0.107 | A |
| C-AB | 59.33 | 14.83 | 59.24 | 0.00 | 542.10 | 0.109 | 0.10 | 0.12 | 0.124 | A |
| C-A | 344.31 | 86.08 | 344.31 | 0.00 | - | - | - | - | - | - |
| A-B | 17.08 | 4.27 | 17.08 | 0.00 | - | - | - | - | - | - |
| A-C | 236.43 | 59.11 | 236.43 | 0.00 | - | - | - | - | - | - |

### Main results: (08:15-08:30)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 55.05 | 13.76 | 54.96 | 0.00 | 583.82 | 0.094 | 0.08 | 0.10 | 0.113 | A |
| C-AB | 72.67 | 18.17 | 72.53 | 0.00 | 528.70 | 0.137 | 0.12 | 0.16 | 0.131 | A |
| C-A | 421.69 | 105.42 | 421.69 | 0.00 | - | - | - | - | - | - |
| A-B | 20.92 | 5.23 | 20.92 | 0.00 | - | - | - | - | - | - |
| A-C | 289.57 | 72.39 | 289.57 | 0.00 | - | - | - | - | - | - |

### Main results: (08:30-08:45)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 55.05 | 13.76 | 55.05 | 0.00 | 583.80 | 0.094 | 0.10 | 0.10 | 0.113 | A |
| C-AB | 72.67 | 18.17 | 72.67 | 0.00 | 528.70 | 0.137 | 0.16 | 0.16 | 0.132 | A |
| C-A | 421.69 | 105.42 | 421.69 | 0.00 | - | - | - | - | - | - |
| A-B | 20.92 | 5.23 | 20.92 | 0.00 | - | - | - | - | - | - |
| A-C | 289.57 | 72.39 | 289.57 | 0.00 | - | - | - | - | - | - |

### Main results: (08:45-09:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 44.95 | 11.24 | 45.04 | 0.00 | 604.66 | 0.074 | 0.10 | 0.08 | 0.107 | A |
| C-AB | 59.33 | 14.83 | 59.47 | 0.00 | 542.10 | 0.109 | 0.16 | 0.12 | 0.124 | A |
| C-A | 344.31 | 86.08 | 344.31 | 0.00 | - | - | - | - | - | - |
| A-B | 17.08 | 4.27 | 17.08 | 0.00 | - | - | - | - | - | - |
| A-C | 236.43 | 59.11 | 236.43 | 0.00 | - | - | - | - | - | - |

### Main results: (09:00-09:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 37.64 | 9.41 | 37.71 | 0.00 | 619.41 | 0.061 | 0.08 | 0.07 | 0.103 | A |
| C-AB | 49.69 | 12.42 | 49.79 | 0.00 | 551.79 | 0.090 | 0.12 | 0.10 | 0.120 | A |
| C-A | 288.34 | 72.09 | 288.34 | 0.00 | - | - | - | - | - | - |
| A-B | 14.30 | 3.58 | 14.30 | 0.00 | - | - | - | - | - | - |
| A-C | 198.00 | 49.50 | 198.00 | 0.00 | - | - | - | - | - | - |

## Queueing Delay Results for each time segment

## Queueing Delay results: (07:45-08:00)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 0.94 | 0.06 | 0.103 | A | A |
| C-AB | 1.46 | 0.10 | 0.119 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (08:00-08:15)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 1.17 | 0.08 | 0.107 | A | A |
| C-AB | 1.83 | 0.12 | 0.124 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (08:15-08:30)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 1.52 | 0.10 | 0.113 | A | A |
| C-AB | 2.37 | 0.16 | 0.131 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (08:30-08:45)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 1.55 | 0.10 | 0.113 | A | A |
| C-AB | 2.39 | 0.16 | 0.132 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (08:45-09:00)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 1.24 | 0.08 | 0.107 | A | A |
| C-AB | 1.86 | 0.12 | 0.124 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (09:00-09:15)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 1.00 | 0.07 | 0.103 | A | A |
| C-AB | 1.49 | 0.10 | 0.120 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction - 175 Dwellings.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Dearne Hall Road - Link Road
**Report generation date:** 27/09/2013 16:44:21

## Summary of junction performance

| | PM | | | | |
|---|---|---|---|---|---|
| | **Queue (Veh)** | **Delay (min)** | **RFC** | **LOS** | **Network Residual Capacity** |
| | **A1 - 2018 Base + CD + Dev** | | | | |
| **Stream B-AC** | 0.25 | 0.14 | 0.20 | A | 111 % [Stream B-AC] |
| **Stream C-AB** | 0.16 | 0.14 | 0.14 | A | |
| **Stream C-A** | - | - | - | - | |
| **Stream A-B** | - | - | - | - | |
| **Stream A-C** | - | - | - | - | |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.*

*"D1 - 2018 Base + CD + Dev, AM" model duration: 07:45 - 09:15*
*"D2 - 2018 Base + CD + Dev, PM " model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 27/09/2013 16:44:20*

## File summary

### File Description

| | |
|---|---|
| **Title** | Dearne Hall Road/Barnsley Road - 2011 Existing, 2016 Base and 2016 Predicted |
| **Location** | Barnsley |
| **Site Number** | |
| **Date** | 21/06/2011 |
| **Version** | |
| **Status** | |
| **Identifier** | |
| **Client** | CEG |
| **Jobnumber** | 08-241 |
| **Enumerator** | rspencer |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | ✓ | Delay | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Min | perMin |

# (Default Analysis Set) - 2018 Base + CD + Dev, PM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Include In Report | Use Specific Demand Set(s) | Specific Demand Set(s) | Locked | Network Flow Scaling Factor (%) | Network Capacity Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | ✓ | | | | 100.000 | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Results For Central Hour Only | Single Time Segment Only | Locked | Run Automatically | Use Relationship | Relationship |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD + Dev, PM | 2018 Base + CD + Dev | PM | | Varies by Arm | 16:45 | 18:15 | 90 | 15 | | | | ✓ | | |

# Junction Network

## Junctions

| Name | Junction Type | Major Road Direction | Arm Order | Do Geometric Delay | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|---|
| untitled | T-Junction | Two-way | A,B,C | | 0.14 | A |

## Junction Network Options

| Driving Side | Lighting | Network Residual Capacity (%) | First Arm Reaching Threshold |
|---|---|---|---|
| Left | Normal/unknown | 111 | Stream B-AC |

# Arms

## Arms

| Arm | Name | Description | Arm Type |
|---|---|---|---|
| A | Link Road | | Major |
| B | Old Dearne Hall Road | | Minor |
| C | Dearne Hall Road (Southbound) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 6.00 | | 0.00 | ✓ | 2.20 | 75.00 | ✓ | 5.00 |

*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) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 3.50 | | | | | | | | | | 90 | 90 |

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| A | None |
| B | None |
| C | None |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 579.816 | 0.106 | 0.267 | 0.168 | 0.381 |
| 1 | B-C | 714.664 | 0.110 | 0.277 | - | - |
| 1 | C-B | 617.397 | 0.239 | 0.239 | - | - |

*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 Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | ONE HOUR | ✓ | 400.00 | 100.000 |
| B | ONE HOUR | ✓ | 98.00 | 100.000 |
| C | ONE HOUR | ✓ | 423.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 8.000 | 392.000 |
| | B | 14.000 | 0.000 | 84.000 |
| | C | 360.000 | 63.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.02 | 0.98 |
| | B | 0.14 | 0.00 | 0.86 |
| | C | 0.85 | 0.15 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.018 |
| | B | 1.000 | 1.000 | 1.035 |
| | C | 1.016 | 1.020 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 0.000 | 1.800 |
| | B | 0.000 | 0.000 | 3.500 |
| | C | 1.600 | 2.000 | 0.000 |

# Results

## Results Summary for whole modelled period

| Stream | Max | Max Delay | Max Queue | Max | Average Demand | Total Junction | Total Queueing | Average Queueing | Rate Of Queueing Delay (Veh- | Inclusive Total Queueing Delay | Inclusive Average Queueing Delay |
|---|---|---|---|---|---|---|---|---|---|---|---|

| | RFC | (min) | (Veh) | LOS | (Veh/hr) | Arrivals (Veh) | Delay (Veh-min) | Delay (min) | min/min) | (Veh-min) | (min) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 0.20 | 0.14 | 0.25 | A | 89.93 | 134.89 | 17.53 | 0.13 | 0.19 | 17.53 | 0.13 |
| C-AB | 0.14 | 0.14 | 0.16 | A | 57.81 | 86.72 | 11.40 | 0.13 | 0.13 | 11.40 | 0.13 |
| C-A | - | - | - | - | 330.34 | 495.51 | - | - | - | - | - |
| A-B | - | - | - | - | 7.34 | 11.01 | - | - | - | - | - |
| A-C | - | - | - | - | 359.71 | 539.56 | - | - | - | - | - |

# Main Results for each time segment

## Main results: (16:45-17:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 73.78 | 18.44 | 73.20 | 0.00 | 576.28 | 0.128 | 0.00 | 0.15 | 0.119 | A |
| C-AB | 47.43 | 11.86 | 47.04 | 0.00 | 533.42 | 0.089 | 0.00 | 0.10 | 0.123 | A |
| C-A | 271.03 | 67.76 | 271.03 | 0.00 | - | - | - | - | - | - |
| A-B | 6.02 | 1.51 | 6.02 | 0.00 | - | - | - | - | - | - |
| A-C | 295.12 | 73.78 | 295.12 | 0.00 | - | - | - | - | - | - |

## Main results: (17:00-17:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 88.10 | 22.03 | 87.94 | 0.00 | 556.94 | 0.158 | 0.15 | 0.19 | 0.128 | A |
| C-AB | 56.64 | 14.16 | 56.54 | 0.00 | 519.48 | 0.109 | 0.10 | 0.12 | 0.130 | A |
| C-A | 323.63 | 80.91 | 323.63 | 0.00 | - | - | - | - | - | - |
| A-B | 7.19 | 1.80 | 7.19 | 0.00 | - | - | - | - | - | - |
| A-C | 352.40 | 88.10 | 352.40 | 0.00 | - | - | - | - | - | - |

## Main results: (17:15-17:30)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 107.90 | 26.98 | 107.63 | 0.00 | 529.69 | 0.204 | 0.19 | 0.25 | 0.142 | A |
| C-AB | 69.37 | 17.34 | 69.22 | 0.00 | 500.20 | 0.139 | 0.12 | 0.16 | 0.139 | A |
| C-A | 396.36 | 99.09 | 396.36 | 0.00 | - | - | - | - | - | - |
| A-B | 8.81 | 2.20 | 8.81 | 0.00 | - | - | - | - | - | - |
| A-C | 431.60 | 107.90 | 431.60 | 0.00 | - | - | - | - | - | - |

## Main results: (17:30-17:45)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 107.90 | 26.98 | 107.89 | 0.00 | 529.67 | 0.204 | 0.25 | 0.25 | 0.142 | A |
| C-AB | 69.37 | 17.34 | 69.36 | 0.00 | 500.20 | 0.139 | 0.16 | 0.16 | 0.139 | A |
| C-A | 396.36 | 99.09 | 396.36 | 0.00 | - | - | - | - | - | - |
| A-B | 8.81 | 2.20 | 8.81 | 0.00 | - | - | - | - | - | - |
| A-C | 431.60 | 107.90 | 431.60 | 0.00 | - | - | - | - | - | - |

## Main results: (17:45-18:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 88.10 | 22.03 | 88.36 | 0.00 | 556.91 | 0.158 | 0.25 | 0.19 | 0.128 | A |
| C-AB | 56.64 | 14.16 | 56.78 | 0.00 | 519.48 | 0.109 | 0.16 | 0.12 | 0.130 | A |
| C-A | 323.63 | 80.91 | 323.63 | 0.00 | - | - | - | - | - | - |
| A-B | 7.19 | 1.80 | 7.19 | 0.00 | - | - | - | - | - | - |
| A-C | 352.40 | 88.10 | 352.40 | 0.00 | - | - | - | - | - | - |

## Main results: (18:00-18:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-AC | 73.78 | 18.44 | 73.95 | 0.00 | 576.23 | 0.128 | 0.19 | 0.15 | 0.119 | A |
| C-AB | 47.43 | 11.86 | 47.53 | 0.00 | 533.42 | 0.089 | 0.12 | 0.10 | 0.124 | A |
| C-A | 271.03 | 67.76 | 271.03 | 0.00 | - | - | - | - | - | - |
| A-B | 6.02 | 1.51 | 6.02 | 0.00 | - | - | - | - | - | - |
| A-C | 295.12 | 73.78 | 295.12 | 0.00 | - | - | - | - | - | - |

# Queueing Delay Results for each time segment

## Queueing Delay results: (16:45-17:00)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 2.11 | 0.14 | 0.119 | A | A |
| C-AB | 1.44 | 0.10 | 0.123 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (17:00-17:15)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 2.73 | 0.18 | 0.128 | A | A |
| C-AB | 1.82 | 0.12 | 0.130 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (17:15-17:30)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 3.69 | 0.25 | 0.142 | A | A |
| C-AB | 2.39 | 0.16 | 0.139 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (17:30-17:45)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 3.81 | 0.25 | 0.142 | A | A |
| C-AB | 2.41 | 0.16 | 0.139 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (17:45-18:00)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 2.92 | 0.19 | 0.128 | A | A |
| C-AB | 1.85 | 0.12 | 0.130 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

## Queueing Delay results: (18:00-18:15)

| Stream | Queueing Total Delay (Veh-min) | Queueing Rate Of Delay (Veh-min/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-AC | 2.27 | 0.15 | 0.119 | A | A |
| C-AB | 1.47 | 0.10 | 0.124 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Barnsley Road-Dearne Hall Road - 175 Dwellings.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Barnsley Road-Dearne Hall Road
**Report generation date:** 27/09/2013 16:53:56

## Summary of junction performance

| | AM | | | | |
|---|---|---|---|---|---|
| | **Queue (Veh)** | **Delay (min)** | **RFC** | **LOS** | **Network Residual Capacity** |
| | **A1 - 2018 Base + CD + Dev** | | | | |
| **Stream B-C** | 0.11 | 0.15 | 0.10 | A | 32 %<br>[Stream B-A] |
| **Stream B-A** | 0.24 | 0.30 | 0.20 | C | |
| **Stream C-AB** | 0.07 | 0.15 | 0.07 | A | |
| **Stream C-A** | - | - | - | - | |
| **Stream A-B** | - | - | - | - | |
| **Stream A-C** | - | - | - | - | |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.*

*"D1 - 2013 Base, AM" model duration: 07:45 - 09:15*
*"D2 - 2013 Base, PM" model duration: 16:45 - 18:15*
*"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15*
*"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15*
*"D5 - 2018 Base + CD + Dev, AM " model duration: 07:45 - 09:15*
*"D6 - 2018 Base + CD + Dev, PM" model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 27/09/2013 16:53:55*

## File summary

### File Description

| | |
|---|---|
| **Title** | Dearne Hall Road/Barnsley Road |
| **Location** | Barnsley |
| **Site Number** | |
| **Date** | 01/03/2013 |
| **Version** | |
| **Status** | |
| **Identifier** | |
| **Client** | CEG |
| **Jobnumber** | 08-241 |
| **Enumerator** | mcrabtree |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | ✓ | Delay | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Hour | perMin |

# (Default Analysis Set) - 2018 Base + CD + Dev, AM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Include In Report | Use Specific Demand Set(s) | Specific Demand Set(s) | Locked | Network Flow Scaling Factor (%) | Network Capacity Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | ✓ | | | | 100.000 | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Results For Central Hour Only | Single Time Segment Only | Locked | Run Automatically | Use Relationship | Relationship |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD + Dev, AM | 2018 Base + CD + Dev | AM | | ONE HOUR | 07:45 | 09:15 | 90 | 15 | | | | | | |

# Junction Network

## Junctions

| Name | Junction Type | Major Road Direction | Arm Order | Do Geometric Delay | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|---|
| untitled | T-Junction | Two-way | A,B,C | | 0.21 | B |

## Junction Network Options

| Driving Side | Lighting | Network Residual Capacity (%) | First Arm Reaching Threshold |
|---|---|---|---|
| Left | Normal/unknown | 32 | Stream B-A |

# Arms

## Arms

| Arm | Name | Description | Arm Type |
|---|---|---|---|
| A | Barnsley Road North | | Major |
| B | Dearne Hall Road | | Minor |
| C | Barnsley Road South | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 6.10 | | 0.00 | | 2.20 | 110.00 | ✓ | 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) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane plus flare | | | | 10.00 | 4.40 | 3.30 | 3.00 | 3.00 | | 1.00 | 19 | 12 |

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| A | None |
| B | None |
| C | None |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 521.771 | 0.095 | 0.239 | 0.150 | 0.342 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | B-C | 665.996 | 0.102 | 0.257 | - | - |
| 1 | C-B | 637.665 | 0.246 | 0.246 | - | - |

*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 Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | ONE HOUR | ✓ | 660.00 | 100.000 |
| B | ONE HOUR | ✓ | 85.00 | 100.000 |
| C | ONE HOUR | ✓ | 469.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 22.000 | 638.000 |
| | B | 44.000 | 0.000 | 41.000 |
| | C | 441.000 | 28.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.03 | 0.97 |
| | B | 0.52 | 0.00 | 0.48 |
| | C | 0.94 | 0.06 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.071 | 1.037 |
| | B | 1.048 | 1.000 | 1.019 |
| | C | 1.047 | 1.024 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 7.100 | 3.700 |
| | B | 4.800 | 0.000 | 1.900 |
| | C | 4.700 | 2.400 | 0.000 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (min) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) | Total Queueing Delay (Veh-hr) | Average Queueing Delay (min) | Rate Of Queueing Delay (Veh-hr/min) | Inclusive Total Queueing Delay (Veh-hr) | Inclusive Average Queueing Delay (min) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 0.10 | 0.15 | 0.11 | A | 37.62 | 56.43 | 0.13 | 0.14 | 0.00 | 0.13 | 0.14 |
| B-A | 0.20 | 0.30 | 0.24 | C | 40.38 | 60.56 | 0.25 | 0.25 | 0.00 | 0.25 | 0.25 |
| C-AB | 0.07 | 0.15 | 0.07 | A | 25.69 | 38.54 | 0.09 | 0.14 | 0.00 | 0.09 | 0.14 |
| C-A | - | - | - | - | 404.67 | 607.00 | - | - | - | - | - |
| A-B | - | - | - | - | 20.19 | 30.28 | - | - | - | - | - |
| A-C | - | - | - | - | 585.44 | 878.16 | - | - | - | - | - |

## Main Results for each time segment

### Main results: (07:45-08:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 30.87 | 7.72 | 30.61 | 0.00 | 512.31 | 0.060 | 0.00 | 0.06 | 0.125 | A |
| B-A | 33.13 | 8.28 | 32.68 | 0.00 | 325.54 | 0.102 | 0.00 | 0.11 | 0.205 | B |
| C-AB | 21.08 | 5.27 | 20.90 | 0.00 | 498.80 | 0.042 | 0.00 | 0.04 | 0.126 | A |
| C-A | 332.01 | 83.00 | 332.01 | 0.00 | - | - | - | - | - | - |
| A-B | 16.56 | 4.14 | 16.56 | 0.00 | - | - | - | - | - | - |
| A-C | 480.32 | 120.08 | 480.32 | 0.00 | - | - | - | - | - | - |

### Main results: (08:00-08:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 36.86 | 9.21 | 36.78 | 0.00 | 483.04 | 0.076 | 0.06 | 0.08 | 0.134 | A |
| B-A | 39.56 | 9.89 | 39.39 | 0.00 | 292.01 | 0.135 | 0.11 | 0.15 | 0.237 | B |
| C-AB | 25.17 | 6.29 | 25.12 | 0.00 | 474.75 | 0.053 | 0.04 | 0.06 | 0.133 | A |
| C-A | 396.45 | 99.11 | 396.45 | 0.00 | - | - | - | - | - | - |
| A-B | 19.78 | 4.94 | 19.78 | 0.00 | - | - | - | - | - | - |
| A-C | 573.55 | 143.39 | 573.55 | 0.00 | - | - | - | - | - | - |

### Main results: (08:15-08:30)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 45.14 | 11.29 | 45.02 | 0.00 | 440.58 | 0.102 | 0.08 | 0.11 | 0.152 | A |
| B-A | 48.44 | 12.11 | 48.10 | 0.00 | 245.52 | 0.197 | 0.15 | 0.24 | 0.303 | C |
| C-AB | 30.83 | 7.71 | 30.75 | 0.00 | 441.50 | 0.070 | 0.06 | 0.07 | 0.146 | A |
| C-A | 485.55 | 121.39 | 485.55 | 0.00 | - | - | - | - | - | - |
| A-B | 24.22 | 6.06 | 24.22 | 0.00 | - | - | - | - | - | - |
| A-C | 702.45 | 175.61 | 702.45 | 0.00 | - | - | - | - | - | - |

### Main results: (08:30-08:45)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 45.14 | 11.29 | 45.14 | 0.00 | 440.25 | 0.103 | 0.11 | 0.11 | 0.152 | A |
| B-A | 48.44 | 12.11 | 48.43 | 0.00 | 245.54 | 0.197 | 0.24 | 0.24 | 0.304 | C |
| C-AB | 30.83 | 7.71 | 30.83 | 0.00 | 441.50 | 0.070 | 0.07 | 0.07 | 0.146 | A |
| C-A | 485.55 | 121.39 | 485.55 | 0.00 | - | - | - | - | - | - |
| A-B | 24.22 | 6.06 | 24.22 | 0.00 | - | - | - | - | - | - |
| A-C | 702.45 | 175.61 | 702.45 | 0.00 | - | - | - | - | - | - |

### Main results: (08:45-09:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 36.86 | 9.21 | 36.98 | 0.00 | 482.58 | 0.076 | 0.11 | 0.08 | 0.135 | A |
| B-A | 39.56 | 9.89 | 39.89 | 0.00 | 292.08 | 0.135 | 0.24 | 0.16 | 0.238 | B |
| C-AB | 25.17 | 6.29 | 25.24 | 0.00 | 474.75 | 0.053 | 0.07 | 0.06 | 0.133 | A |
| C-A | 396.45 | 99.11 | 396.45 | 0.00 | - | - | - | - | - | - |
| A-B | 19.78 | 4.94 | 19.78 | 0.00 | - | - | - | - | - | - |
| A-C | 573.55 | 143.39 | 573.55 | 0.00 | - | - | - | - | - | - |

### Main results: (09:00-09:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 30.87 | 7.72 | 30.94 | 0.00 | 511.81 | 0.060 | 0.08 | 0.06 | 0.125 | A |
| B-A | 33.13 | 8.28 | 33.30 | 0.00 | 325.60 | 0.102 | 0.16 | 0.11 | 0.205 | B |
| C-AB | 21.08 | 5.27 | 21.13 | 0.00 | 498.80 | 0.042 | 0.06 | 0.04 | 0.126 | A |
| C-A | 332.01 | 83.00 | 332.01 | 0.00 | - | - | - | - | - | - |
| A-B | 16.56 | 4.14 | 16.56 | 0.00 | - | - | - | - | - | - |
| A-C | 480.32 | 120.08 | 480.32 | 0.00 | - | - | - | - | - | - |

## Queueing Delay Results for each time segment

### Queueing Delay results: (07:45-08:00)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.125 | A | A |
| B-A | 0.03 | 0.00 | 0.205 | B | B |
| C-AB | 0.01 | 0.00 | 0.126 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (08:00-08:15)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.134 | A | A |
| B-A | 0.04 | 0.00 | 0.237 | B | B |
| C-AB | 0.01 | 0.00 | 0.133 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (08:15-08:30)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.03 | 0.00 | 0.152 | A | A |
| B-A | 0.06 | 0.00 | 0.303 | C | B |
| C-AB | 0.02 | 0.00 | 0.146 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (08:30-08:45)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.03 | 0.00 | 0.152 | A | A |
| B-A | 0.06 | 0.00 | 0.304 | C | B |
| C-AB | 0.02 | 0.00 | 0.146 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (08:45-09:00)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.135 | A | A |
| B-A | 0.04 | 0.00 | 0.238 | B | B |
| C-AB | 0.01 | 0.00 | 0.133 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (09:00-09:15)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.125 | A | A |
| B-A | 0.03 | 0.00 | 0.205 | B | B |
| C-AB | 0.01 | 0.00 | 0.126 | A | A |
| C-A | - | - | - | - | - |

| | | | | | |
|---|---|---|---|---|---|
| **A-B** | - | - | - | - | - |
| **A-C** | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Barnsley Road-Dearne Hall Road - 175 Dwellings.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Barnsley Road-Dearne Hall Road
**Report generation date:** 27/09/2013 16:55:06

## Summary of junction performance

| | PM | | | | |
|---|---|---|---|---|---|
| | Queue (Veh) | Delay (min) | RFC | LOS | Network Residual Capacity |
| | A1 - 2018 Base + CD + Dev | | | | |
| Stream B-C | 0.10 | 0.12 | 0.09 | A | 64 % [Stream B-A] |
| Stream B-A | 0.11 | 0.24 | 0.10 | B | |
| Stream C-AB | 0.12 | 0.13 | 0.11 | A | |
| Stream C-A | - | - | - | - | |
| Stream A-B | - | - | - | - | |
| Stream A-C | - | - | - | - | |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.*

*"D1 - 2013 Base, AM" model duration: 07:45 - 09:15*
*"D2 - 2013 Base, PM" model duration: 16:45 - 18:15*
*"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15*
*"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15*
*"D5 - 2018 Base + CD + Dev, AM" model duration: 07:45 - 09:15*
*"D6 - 2018 Base + CD + Dev, PM " model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 27/09/2013 16:55:04*

## File summary

### File Description

| | |
|---|---|
| Title | Dearne Hall Road/Barnsley Road |
| Location | Barnsley |
| Site Number | |
| Date | 01/03/2013 |
| Version | |
| Status | |
| Identifier | |
| Client | CEG |
| Jobnumber | 08-241 |
| Enumerator | mcrabtree |
| Description | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | ✓ | Delay | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Hour | perMin |

# (Default Analysis Set) - 2018 Base + CD + Dev, PM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Include In Report | Use Specific Demand Set(s) | Specific Demand Set(s) | Locked | Network Flow Scaling Factor (%) | Network Capacity Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | ✓ | | | | 100.000 | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Results For Central Hour Only | Single Time Segment Only | Locked | Run Automatically | Use Relationship | Relationship |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD + Dev, PM | 2018 Base + CD + Dev | PM | | ONE HOUR | 16:45 | 18:15 | 90 | 15 | | | | | | |

# Junction Network

## Junctions

| Name | Junction Type | Major Road Direction | Arm Order | Do Geometric Delay | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|---|
| untitled | T-Junction | Two-way | A,B,C | | 0.15 | A |

## Junction Network Options

| Driving Side | Lighting | Network Residual Capacity (%) | First Arm Reaching Threshold |
|---|---|---|---|
| Left | Normal/unknown | 64 | Stream B-A |

# Arms

## Arms

| Arm | Name | Description | Arm Type |
|---|---|---|---|
| A | Barnsley Road North | | Major |
| B | Dearne Hall Road | | Minor |
| C | Barnsley Road South | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 6.10 | | 0.00 | | 2.20 | 110.00 | ✓ | 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) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane plus flare | | | | 10.00 | 4.40 | 3.30 | 3.00 | 3.00 | | 1.00 | 19 | 12 |

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| A | None |
| B | None |
| C | None |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 504.400 | 0.091 | 0.231 | 0.145 | 0.330 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | B-C | 688.398 | 0.105 | 0.266 | - | - |
| 1 | C-B | 637.665 | 0.246 | 0.246 | - | - |

*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 Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | ONE HOUR | ✓ | 390.00 | 100.000 |
| B | ONE HOUR | ✓ | 71.00 | 100.000 |
| C | ONE HOUR | ✓ | 666.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 45.000 | 345.000 |
| | B | 25.000 | 0.000 | 46.000 |
| | C | 613.000 | 53.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.12 | 0.88 |
| | B | 0.35 | 0.00 | 0.65 |
| | C | 0.92 | 0.08 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.051 | 1.000 |
| | B | 1.067 | 1.000 | 1.015 |
| | C | 1.019 | 1.011 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 5.100 | 0.000 |
| | B | 6.700 | 0.000 | 1.500 |
| | C | 1.900 | 1.100 | 0.000 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (min) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) | Total Queueing Delay (Veh-hr) | Average Queueing Delay (min) | Rate Of Queueing Delay (Veh-hr/min) | Inclusive Total Queueing Delay (Veh-hr) | Inclusive Average Queueing Delay (min) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 0.09 | 0.12 | 0.10 | A | 42.21 | 63.32 | 0.12 | 0.11 | 0.00 | 0.12 | 0.11 |
| B-A | 0.10 | 0.24 | 0.11 | B | 22.94 | 34.41 | 0.12 | 0.21 | 0.00 | 0.12 | 0.21 |
| C-AB | 0.11 | 0.13 | 0.12 | A | 48.63 | 72.95 | 0.15 | 0.12 | 0.00 | 0.15 | 0.12 |
| C-A | - | - | - | - | 562.50 | 843.75 | - | - | - | - | - |
| A-B | - | - | - | - | 41.29 | 61.94 | - | - | - | - | - |
| A-C | - | - | - | - | 316.58 | 474.87 | - | - | - | - | - |

## Main Results for each time segment

### Main results: (16:45-17:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 34.63 | 8.66 | 34.39 | 0.00 | 597.98 | 0.058 | 0.00 | 0.06 | 0.106 | A |
| B-A | 18.82 | 4.71 | 18.59 | 0.00 | 336.73 | 0.056 | 0.00 | 0.06 | 0.188 | B |
| C-AB | 39.90 | 9.98 | 39.60 | 0.00 | 558.87 | 0.071 | 0.00 | 0.08 | 0.116 | A |
| C-A | 461.50 | 115.37 | 461.50 | 0.00 | - | - | - | - | - | - |
| A-B | 33.88 | 8.47 | 33.88 | 0.00 | - | - | - | - | - | - |
| A-C | 259.73 | 64.93 | 259.73 | 0.00 | - | - | - | - | - | - |

### Main results: (17:00-17:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 41.35 | 10.34 | 41.29 | 0.00 | 581.45 | 0.071 | 0.06 | 0.08 | 0.111 | A |
| B-A | 22.47 | 5.62 | 22.40 | 0.00 | 310.26 | 0.072 | 0.06 | 0.08 | 0.208 | B |
| C-AB | 47.65 | 11.91 | 47.57 | 0.00 | 544.92 | 0.087 | 0.08 | 0.10 | 0.121 | A |
| C-A | 551.07 | 137.77 | 551.07 | 0.00 | - | - | - | - | - | - |
| A-B | 40.45 | 10.11 | 40.45 | 0.00 | - | - | - | - | - | - |
| A-C | 310.15 | 77.54 | 310.15 | 0.00 | - | - | - | - | - | - |

### Main results: (17:15-17:30)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 50.65 | 12.66 | 50.55 | 0.00 | 558.10 | 0.091 | 0.08 | 0.10 | 0.118 | A |
| B-A | 27.53 | 6.88 | 27.39 | 0.00 | 273.63 | 0.101 | 0.08 | 0.11 | 0.244 | B |
| C-AB | 58.35 | 14.59 | 58.24 | 0.00 | 525.64 | 0.111 | 0.09 | 0.12 | 0.128 | A |
| C-A | 674.93 | 168.73 | 674.93 | 0.00 | - | - | - | - | - | - |
| A-B | 49.55 | 12.39 | 49.55 | 0.00 | - | - | - | - | - | - |
| A-C | 379.85 | 94.96 | 379.85 | 0.00 | - | - | - | - | - | - |

### Main results: (17:30-17:45)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 50.65 | 12.66 | 50.65 | 0.00 | 557.94 | 0.091 | 0.10 | 0.10 | 0.118 | A |
| B-A | 27.53 | 6.88 | 27.52 | 0.00 | 273.63 | 0.101 | 0.11 | 0.11 | 0.244 | B |
| C-AB | 58.35 | 14.59 | 58.35 | 0.00 | 525.64 | 0.111 | 0.12 | 0.12 | 0.128 | A |
| C-A | 674.93 | 168.73 | 674.93 | 0.00 | - | - | - | - | - | - |
| A-B | 49.55 | 12.39 | 49.55 | 0.00 | - | - | - | - | - | - |
| A-C | 379.85 | 94.96 | 379.85 | 0.00 | - | - | - | - | - | - |

### Main results: (17:45-18:00)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 41.35 | 10.34 | 41.44 | 0.00 | 581.20 | 0.071 | 0.10 | 0.08 | 0.111 | A |
| B-A | 22.47 | 5.62 | 22.60 | 0.00 | 310.28 | 0.072 | 0.11 | 0.08 | 0.209 | B |
| C-AB | 47.65 | 11.91 | 47.76 | 0.00 | 544.92 | 0.087 | 0.12 | 0.10 | 0.121 | A |
| C-A | 551.07 | 137.77 | 551.07 | 0.00 | - | - | - | - | - | - |
| A-B | 40.45 | 10.11 | 40.45 | 0.00 | - | - | - | - | - | - |
| A-C | 310.15 | 77.54 | 310.15 | 0.00 | - | - | - | - | - | - |

### Main results: (18:00-18:15)

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | Start Queue (Veh) | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|---|---|
| B-C | 34.63 | 8.66 | 34.69 | 0.00 | 597.62 | 0.058 | 0.08 | 0.06 | 0.107 | A |
| B-A | 18.82 | 4.71 | 18.90 | 0.00 | 336.73 | 0.056 | 0.08 | 0.06 | 0.189 | B |
| C-AB | 39.90 | 9.98 | 39.98 | 0.00 | 558.87 | 0.071 | 0.10 | 0.08 | 0.116 | A |
| C-A | 461.50 | 115.37 | 461.50 | 0.00 | - | - | - | - | - | - |
| A-B | 33.88 | 8.47 | 33.88 | 0.00 | - | - | - | - | - | - |
| A-C | 259.73 | 64.93 | 259.73 | 0.00 | - | - | - | - | - | - |

## Queueing Delay Results for each time segment

### Queueing Delay results: (16:45-17:00)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.01 | 0.00 | 0.106 | A | A |
| B-A | 0.01 | 0.00 | 0.188 | B | B |
| C-AB | 0.02 | 0.00 | 0.116 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (17:00-17:15)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.111 | A | A |
| B-A | 0.02 | 0.00 | 0.208 | B | B |
| C-AB | 0.02 | 0.00 | 0.121 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (17:15-17:30)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.118 | A | A |
| B-A | 0.03 | 0.00 | 0.244 | B | B |
| C-AB | 0.03 | 0.00 | 0.128 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (17:30-17:45)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.118 | A | A |
| B-A | 0.03 | 0.00 | 0.244 | B | B |
| C-AB | 0.03 | 0.00 | 0.128 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (17:45-18:00)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.111 | A | A |
| B-A | 0.02 | 0.00 | 0.209 | B | B |
| C-AB | 0.02 | 0.00 | 0.121 | A | A |
| C-A | - | - | - | - | - |
| A-B | - | - | - | - | - |
| A-C | - | - | - | - | - |

### Queueing Delay results: (18:00-18:15)

| Stream | Queueing Total Delay (Veh-hr) | Queueing Rate Of Delay (Veh-hr/min) | Average Delay Per Arriving Vehicle (min) | Unsignalised Level Of Service | Signalised Level Of Service |
|---|---|---|---|---|---|
| B-C | 0.02 | 0.00 | 0.107 | A | A |
| B-A | 0.02 | 0.00 | 0.189 | B | B |
| C-AB | 0.02 | 0.00 | 0.116 | A | A |
| C-A | - | - | - | - | - |

| | | | | | |
|---|---|---|---|---|---|
| **A-B** | - | - | - | - | - |
| **A-C** | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Swallow Hill Junction - 175 Dwellings.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Swallow Hill - Dearne Hall
**Report generation date:** 27/09/2013 16:50:22

## Summary of junction performance

| | AM | | | |
|---|---|---|---|---|
| | Queue (Veh) | Delay (min) | RFC | LOS |
| | A1 - 2018 Base + CD + Dev | | | |
| **Stream B-AC** | 0.65 | 0.25 | 0.40 | C |
| **Stream C-AB** | 0.40 | 0.10 | 0.20 | A |
| **Stream C-A** | - | - | - | - |
| **Stream A-B** | - | - | - | - |
| **Stream A-C** | - | - | - | - |

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

*"D1 - 2013 Base, AM" model duration: 07:45 - 09:15*
*"D2 - 2013 Base, PM" model duration: 16:45 - 18:15*
*"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15*
*"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15*
*"D5 - 2018 Base + CD + Dev, AM " model duration: 07:45 - 09:15*
*"D6 - 2018 Base + CD + Dev, PM" model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 27/09/2013 16:50:22*

## File summary

### File Description

| | |
|---|---|
| **Title** | Barugh Green, Barnsley |
| **Location** | Swallow Hill Road |
| **Site Number** | |
| **Date** | 04/03/2013 |
| **Version** | |
| **Status** | |
| **Identifier** | |
| **Client** | CEG |
| **Jobnumber** | 08-241 |
| **Enumerator** | mcrabtree |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Hour | perMin |

# (Default Analysis Set) - 2018 Base + CD + Dev, AM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|
| (Default Analysis Set) | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD + Dev, AM | 2018 Base + CD + Dev | AM | | ONE HOUR | 07:45 | 09:15 | 90 | 15 | | |

# Junction Network

## Junctions

| Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|
| (untitled) | T-Junction | Two-way | A,B,C | 0.18 | B |

## Junction Network Options

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

# Arms

## Arms

| Arm | Name | Description | Arm Type |
|---|---|---|---|
| A | Spark Lane | | Major |
| B | Swallow Hill Road | | Minor |
| C | Dearne Hall Road | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 6.90 | | 0.00 | | 2.20 | 90.00 | ✓ | 0.00 |

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

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 2.20 | | | | | | | | | | 50 | 25 |

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| A | None |
| B | None |
| C | None |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 465.524 | 0.081 | 0.206 | 0.130 | 0.294 |
| 1 | B-C | 588.441 | 0.087 | 0.219 | - | - |
| 1 | C-B | 626.083 | 0.233 | 0.233 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*
*Streams may be combined, in which case capacity will be adjusted.*
*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | ONE HOUR | ✓ | 374.00 | 100.000 |
| B | ONE HOUR | ✓ | 142.00 | 100.000 |
| C | ONE HOUR | ✓ | 346.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 21.000 | 353.000 |
| | B | 65.000 | 0.000 | 77.000 |
| | C | 266.000 | 80.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.06 | 0.94 |
| | B | 0.46 | 0.00 | 0.54 |
| | C | 0.77 | 0.23 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.033 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.038 | 1.015 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 0.000 | 3.300 |
| | B | 0.000 | 0.000 | 0.000 |
| | C | 3.800 | 1.500 | 0.000 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (min) | Max Queue (Veh) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.40 | 0.25 | 0.65 | C |
| | | | | |

| | | | | |
|---|---|---|---|---|
| **C-AB** | 0.20 | 0.10 | 0.40 | A |
| **C-A** | - | - | - | - |
| **A-B** | - | - | - | - |
| **A-C** | - | - | - | - |

# Main Results for each time segment

## Main results: (07:45-08:00)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 106.91 | 105.63 | 0.00 | 436.53 | 0.245 | 0.32 | 0.181 | B |
| **C-AB** | 84.86 | 84.06 | 0.00 | 686.71 | 0.124 | 0.20 | 0.100 | A |
| **C-A** | 175.63 | 175.63 | 0.00 | - | - | - | - | - |
| **A-B** | 15.81 | 15.81 | 0.00 | - | - | - | - | - |
| **A-C** | 265.76 | 265.76 | 0.00 | - | - | - | - | - |

## Main results: (08:00-08:15)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 127.66 | 127.21 | 0.00 | 418.61 | 0.305 | 0.43 | 0.206 | B |
| **C-AB** | 109.01 | 108.73 | 0.00 | 702.05 | 0.155 | 0.27 | 0.101 | A |
| **C-A** | 202.04 | 202.04 | 0.00 | - | - | - | - | - |
| **A-B** | 18.88 | 18.88 | 0.00 | - | - | - | - | - |
| **A-C** | 317.34 | 317.34 | 0.00 | - | - | - | - | - |

## Main results: (08:15-08:30)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 156.34 | 155.50 | 0.00 | 393.57 | 0.397 | 0.64 | 0.251 | C |
| **C-AB** | 147.47 | 146.97 | 0.00 | 723.94 | 0.204 | 0.39 | 0.104 | A |
| **C-A** | 233.49 | 233.49 | 0.00 | - | - | - | - | - |
| **A-B** | 23.12 | 23.12 | 0.00 | - | - | - | - | - |
| **A-C** | 388.66 | 388.66 | 0.00 | - | - | - | - | - |

## Main results: (08:30-08:45)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 156.34 | 156.31 | 0.00 | 393.49 | 0.397 | 0.65 | 0.253 | C |
| **C-AB** | 147.63 | 147.61 | 0.00 | 724.11 | 0.204 | 0.40 | 0.104 | A |
| **C-A** | 233.32 | 233.32 | 0.00 | - | - | - | - | - |
| **A-B** | 23.12 | 23.12 | 0.00 | - | - | - | - | - |
| **A-C** | 388.66 | 388.66 | 0.00 | - | - | - | - | - |

## Main results: (08:45-09:00)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 127.66 | 128.47 | 0.00 | 418.50 | 0.305 | 0.45 | 0.207 | B |
| **C-AB** | 109.21 | 109.69 | 0.00 | 702.31 | 0.156 | 0.28 | 0.102 | A |
| **C-A** | 201.84 | 201.84 | 0.00 | - | - | - | - | - |
| **A-B** | 18.88 | 18.88 | 0.00 | - | - | - | - | - |
| **A-C** | 317.34 | 317.34 | 0.00 | - | - | - | - | - |

## Main results: (09:00-09:15)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 106.91 | 107.38 | 0.00 | 436.35 | 0.245 | 0.33 | 0.183 | B |
| **C-AB** | 85.17 | 85.46 | 0.00 | 686.93 | 0.124 | 0.21 | 0.100 | A |
| **C-A** | 175.32 | 175.32 | 0.00 | - | - | - | - | - |
| **A-B** | 15.81 | 15.81 | 0.00 | - | - | - | - | - |
| **A-C** | 265.76 | 265.76 | 0.00 | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
© Copyright TRL Limited, 2013

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Swallow Hill Junction - 175 Dwellings.arc8
**Path:** Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Swallow Hill - Dearne Hall
**Report generation date:** 27/09/2013 16:51:28

## Summary of junction performance

| | PM | | | |
|---|---|---|---|---|
| | Queue (Veh) | Delay (min) | RFC | LOS |
| | A1 - 2018 Base + CD + Dev | | | |
| **Stream B-AC** | 0.33 | 0.21 | 0.25 | B |
| **Stream C-AB** | 1.23 | 0.14 | 0.45 | A |
| **Stream C-A** | - | - | - | - |
| **Stream A-B** | - | - | - | - |
| **Stream A-C** | - | - | - | - |

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

*"D1 - 2013 Base, AM" model duration: 07:45 - 09:15*
*"D2 - 2013 Base, PM" model duration: 16:45 - 18:15*
*"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15*
*"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15*
*"D5 - 2018 Base + CD + Dev, AM" model duration: 07:45 - 09:15*
*"D6 - 2018 Base + CD + Dev, PM " model duration: 16:45 - 18:15*

*Run using Junctions 8.0.2.316 at 27/09/2013 16:51:27*

## File summary

### File Description

| | |
|---|---|
| **Title** | Barugh Green, Barnsley |
| **Location** | Swallow Hill Road |
| **Site Number** | |
| **Date** | 04/03/2013 |
| **Version** | |
| **Status** | |
| **Identifier** | |
| **Client** | CEG |
| **Jobnumber** | 08-241 |
| **Enumerator** | mcrabtree |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (min) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 0.60 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | Veh | Veh | perHour | min | -Hour | perMin |

# (Default Analysis Set) - 2018 Base + CD + Dev, PM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|
| (Default Analysis Set) | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 Base + CD + Dev, PM | 2018 Base + CD + Dev | PM | | ONE HOUR | 16:45 | 18:15 | 90 | 15 | | |

# Junction Network

## Junctions

| Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (min) | Junction LOS |
|---|---|---|---|---|---|
| (untitled) | T-Junction | Two-way | A,B,C | 0.16 | A |

## Junction Network Options

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

# Arms

## Arms

| Arm | Name | Description | Arm Type |
|---|---|---|---|
| A | Spark Lane | | Major |
| B | Swallow Hill Road | | Minor |
| C | Dearne Hall Road | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 6.90 | | 0.00 | | 2.20 | 90.00 | ✓ | 0.00 |

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

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 2.20 | | | | | | | | | | 50 | 25 |

## Pedestrian Crossings

| Arm | Crossing Type |
|---|---|
| A | None |
| B | None |
| C | None |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 465.524 | 0.081 | 0.206 | 0.130 | 0.294 |
| 1 | B-C | 588.441 | 0.087 | 0.219 | - | - |
| 1 | C-B | 626.083 | 0.233 | 0.233 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*
*Streams may be combined, in which case capacity will be adjusted.*
*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (Veh/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | ONE HOUR | ✓ | 388.00 | 100.000 |
| B | ONE HOUR | ✓ | 88.00 | 100.000 |
| C | ONE HOUR | ✓ | 499.00 | 100.000 |

# Turning Proportions

### Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 68.000 | 320.000 |
| | B | 35.000 | 0.000 | 53.000 |
| | C | 328.000 | 171.000 | 0.000 |

### Turning Proportions (Veh) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.18 | 0.82 |
| | B | 0.40 | 0.00 | 0.60 |
| | C | 0.66 | 0.34 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.011 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.010 | 1.008 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 0.000 | 1.100 |
| | B | 0.000 | 0.000 | 0.000 |
| | C | 1.000 | 0.800 | 0.000 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (min) | Max Queue (Veh) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.25 | 0.21 | 0.33 | B |

| | | | | |
|---|---|---|---|---|
| **C-AB** | 0.45 | 0.14 | 1.23 | A |
| **C-A** | - | - | - | - |
| **A-B** | - | - | - | - |
| **A-C** | - | - | - | - |

## Main Results for each time segment

### Main results: (16:45-17:00)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 66.25 | 65.54 | 0.00 | 434.35 | 0.153 | 0.18 | 0.162 | A |
| **C-AB** | 194.85 | 192.84 | 0.00 | 722.89 | 0.270 | 0.50 | 0.113 | A |
| **C-A** | 180.82 | 180.82 | 0.00 | - | - | - | - | - |
| **A-B** | 51.19 | 51.19 | 0.00 | - | - | - | - | - |
| **A-C** | 240.91 | 240.91 | 0.00 | - | - | - | - | - |

### Main results: (17:00-17:15)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 79.11 | 78.89 | 0.00 | 413.55 | 0.191 | 0.23 | 0.179 | B |
| **C-AB** | 253.84 | 252.95 | 0.00 | 744.99 | 0.341 | 0.73 | 0.122 | A |
| **C-A** | 194.75 | 194.75 | 0.00 | - | - | - | - | - |
| **A-B** | 61.13 | 61.13 | 0.00 | - | - | - | - | - |
| **A-C** | 287.67 | 287.67 | 0.00 | - | - | - | - | - |

### Main results: (17:15-17:30)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 96.89 | 96.50 | 0.00 | 384.03 | 0.252 | 0.33 | 0.208 | B |
| **C-AB** | 352.71 | 350.77 | 0.00 | 777.37 | 0.454 | 1.21 | 0.141 | A |
| **C-A** | 196.70 | 196.70 | 0.00 | - | - | - | - | - |
| **A-B** | 74.87 | 74.87 | 0.00 | - | - | - | - | - |
| **A-C** | 352.33 | 352.33 | 0.00 | - | - | - | - | - |

### Main results: (17:30-17:45)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 96.89 | 96.88 | 0.00 | 383.75 | 0.252 | 0.33 | 0.209 | B |
| **C-AB** | 353.54 | 353.46 | 0.00 | 778.15 | 0.454 | 1.23 | 0.142 | A |
| **C-A** | 195.87 | 195.87 | 0.00 | - | - | - | - | - |
| **A-B** | 74.87 | 74.87 | 0.00 | - | - | - | - | - |
| **A-C** | 352.33 | 352.33 | 0.00 | - | - | - | - | - |

### Main results: (17:45-18:00)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 79.11 | 79.49 | 0.00 | 413.14 | 0.191 | 0.24 | 0.180 | B |
| **C-AB** | 254.76 | 256.64 | 0.00 | 746.09 | 0.341 | 0.76 | 0.124 | A |
| **C-A** | 193.83 | 193.83 | 0.00 | - | - | - | - | - |
| **A-B** | 61.13 | 61.13 | 0.00 | - | - | - | - | - |
| **A-C** | 287.67 | 287.67 | 0.00 | - | - | - | - | - |

### Main results: (18:00-18:15)

| Stream | Total Demand (Veh/hr) | Entry Flow (Veh/hr) | Pedestrian Demand (Ped/hr) | Capacity (Veh/hr) | RFC | End Queue (Veh) | Delay (min) | LOS |
|---|---|---|---|---|---|---|---|---|
| **B-AC** | 66.25 | 66.48 | 0.00 | 433.89 | 0.153 | 0.18 | 0.163 | A |
| **C-AB** | 195.83 | 196.78 | 0.00 | 723.70 | 0.271 | 0.52 | 0.114 | A |
| **C-A** | 179.84 | 179.84 | 0.00 | - | - | - | - | - |
| **A-B** | 51.19 | 51.19 | 0.00 | - | - | - | - | - |
| **A-C** | 240.91 | 240.91 | 0.00 | - | - | - | - | - |