

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 716 | 1915 | 985 | 72.7% | - | - | - | 3.9 | 19.8 | 10.7 | 12.1 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 839 | 2055:1827 | 1161 | 72.3% | - | - | - | 4.6 | 19.9 | 11.2 | 12.5 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 575 | 2055:1702 | 1056 | 54.4% | - | - | - | 2.4 | 15.1 | 7.4 | 8.0 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 430 | 2055 | 1057 | 40.7% | - | - | - | 1.6 | 13.3 | 5.0 | 5.4 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 105 | 1813 | 207 | 50.7% | - | - | - | 1.4 | 46.6 | 1.9 | 2.4 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 744 | 1965 | 1544 | 48.2% | - | - | - | 0.5 | 2.4 | 0.2 | 0.6 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 814 | 2105 | 1654 | 49.2% | - | - | - | 0.5 | 2.3 | 0.2 | 0.7 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 564 | 1915 | 1915 | 29.5% | - | - | - | 0.2 | 1.5 | 0.3 | 0.5 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 454 | 2055 | 2055 | 22.1% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 23.8
 PRC Over All Lanes (%): 23.8

Total Delay for Signalled Lanes (pcuHr): 14.96
 Total Delay Over All Lanes(pcuHr): 20.51

Cycle Time (s): 70

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 740 | 2029:1786 | 1580 | 46.8% | 1480 | 0 | 0 | 0.4 | 2.1 | 0.0 | 0.4 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 189 | 2029 | 1063 | 17.8% | 189 | 0 | 0 | 0.1 | 2.1 | 0.0 | 0.1 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 219 | 1894 | 1361 | 16.1% | 219 | 0 | 0 | 0.1 | 1.6 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 768 | 1965 | 1965 | 39.1% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 715 | 2029 | 1186 | 60.3% | 715 | 0 | 0 | 1.7 | 8.5 | 12.8 | 13.6 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 59 | 1747 | 546 | 10.8% | 59 | 0 | 0 | 0.1 | 3.7 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 216 | 2077 | 2077 | 10.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 498 | 2077 | 2077 | 24.0% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 189 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 167 | 2005 | 2005 | 8.3% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 827 | 1965 | 1965 | 42.1% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 666 | 2077 | 2077 | 32.1% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 216 | 2005 | 2005 | 10.8% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1493 | 4070 | 4070 | 36.7% | - | - | - | 0.3 | 0.7 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 540 | 1965 | 1965 | 27.5% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 199 | 2105 | 2105 | 9.5% | - | - | - | 0.1 | 0.9 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 540 | 1915 | 985 | 54.8% | - | - | - | 2.3 | 15.5 | 7.1 | 7.7 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 199 | 2055:1827 | 268 | 74.3% | - | - | - | 3.0 | 53.4 | 3.6 | 5.0 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 912 | 2055:1702 | 1080 | 84.4% | - | - | - | 6.1 | 24.1 | 14.0 | 16.6 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 709 | 2055 | 1057 | 67.1% | - | - | - | 3.5 | 17.8 | 10.0 | 11.1 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 22 | 1809 | 207 | 10.6% | - | - | - | 0.2 | 37.6 | 0.4 | 0.4 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 540 | 1965 | 1544 | 35.0% | - | - | - | 0.3 | 2.0 | 0.1 | 0.4 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 21 | 2105 | 1654 | 1.3% | - | - | - | 0.0 | 1.1 | 0.0 | 0.0 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 768 | 1915 | 1915 | 40.1% | - | - | - | 0.3 | 1.6 | 0.2 | 0.5 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 715 | 2055 | 2055 | 34.8% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 6.6
 PRC Over All Lanes (%): 6.6

Total Delay for Signalled Lanes (pcuHr): 15.41
 Total Delay Over All Lanes(pcuHr): 20.24

Cycle Time (s): 70

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 622 | 2029:1786 | 1873 | 33.2% | 1244 | 0 | 0 | 0.2 | 1.4 | 0.0 | 0.2 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 356 | 2029 | 1088 | 32.7% | 356 | 0 | 0 | 0.2 | 2.5 | 0.0 | 0.2 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 392 | 1894 | 1335 | 29.4% | 392 | 0 | 0 | 0.2 | 1.9 | 0.0 | 0.2 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 503 | 1965 | 1965 | 25.6% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 410 | 2029 | 1130 | 36.3% | 410 | 0 | 0 | 0.4 | 3.1 | 4.2 | 4.5 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 124 | 1747 | 604 | 20.5% | 124 | 0 | 0 | 0.1 | 3.7 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 174 | 2077 | 2077 | 8.4% | - | - | - | 0.0 | 0.9 | 0.0 | 0.0 |
| J1:6/1 | Ahead | U | - | | - | - | - | 368 | 2077 | 2077 | 17.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 356 | 2077 | 2077 | 17.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 269 | 2005 | 2005 | 13.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 627 | 1965 | 1965 | 31.9% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:8/2 | Ahead | U | - | | - | - | - | 505 | 2077 | 2077 | 24.3% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 174 | 2005 | 2005 | 8.7% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1132 | 4070 | 4070 | 27.8% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 387 | 1965 | 1965 | 19.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 460 | 2105 | 2105 | 21.9% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|-----|-----|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 387 | 1915 | 985 | 39.3% | - | - | - | 1.4 | 13.4 | 4.5 | 4.8 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 460 | 2055:1827 | 1236 | 37.2% | - | - | - | 1.9 | 15.2 | 4.4 | 4.7 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 513 | 2055:1702 | 1056 | 48.6% | - | - | - | 2.0 | 14.2 | 6.3 | 6.8 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 387 | 2055 | 1057 | 36.6% | - | - | - | 1.4 | 12.9 | 4.4 | 4.7 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 92 | 1811 | 207 | 44.5% | - | - | - | 1.1 | 44.5 | 1.7 | 2.1 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 390 | 1965 | 1544 | 25.3% | - | - | - | 0.2 | 1.7 | 0.1 | 0.3 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 450 | 2105 | 1654 | 27.2% | - | - | - | 0.2 | 1.6 | 0.1 | 0.3 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 503 | 1915 | 1915 | 26.3% | - | - | - | 0.2 | 1.4 | 0.2 | 0.4 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 410 | 2055 | 2055 | 20.0% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 85.3
 PRC Over All Lanes (%): 85.3

Total Delay for Signalled Lanes (pcuHr): 8.32
 Total Delay Over All Lanes(pcuHr): 11.22

Cycle Time (s): 70

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 908 | 2029:1786 | 1458 | 62.3% | 1816 | 0 | 0 | 0.8 | 3.3 | 0.0 | 0.8 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 190 | 2029 | 1056 | 18.0% | 190 | 0 | 0 | 0.1 | 2.1 | 0.0 | 0.1 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 239 | 1894 | 1245 | 19.2% | 239 | 0 | 0 | 0.1 | 1.8 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 796 | 1965 | 1965 | 40.5% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 769 | 2029 | 1183 | 65.0% | 769 | 0 | 0 | 2.2 | 10.1 | 14.0 | 14.9 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 61 | 1747 | 540 | 11.3% | 61 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 228 | 2077 | 2077 | 11.0% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 658 | 2077 | 2077 | 31.7% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 190 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 173 | 2005 | 2005 | 8.6% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 857 | 1965 | 1965 | 43.6% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 714 | 2077 | 2077 | 34.4% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:8/3 | Right | U | - | | - | - | - | 228 | 2005 | 2005 | 11.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1571 | 4070 | 4070 | 38.6% | - | - | - | 0.3 | 0.7 | 0.0 | 0.2 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 712 | 1965 | 1965 | 36.2% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 202 | 2105 | 2105 | 9.6% | - | - | - | 0.1 | 0.9 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 712 | 1915 | 985 | 72.3% | - | - | - | 3.9 | 19.7 | 10.7 | 12.0 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 202 | 2055:1827 | 262 | 77.0% | - | - | - | 3.2 | 57.2 | 3.7 | 5.3 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 948 | 2055:1702 | 1081 | 87.7% | - | - | - | 7.1 | 27.0 | 15.1 | 18.5 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 763 | 2055 | 1057 | 72.2% | - | - | - | 4.1 | 19.2 | 11.4 | 12.7 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 27 | 1814 | 207 | 13.0% | - | - | - | 0.3 | 37.9 | 0.5 | 0.5 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 713 | 1965 | 1544 | 46.2% | - | - | - | 0.5 | 2.3 | 0.2 | 0.6 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 21 | 2105 | 1654 | 1.3% | - | - | - | 0.0 | 1.1 | 0.0 | 0.0 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 796 | 1915 | 1915 | 41.6% | - | - | - | 0.4 | 1.7 | 0.2 | 0.6 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 769 | 2055 | 2055 | 37.4% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.6
 PRC Over All Lanes (%): 2.6

Total Delay for Signalled Lanes (pcuHr): 19.04
 Total Delay Over All Lanes(pcuHr): 25.08

Cycle Time (s): 70

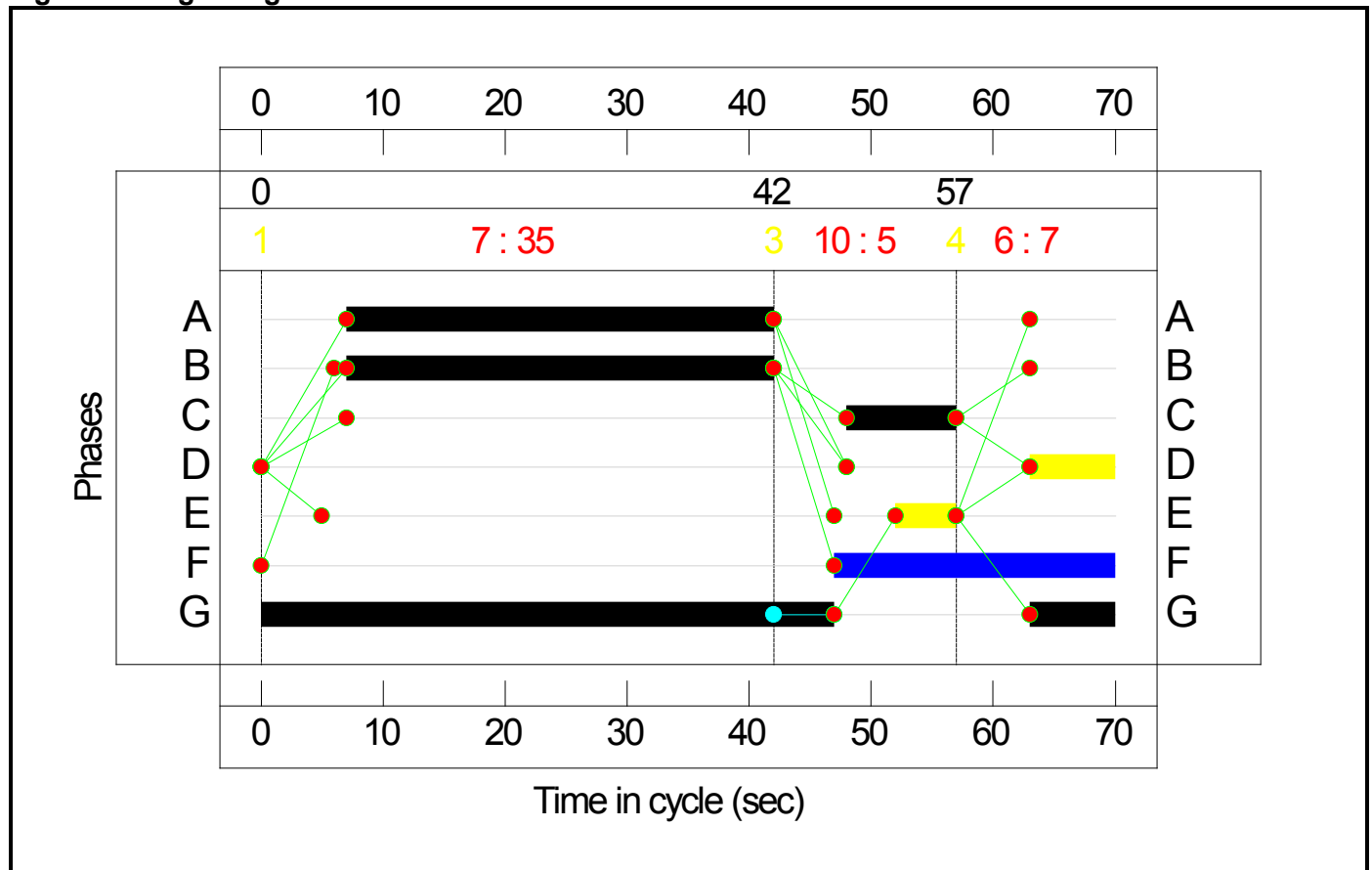
Scenario 10: '2024 DS2 PM Base' (FG10: '2024 DS2 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 794 | 162 | 11 | 967 |
| | B | 799 | 0 | 263 | 71 | 1133 |
| | C | 142 | 278 | 0 | 7 | 427 |
| | D | 84 | 128 | 24 | 0 | 236 |
| | Tot. | 1025 | 1200 | 449 | 89 | 2763 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 704 | 2029:1786 | 1777 | 39.6% | 1408 | 0 | 0 | 0.3 | 1.7 | 0.0 | 0.3 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 429 | 2029 | 1081 | 39.7% | 429 | 0 | 0 | 0.3 | 2.8 | 0.0 | 0.3 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 427 | 1894 | 1229 | 34.7% | 427 | 0 | 0 | 0.3 | 2.2 | 0.0 | 0.3 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 542 | 1965 | 1965 | 27.6% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 438 | 2029 | 1125 | 38.9% | 438 | 0 | 0 | 0.4 | 3.4 | 5.0 | 5.3 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 128 | 1747 | 596 | 21.5% | 128 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 186 | 2077 | 2077 | 9.0% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:6/1 | Ahead | U | - | | - | - | - | 441 | 2077 | 2077 | 21.2% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 429 | 2077 | 2077 | 20.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 278 | 2005 | 2005 | 13.9% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 670 | 1965 | 1965 | 34.1% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:8/2 | Ahead | U | - | | - | - | - | 530 | 2077 | 2077 | 25.5% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 186 | 2005 | 2005 | 9.3% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1200 | 4070 | 4070 | 29.5% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 462 | 1965 | 1965 | 23.5% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 557 | 2105 | 2105 | 26.5% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|-----|-----|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 462 | 1915 | 985 | 46.9% | - | - | - | 1.8 | 14.3 | 5.6 | 6.1 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 557 | 2055:1827 | 1208 | 46.1% | - | - | - | 2.4 | 15.8 | 5.9 | 6.3 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 553 | 2055:1702 | 1057 | 52.3% | - | - | - | 2.3 | 14.8 | 7.0 | 7.5 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 414 | 2055 | 1057 | 39.2% | - | - | - | 1.5 | 13.1 | 4.8 | 5.2 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 108 | 1814 | 207 | 52.1% | - | - | - | 1.4 | 47.1 | 2.0 | 2.5 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 468 | 1965 | 1544 | 30.3% | - | - | - | 0.2 | 1.8 | 0.1 | 0.3 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 557 | 2105 | 1654 | 33.7% | - | - | - | 0.3 | 1.8 | 0.1 | 0.4 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 542 | 1915 | 1915 | 28.3% | - | - | - | 0.2 | 1.5 | 0.2 | 0.4 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 438 | 2055 | 2055 | 21.3% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 71.9
 PRC Over All Lanes (%): 71.9

Total Delay for Signalled Lanes (pcuHr): 9.99
 Total Delay Over All Lanes(pcuHr): 13.43

Cycle Time (s): 70

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 926 | 2029:1786 | 1446 | 64.1% | 1852 | 0 | 0 | 0.9 | 3.5 | 0.0 | 0.9 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 190 | 2029 | 1055 | 18.0% | 190 | 0 | 0 | 0.1 | 2.1 | 0.0 | 0.1 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 241 | 1894 | 1232 | 19.6% | 241 | 0 | 0 | 0.1 | 1.8 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 801 | 1965 | 1965 | 40.8% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 777 | 2029 | 1183 | 65.7% | 777 | 0 | 0 | 2.2 | 10.3 | 14.1 | 15.1 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 61 | 1747 | 539 | 11.3% | 61 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 230 | 2077 | 2077 | 11.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 676 | 2077 | 2077 | 32.5% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 190 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 173 | 2005 | 2005 | 8.6% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 862 | 1965 | 1965 | 43.9% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 720 | 2077 | 2077 | 34.7% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:8/3 | Right | U | - | | - | - | - | 230 | 2005 | 2005 | 11.5% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1582 | 4070 | 4070 | 38.9% | - | - | - | 0.3 | 0.7 | 0.0 | 0.2 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 732 | 1965 | 1965 | 37.3% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 202 | 2105 | 2105 | 9.6% | - | - | - | 0.1 | 0.9 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 732 | 1915 | 985 | 74.3% | - | - | - | 4.1 | 20.4 | 11.2 | 12.6 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 202 | 2055:1827 | 262 | 77.0% | - | - | - | 3.2 | 57.2 | 3.7 | 5.3 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 954 | 2055:1702 | 1081 | 88.3% | - | - | - | 7.3 | 27.7 | 15.2 | 18.7 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 771 | 2055 | 1057 | 73.0% | - | - | - | 4.2 | 19.5 | 11.6 | 12.9 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 28 | 1814 | 207 | 13.5% | - | - | - | 0.3 | 37.9 | 0.5 | 0.6 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 733 | 1965 | 1544 | 47.5% | - | - | - | 0.5 | 2.4 | 0.2 | 0.6 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 22 | 2105 | 1654 | 1.3% | - | - | - | 0.0 | 1.1 | 0.0 | 0.0 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 801 | 1915 | 1915 | 41.8% | - | - | - | 0.4 | 1.7 | 0.2 | 0.6 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 777 | 2055 | 2055 | 37.8% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.0
 PRC Over All Lanes (%): 2.0

Total Delay for Signalled Lanes (pcuHr): 19.64
 Total Delay Over All Lanes(pcuHr): 25.86

Cycle Time (s): 70

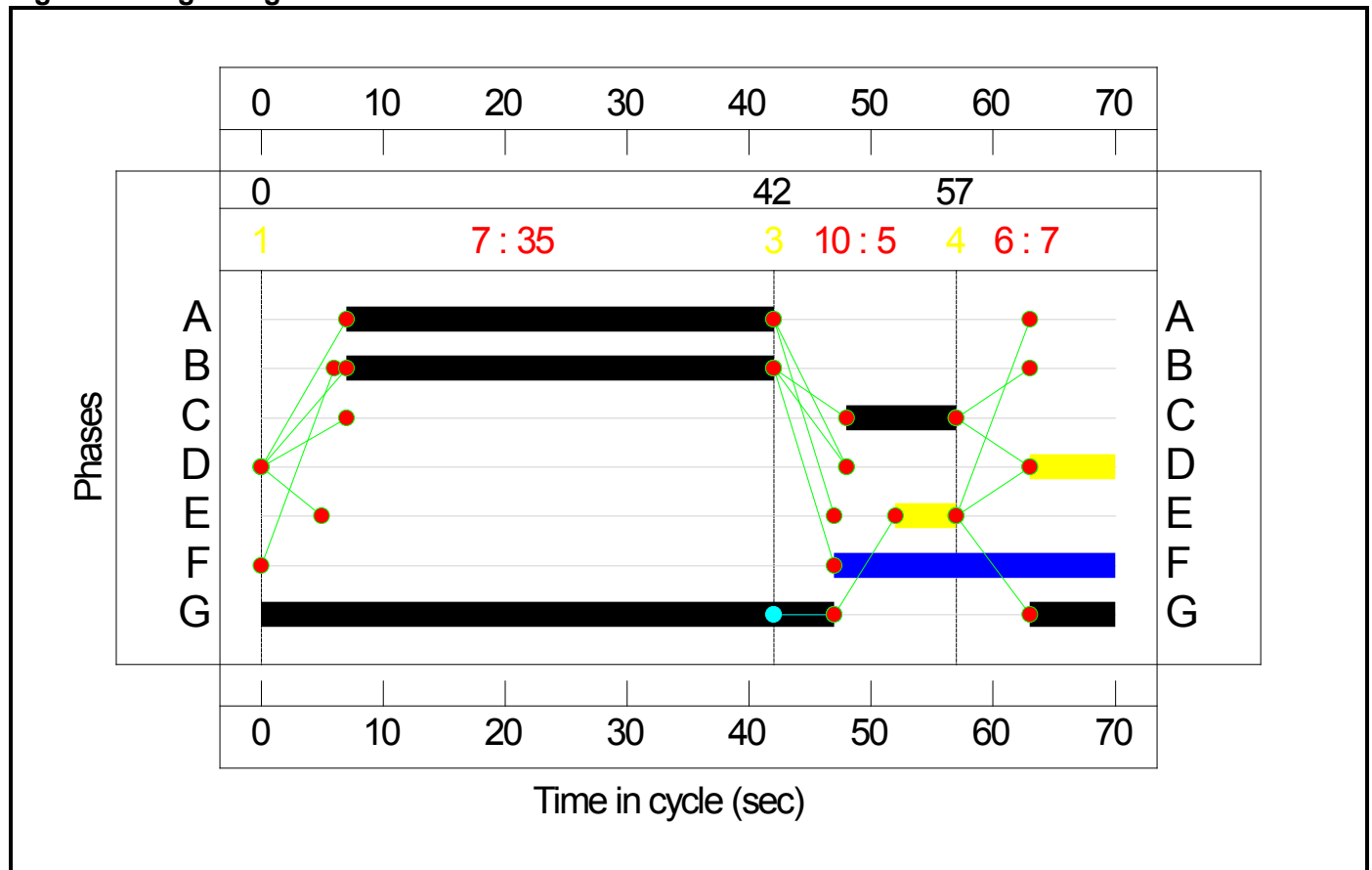
Scenario 12: '2024 DS2 PM Base + Development' (FG12: '2024 DS2 PM Base + Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 813 | 166 | 11 | 990 |
| | B | 821 | 0 | 263 | 71 | 1155 |
| | C | 144 | 278 | 0 | 7 | 429 |
| | D | 86 | 128 | 24 | 0 | 238 |
| | Tot. | 1051 | 1219 | 453 | 89 | 2812 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 713 | 2029:1786 | 1746 | 40.8% | 1426 | 0 | 0 | 0.3 | 1.7 | 0.0 | 0.3 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 442 | 2029 | 1079 | 41.0% | 442 | 0 | 0 | 0.3 | 2.8 | 0.0 | 0.3 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 429 | 1894 | 1214 | 35.4% | 429 | 0 | 0 | 0.3 | 2.3 | 0.0 | 0.3 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 555 | 1965 | 1965 | 28.2% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 448 | 2029 | 1125 | 39.8% | 448 | 0 | 0 | 0.4 | 3.6 | 5.1 | 5.5 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 128 | 1747 | 593 | 21.6% | 128 | 0 | 0 | 0.1 | 3.9 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 190 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 450 | 2077 | 2077 | 21.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 442 | 2077 | 2077 | 21.3% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 278 | 2005 | 2005 | 13.9% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 683 | 1965 | 1965 | 34.8% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:8/2 | Ahead | U | - | | - | - | - | 536 | 2077 | 2077 | 25.8% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 190 | 2005 | 2005 | 9.5% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1219 | 4070 | 4070 | 30.0% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 475 | 1965 | 1965 | 24.2% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 568 | 2105 | 2105 | 27.0% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|-----|-----|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 475 | 1915 | 985 | 48.2% | - | - | - | 1.9 | 14.5 | 5.9 | 6.4 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 568 | 2055:1827 | 1205 | 47.1% | - | - | - | 2.5 | 15.9 | 6.0 | 6.4 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 566 | 2055:1702 | 1056 | 53.6% | - | - | - | 2.4 | 15.0 | 7.1 | 7.7 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 424 | 2055 | 1057 | 40.1% | - | - | - | 1.6 | 13.2 | 4.9 | 5.3 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 110 | 1814 | 207 | 53.1% | - | - | - | 1.5 | 47.5 | 2.0 | 2.6 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 481 | 1965 | 1544 | 31.2% | - | - | - | 0.2 | 1.8 | 0.1 | 0.3 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 570 | 2105 | 1654 | 34.5% | - | - | - | 0.3 | 1.8 | 0.1 | 0.4 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 555 | 1915 | 1915 | 29.0% | - | - | - | 0.2 | 1.5 | 0.2 | 0.5 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 448 | 2055 | 2055 | 21.8% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 68.0
 PRC Over All Lanes (%): 68.0

Total Delay for Signalled Lanes (pcuHr): 10.31
 Total Delay Over All Lanes(pcuHr): 13.88

Cycle Time (s): 70

Pegasus Group LinSig Report

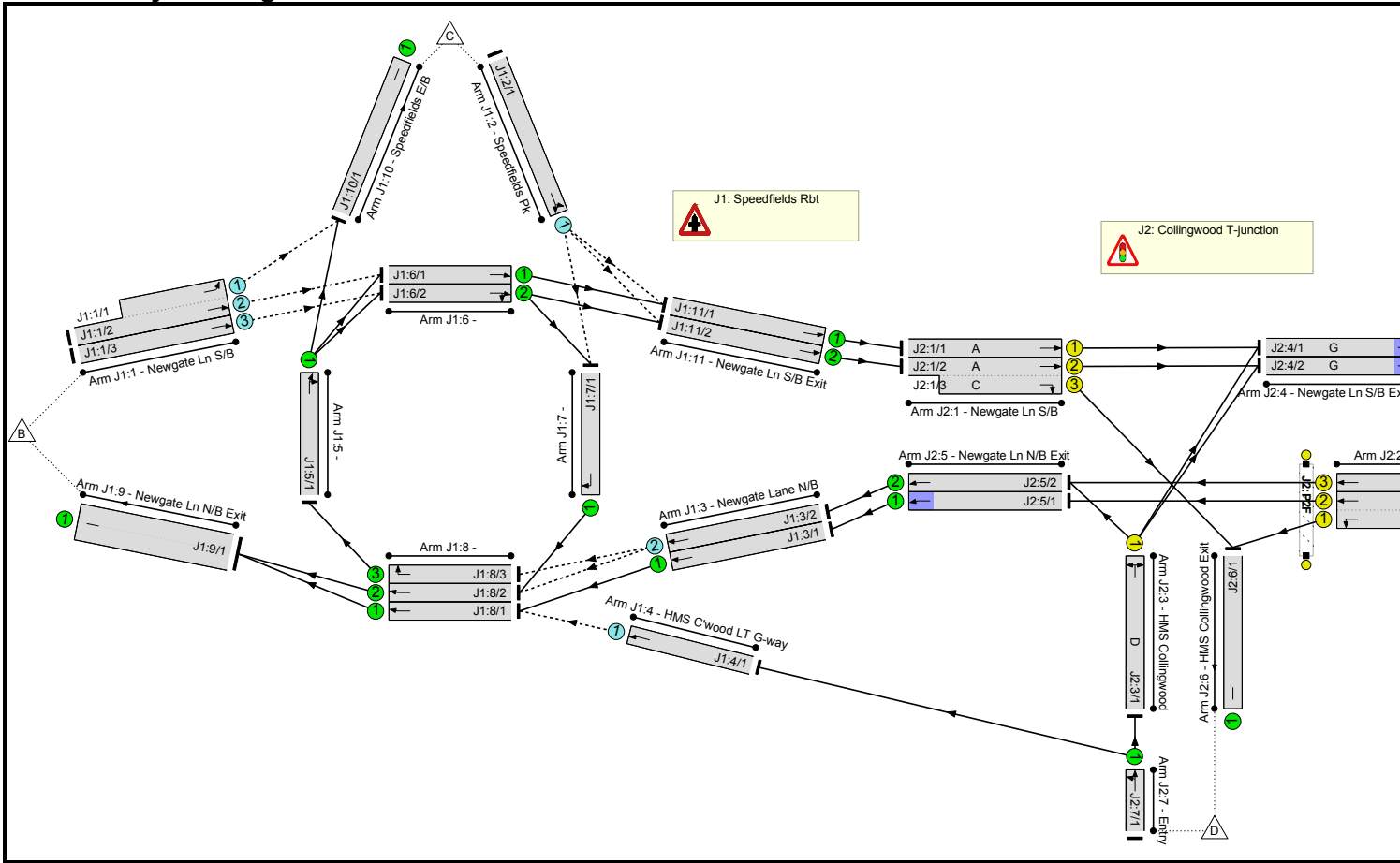
User and Project Details

| | |
|------------------------|--|
| Project: | Collingwood signals & Speedfield Rbt |
| Title: | Land to the West of Newgate Lane, Fareham |
| Location: | |
| Company: | Pegasus Group |
| Address: | |
| Linsig Version: | 3, 2, 39, 0 |

Scenarios

| Number | Scenario Name | Flow Group | Network Control Plan | Time | Cycle Time (s) | PRC (%) | Delay (pcuHr) |
|--------|--------------------------------|------------------------|----------------------|---------------|----------------|---------|---------------|
| 1 | 2019 DS1 AM Base | 2019 DS1 AM Base | Plan 1 | 08:00 - 09:00 | 70 | 7.6 | 20.17 |
| 2 | 2019 DS1 PM Base | 2019 DS1 PM Base | Plan 1 | 17:00 - 18:00 | 70 | 44.1 | 16.07 |
| 3 | 2024 DS1 AM Base | 2024 DS1 AM Base | Plan 1 | 08:00 - 09:00 | 70 | 3.4 | 23.68 |
| 4 | 2024 DS1 PM Base | 2024 DS1 PM Base | Plan 1 | 17:00 - 18:00 | 70 | 25.5 | 19.83 |
| 5 | 2024 DS1 AM Base + Development | 2024 DS1 AM Base+Dev | Plan 1 | 08:00 - 09:00 | 70 | 2.4 | 24.47 |
| 6 | 2024 DS1 PM Base + Development | 2024 DS1 PM Base+Dev | Plan 1 | 17:00 - 18:00 | 70 | 23.6 | 20.54 |
| 7 | 2019 DS2 AM Base | 2019 DS2 AM Base | Plan 1 | 08:00 - 09:00 | 70 | 6.6 | 20.24 |
| 8 | 2019 DS2 PM Base | 2019 DS2 PM Base | Plan 1 | 17:00 - 18:00 | 70 | 85.3 | 11.22 |
| 9 | 2024 DS2 AM Base | 2024 DS2 AM Base | Plan 1 | 08:00 - 09:00 | 70 | 2.6 | 25.08 |
| 10 | 2024 DS2 PM Base | 2024 DS2 PM Base | Plan 1 | 17:00 - 18:00 | 70 | 71.9 | 13.43 |
| 11 | 2024 DS2 AM Base + Development | 2024 DS2 AM Base + Dev | Plan 1 | 08:00 - 09:00 | 70 | 1.9 | 25.97 |
| 12 | 2024 DS2 PM Base + Development | 2024 DS2 PM Base + Dev | Plan 1 | 17:00 - 18:00 | 70 | 67.7 | 13.89 |

Network Layout Diagram



Lane Input Data

| Junction: J1: Speedfields Rbt | | | | | | | | | | | | |
|---------------------------------|-----------|--------|-------------|-----------|-----------------------|---------------|-----------------------------------|----------------|----------|---------------|-----------------|--------------------|
| Lane | Lane Type | Phases | Start Disp. | End Disp. | Physical Length (PCU) | Sat Flow Type | Def User Saturation Flow (PCU/Hr) | Lane Width (m) | Gradient | Nearside Lane | Turns | Turning Radius (m) |
| J1:1/1 (Newgate Ln S/B) | O | | 2 | 3 | 8.7 | Geom | - | 3.50 | 0.00 | Y | Arm J1:10 Left | 15.00 |
| J1:1/2 (Newgate Ln S/B) | O | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | N | Arm J1:6 Ahead | 40.00 |
| J1:1/3 (Newgate Ln S/B) | O | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | N | Arm J1:6 Ahead | 40.00 |
| J1:2/1 (Speedfields Pk) | O | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J1:7 Ahead | 40.00 |
| | | | | | | | | | | | Arm J1:11 Left | 40.00 |
| J1:3/1 (Newgate Lane N/B) | U | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J1:8 Ahead | Inf |
| J1:3/2 (Newgate Lane N/B) | O | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | N | Arm J1:8 Ahead | 40.00 |
| J1:4/1 (HMS C'wood LT G-way) | O | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J1:8 Ahead | 12.00 |
| J1:5/1 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:6 Right | 20.00 |
| | | | | | | | | | | | Arm J1:10 Ahead | 40.00 |
| J1:6/1 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:11 Ahead | 40.00 |
| J1:6/2 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:7 Right | 20.00 |
| | | | | | | | | | | | Arm J1:11 Ahead | 40.00 |
| J1:7/1 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:8 Right | 20.00 |
| J1:8/1 | U | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J1:9 Ahead | Inf |
| J1:8/2 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:9 Ahead | 40.00 |
| J1:8/3 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:5 Right | 20.00 |

| | | | | | | | | | | | | |
|-------------------------------------|---|--|---|---|------|------|------|------|------|---|----------------------|-----|
| J1:9/1 (Newgate Ln N/B Exit) | U | | 2 | 3 | 60.0 | User | 4070 | - | - | - | - | - |
| J1:10/1 (Speedfields E/B) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| J1:11/1 (Newgate Ln S/B Exit) | U | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J2:1 Ahead | Inf |
| J1:11/2 (Newgate Ln S/B Exit) | U | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | N | Arm J2:1 Ahead | Inf |

| Junction: J2: Collingwood T-junction | | | | | | | | | | | | |
|---------------------------------------|-----------|--------|-------------|-----------|-----------------------|---------------|-----------------------------------|----------------|----------|---------------|---------------------------------|--------------------|
| Lane | Lane Type | Phases | Start Disp. | End Disp. | Physical Length (PCU) | Sat Flow Type | Def User Saturation Flow (PCU/Hr) | Lane Width (m) | Gradient | Nearside Lane | Turns | Turning Radius (m) |
| J2:1/1 (Newgate Ln S/B) | U | A | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | Y | Arm J2:4 Ahead | Inf |
| J2:1/2 (Newgate Ln S/B) | U | A | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | N | Arm J2:4 Ahead | Inf |
| J2:1/3 (Newgate Ln S/B) | U | C | 2 | 3 | 15.7 | Geom | - | 3.00 | 0.00 | N | Arm J2:6 Right | 12.00 |
| J2:2/1 (Newgate Ln N/B) | U | B | 2 | 3 | 5.2 | Geom | - | 3.00 | 0.00 | Y | Arm J2:6 Left | 12.00 |
| J2:2/2 (Newgate Ln N/B) | U | B | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | N | Arm J2:5 Ahead | Inf |
| J2:2/3 (Newgate Ln N/B) | U | B | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | N | Arm J2:5 Ahead | Inf |
| J2:3/1 (HMS Collingwood) | U | D | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | Y | Arm J2:4 Right Arm J2:5 Left | 15.00 10.00 |
| J2:4/1 (Newgate Ln S/B Exit Merge) | U | G | 2 | 3 | 5.2 | Geom | - | 3.50 | 0.00 | Y | Arm J2:8 Ahead | Inf |
| J2:4/2 (Newgate Ln S/B Exit Merge) | U | G | 2 | 3 | 5.2 | Geom | - | 3.50 | 0.00 | N | Arm J2:8 Ahead | Inf |
| J2:5/1 (Newgate Ln N/B Exit) | U | | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | Y | Arm J1:3 Ahead | Inf |
| J2:5/2 (Newgate Ln N/B Exit) | U | | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | N | Arm J1:3 Ahead | Inf |
| J2:6/1 (HMS Collingwood Exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| J2:7/1 (Entry) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| J2:8/1 | U | | 2 | 3 | 19.1 | Inf | - | - | - | - | - | - |

Give-Way Lane Input Data

| Junction: J1: Speedfields Rbt | | | | | | | | | | | |
|---------------------------------|-------------------|-----------------------------------|-----------------------------------|---------------|------------------|--------------|--------------------------|----------------------------|-----|------------------------|-------------------------------|
| Lane | Movement | Max Flow when Giving Way (PCU/Hr) | Min Flow when Giving Way (PCU/Hr) | Opposing Lane | Opp. Lane Coeff. | Opp. Mvmnts. | Right Turn Storage (PCU) | Non-Blocking Storage (PCU) | RTF | Right Turn Move up (s) | Max Turns in Intergreen (PCU) |
| J1:1/1 (Newgate Ln S/B) | J1:10/1 (Left) | 1189 | 0 | J1:5/1 | 0.58 | All | - | - | - | - | - |
| J1:1/2 (Newgate Ln S/B) | J1:6/1 (Ahead) | 1189 | 0 | J1:5/1 | 0.58 | All | - | - | - | - | - |
| J1:1/3 (Newgate Ln S/B) | J1:6/2 (Ahead) | 1189 | 0 | J1:5/1 | 0.58 | All | - | - | - | - | - |
| J1:2/1 (Speedfields Pk) | J1:7/1 (Ahead) | 1856 | 0 | J1:6/1 | 0.72 | All | - | - | - | - | - |
| | | | | J1:6/2 | 0.72 | All | | | | | |
| | J1:11/1 (Left) | 1856 | 0 | J1:6/1 | 0.72 | All | | | | | |
| | | | | J1:6/2 | 0.72 | All | | | | | |
| | J1:11/2 (Left) | 1856 | 0 | J1:6/1 | 0.72 | All | | | | | |
| | | | | J1:6/2 | 0.72 | All | | | | | |
| J1:3/2 (Newgate Lane N/B) | J1:8/2 (Ahead) | 1278 | 0 | J1:7/1 | 0.55 | All | - | - | - | - | - |
| | J1:8/3 (Ahead) | 1278 | 0 | J1:7/1 | 0.55 | All | | | | | |
| J1:4/1 (HMS C'wood LT G-way) | J1:8/1 (Ahead) | 715 | 0 | J1:3/1 | 0.22 | All | - | - | - | - | - |

Junction: J2: Collingwood T-junction

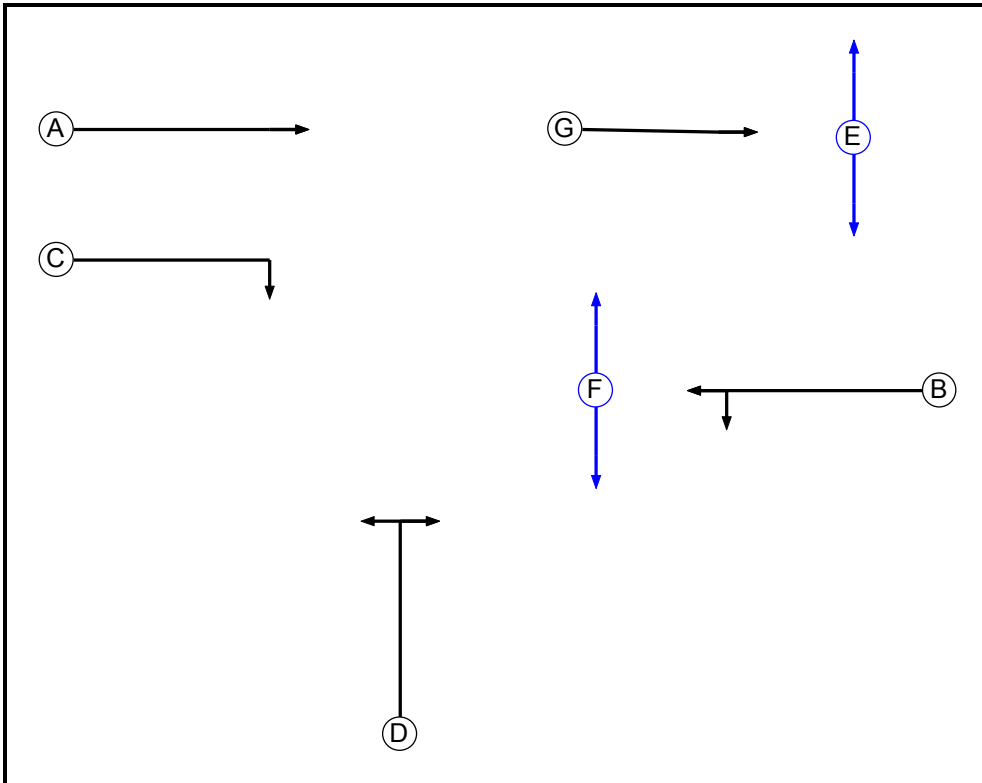
There are no Opposed Lanes in this Junction

Lane Connector Input Data

| Junction: J1: Speedfields Rbt | | | | |
|--------------------------------------|------------------|-----------------|-------------------------|---------------------------|
| Org Lane | Dest Lane | Junction | Mean Cruise Time | Platoon Dispersion |
| J1:1/1 | J1:10/1 | Internal | 10 | 35 |
| J1:1/2 | J1:6/1 | Internal | 2 | 35 |
| J1:1/3 | J1:6/2 | Internal | 2 | 35 |
| J1:2/1 | J1:7/1 | Internal | 2 | 35 |
| J1:2/1 | J1:11/1 | Internal | 2 | 35 |
| J1:2/1 | J1:11/2 | Internal | 2 | 35 |
| J1:3/1 | J1:8/1 | Internal | 2 | 35 |
| J1:3/2 | J1:8/2 | Internal | 2 | 35 |
| J1:3/2 | J1:8/3 | Internal | 2 | 35 |
| J1:4/1 | J1:8/1 | Internal | 2 | 35 |
| J1:5/1 | J1:6/1 | Internal | 2 | 35 |
| J1:5/1 | J1:6/2 | Internal | 2 | 35 |
| J1:5/1 | J1:10/1 | Internal | 10 | 35 |
| J1:6/1 | J1:11/1 | Internal | 2 | 35 |
| J1:6/2 | J1:7/1 | Internal | 2 | 35 |
| J1:6/2 | J1:11/2 | Internal | 2 | 35 |
| J1:7/1 | J1:8/2 | Internal | 2 | 35 |
| J1:8/1 | J1:9/1 | Internal | 2 | 35 |
| J1:8/2 | J1:9/1 | Internal | 2 | 35 |
| J1:8/3 | J1:5/1 | Internal | 2 | 35 |
| J1:11/1 | J2:1/1 | Leaving | 13 | 35 |
| J1:11/2 | J2:1/2 | Leaving | 13 | 35 |
| J2:5/1 | J1:3/1 | Entering | 13 | 35 |
| J2:5/2 | J1:3/2 | Entering | 13 | 35 |
| J2:7/1 | J1:4/1 | Entering | 1 | 35 |

| Junction: J2: Collingwood T-junction | | | | |
|--------------------------------------|-----------|----------|------------------|--------------------|
| Org Lane | Dest Lane | Junction | Mean Cruise Time | Platoon Dispersion |
| J1:11/1 | J2:1/1 | Entering | 13 | 35 |
| J1:11/2 | J2:1/2 | Entering | 13 | 35 |
| J2:1/1 | J2:4/1 | Internal | 5 | 35 |
| J2:1/2 | J2:4/2 | Internal | 5 | 35 |
| J2:1/3 | J2:6/1 | Internal | 10 | 35 |
| J2:2/1 | J2:6/1 | Internal | 10 | 35 |
| J2:2/2 | J2:5/1 | Internal | 2 | 35 |
| J2:2/3 | J2:5/2 | Internal | 2 | 35 |
| J2:3/1 | J2:4/1 | Internal | 6 | 35 |
| J2:3/1 | J2:4/2 | Internal | 6 | 35 |
| J2:3/1 | J2:5/2 | Internal | 2 | 35 |
| J2:4/1 | J2:8/1 | Internal | 10 | 35 |
| J2:4/2 | J2:8/1 | Internal | 10 | 35 |
| J2:5/1 | J1:3/1 | Leaving | 13 | 35 |
| J2:5/2 | J1:3/2 | Leaving | 13 | 35 |
| J2:7/1 | J1:4/1 | Leaving | 1 | 35 |
| J2:7/1 | J2:3/1 | Internal | 1 | 35 |

Phase Diagram



Phase Input Data

| Phase Name | Phase Type | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|------------|----------|
| A | Traffic | | 7 | 7 |
| B | Traffic | | 7 | 7 |
| C | Traffic | | 7 | 7 |
| D | Traffic | | 7 | 7 |
| E | Pedestrian | | 5 | 5 |
| F | Pedestrian | | 5 | 5 |
| G | Traffic | | 7 | 2 |

Phase Intergreens Matrix

| | | Starting Phase | | | | | | |
|-------------------|---|----------------|---|---|---|---|---|---|
| | | A | B | C | D | E | F | G |
| Terminating Phase | A | - | - | 6 | 5 | - | - | - |
| | B | - | - | 6 | 6 | - | 5 | - |
| | C | - | 6 | - | 6 | - | - | - |
| | D | 7 | 7 | 7 | - | 5 | - | - |
| | E | 6 | - | - | 6 | - | - | 6 |
| | F | - | 6 | - | - | - | - | - |
| | G | - | - | - | - | 5 | - | - |

Phases in Stage

| Stage No. | Phases in Stage |
|-----------|-----------------|
| 1 | A B G |
| 2 | A C F G |
| 3 | C E F |
| 4 | D F G |

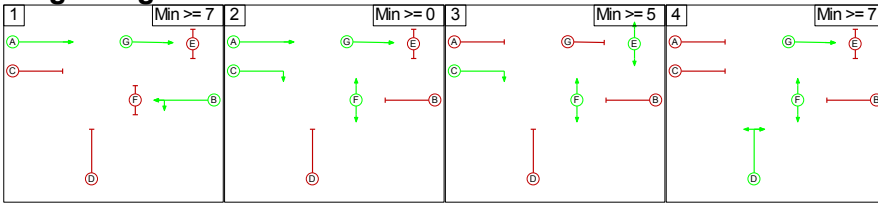
Phase Delays

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-------------|-------------|-------|--------|-------|------------|
| 1 | 3 | G | Losing | 5 | 5 |
| 2 | 3 | G | Losing | 5 | 5 |
| 4 | 3 | G | Losing | 5 | 5 |

Prohibited Stage Change

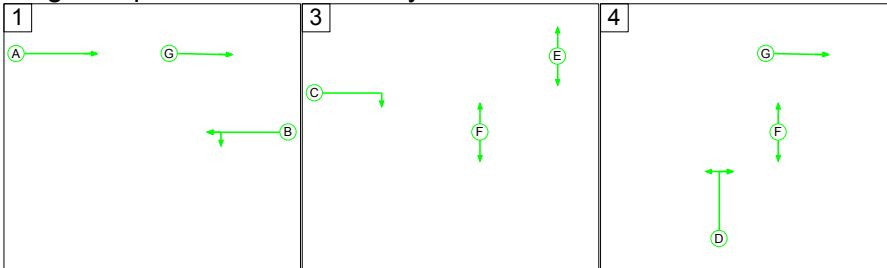
| | | To Stage | | | |
|------------|---|----------|---|----|---|
| | | 1 | 2 | 3 | 4 |
| From Stage | 1 | - | 6 | 10 | 6 |
| | 2 | 6 | - | 10 | 6 |
| | 3 | 6 | 6 | - | 6 |
| | 4 | 7 | 7 | 10 | - |

Stage Diagram



Stage Sequence Summary

Stage Sequence: Peds Each Cycle



Network Control Plans

| Plan | Controller | Sequence Name | Sequence |
|--------|-----------------------------|-----------------|----------|
| Plan 1 | C1 - Collingwood T-Junction | Peds Each Cycle | 1,3,4 |

Traffic Flow Groups

| Flow Group | Start Time | End Time | Duration | Formula |
|------------------------------|------------|----------|----------|---------|
| 1: '2019 DS1 AM Base' | 08:00 | 09:00 | 01:00 | |
| 2: '2019 DS1 PM Base' | 17:00 | 18:00 | 01:00 | |
| 3: '2024 DS1 AM Base' | 08:00 | 09:00 | 01:00 | |
| 4: '2024 DS1 PM Base' | 17:00 | 18:00 | 01:00 | |
| 5: '2024 DS1 AM Base+Dev' | 08:00 | 09:00 | 01:00 | |
| 6: '2024 DS1 PM Base+Dev' | 17:00 | 18:00 | 01:00 | |
| 7: '2019 DS2 AM Base' | 08:00 | 09:00 | 01:00 | |
| 8: '2019 DS2 PM Base' | 17:00 | 18:00 | 01:00 | |
| 9: '2024 DS2 AM Base' | 08:00 | 09:00 | 01:00 | |
| 10: '2024 DS2 PM Base' | 17:00 | 18:00 | 01:00 | |
| 11: '2024 DS2 AM Base + Dev' | 08:00 | 09:00 | 01:00 | |
| 12: '2024 DS2 PM Base + Dev' | 17:00 | 18:00 | 01:00 | |

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 726 | 2029:1786 | 1595 | 45.5% | 1452 | 0 | 0 | 0.4 | 2.1 | 0.0 | 0.4 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 469 | 2029 | 1063 | 44.1% | 469 | 0 | 0 | 0.4 | 3.0 | 0.0 | 0.4 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 219 | 1894 | 1170 | 18.7% | 219 | 0 | 0 | 0.1 | 1.9 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 760 | 1965 | 1965 | 38.7% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 704 | 2029 | 1186 | 59.4% | 704 | 0 | 0 | 1.6 | 8.2 | 12.6 | 13.3 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 59 | 1747 | 548 | 10.8% | 59 | 0 | 0 | 0.1 | 3.7 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 216 | 2077 | 2077 | 10.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 484 | 2077 | 2077 | 23.3% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 469 | 2077 | 2077 | 22.6% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 167 | 2005 | 2005 | 8.3% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 819 | 1965 | 1965 | 41.7% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 655 | 2077 | 2077 | 31.5% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 216 | 2005 | 2005 | 10.8% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1474 | 4070 | 4070 | 36.2% | - | - | - | 0.3 | 0.7 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 488 | 1965 | 1965 | 24.8% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 517 | 2105 | 2105 | 24.6% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 488 | 1915 | 985 | 49.6% | - | - | - | 2.0 | 14.7 | 6.1 | 6.6 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 517 | 2055:1827 | 906 | 57.0% | - | - | - | 3.1 | 21.5 | 3.6 | 4.3 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 904 | 2055:1702 | 1081 | 83.7% | - | - | - | 5.9 | 23.5 | 13.6 | 16.1 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 698 | 2055 | 1057 | 66.0% | - | - | - | 3.4 | 17.5 | 9.9 | 10.9 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 22 | 1809 | 207 | 10.6% | - | - | - | 0.2 | 37.6 | 0.4 | 0.4 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 489 | 1965 | 1544 | 31.7% | - | - | - | 0.3 | 1.9 | 0.1 | 0.3 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 338 | 2105 | 1654 | 20.4% | - | - | - | 0.1 | 1.5 | 0.1 | 0.2 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 760 | 1915 | 1915 | 39.7% | - | - | - | 0.3 | 1.6 | 0.2 | 0.5 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 704 | 2055 | 2055 | 34.3% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%):

7.6

Total Delay for Signalled Lanes (pcuHr):

15.00

Cycle Time (s): 70

PRC Over All Lanes (%):

7.6

Total Delay Over All Lanes(pcuHr):

20.17

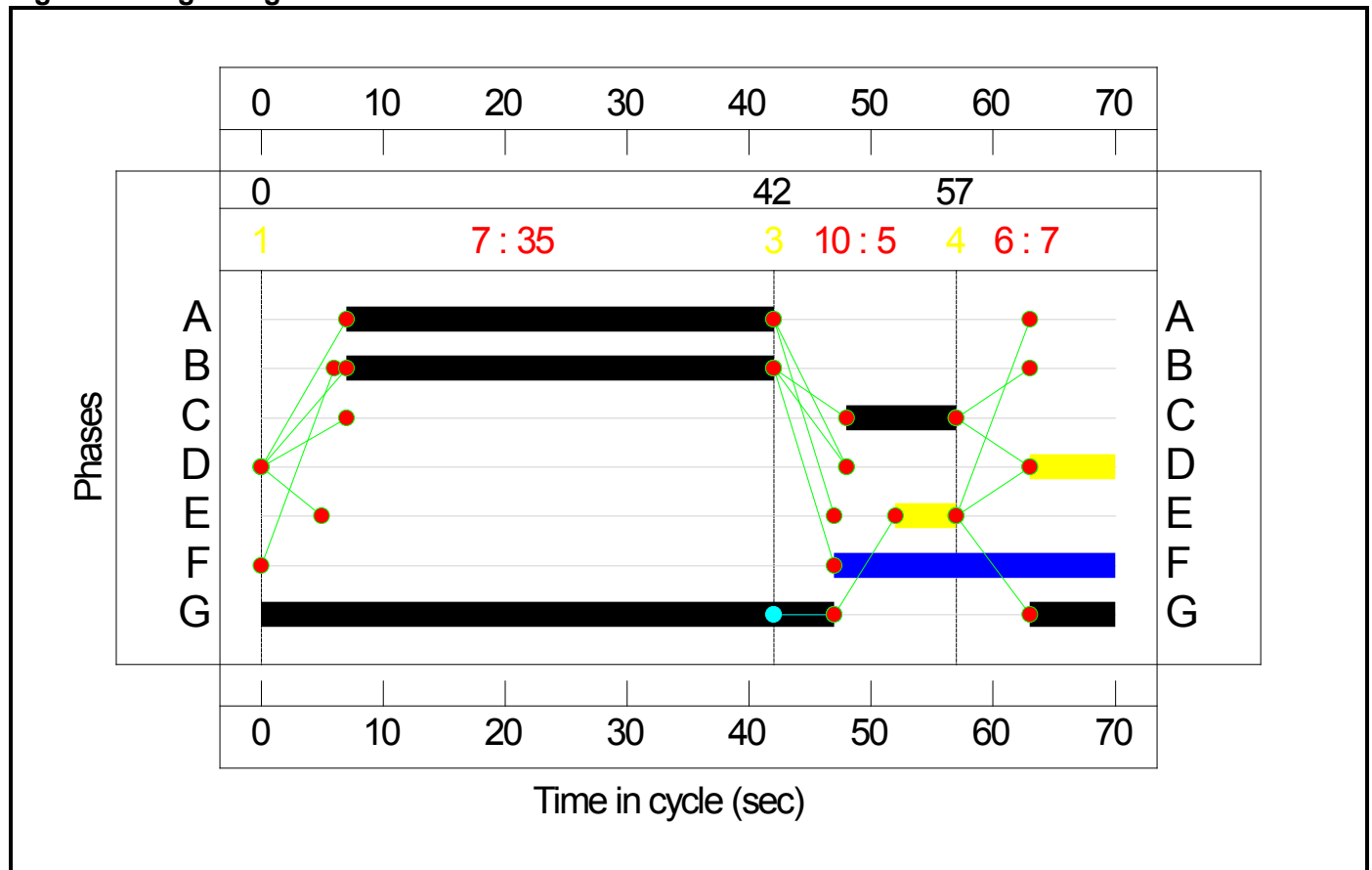
Scenario 2: '2019 DS1 PM Base' (FG2: '2019 DS1 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 753 | 151 | 10 | 914 |
| | B | 1144 | 0 | 254 | 69 | 1467 |
| | C | 116 | 269 | 0 | 7 | 392 |
| | D | 69 | 124 | 23 | 0 | 216 |
| | Tot. | 1329 | 1146 | 428 | 86 | 2989 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 852 | 2029:1786 | 1550 | 55.0% | 1704 | 0 | 0 | 0.6 | 2.6 | 0.0 | 0.6 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 615 | 2029 | 1088 | 56.5% | 615 | 0 | 0 | 0.6 | 3.8 | 0.0 | 0.6 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 392 | 1894 | 982 | 39.9% | 392 | 0 | 0 | 0.3 | 3.0 | 0.0 | 0.3 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 511 | 1965 | 1965 | 26.0% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 416 | 2029 | 1130 | 36.8% | 416 | 0 | 0 | 0.4 | 3.2 | 4.5 | 4.8 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 124 | 1747 | 603 | 20.6% | 124 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 174 | 2077 | 2077 | 8.4% | - | - | - | 0.0 | 0.9 | 0.0 | 0.0 |
| J1:6/1 | Ahead | U | - | | - | - | - | 598 | 2077 | 2077 | 28.8% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 615 | 2077 | 2077 | 29.6% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:7/1 | Right | U | - | | - | - | - | 269 | 2005 | 2005 | 13.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 635 | 1965 | 1965 | 32.3% | - | - | - | 0.2 | 1.4 | 0.0 | 0.2 |
| J1:8/2 | Ahead | U | - | | - | - | - | 511 | 2077 | 2077 | 24.6% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 174 | 2005 | 2005 | 8.7% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1146 | 4070 | 4070 | 28.2% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 615 | 1965 | 1965 | 31.3% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 721 | 2105 | 2105 | 34.3% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|-----|-----|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 615 | 1915 | 985 | 62.4% | - | - | - | 2.9 | 17.0 | 8.5 | 9.4 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 721 | 2055:1827 | 1173 | 61.5% | - | - | - | 3.5 | 17.6 | 8.8 | 9.6 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 521 | 2055:1702 | 1056 | 49.3% | - | - | - | 2.1 | 14.3 | 6.4 | 6.9 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 393 | 2055 | 1057 | 37.2% | - | - | - | 1.4 | 12.9 | 4.6 | 4.9 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 92 | 1811 | 207 | 44.5% | - | - | - | 1.1 | 44.5 | 1.7 | 2.1 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 626 | 1965 | 1544 | 40.5% | - | - | - | 0.4 | 2.1 | 0.1 | 0.5 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 703 | 2105 | 1654 | 42.5% | - | - | - | 0.4 | 2.0 | 0.1 | 0.5 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 511 | 1915 | 1915 | 26.7% | - | - | - | 0.2 | 1.4 | 0.2 | 0.4 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 416 | 2055 | 2055 | 20.2% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 44.1
 PRC Over All Lanes (%): 44.1

Total Delay for Signalled Lanes (pcuHr): 11.81
 Total Delay Over All Lanes(pcuHr): 16.07

Cycle Time (s): 70

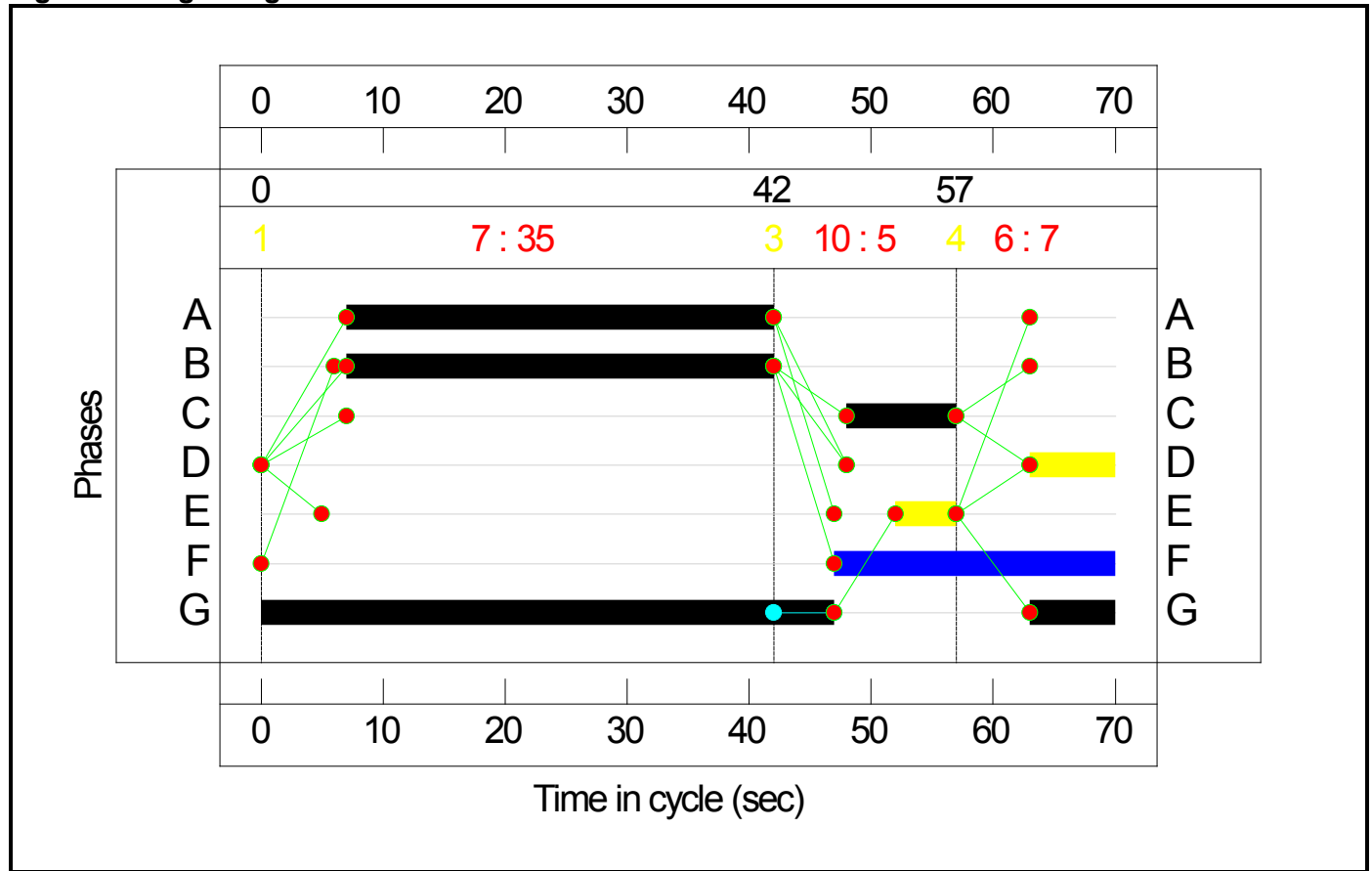
Scenario 3: '2024 DS1 AM Base' (FG3: '2024 DS1 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 1317 | 222 | 152 | 1691 |
| | B | 939 | 0 | 250 | 190 | 1379 |
| | C | 51 | 173 | 0 | 11 | 235 |
| | D | 20 | 61 | 6 | 0 | 87 |
| | Tot. | 1010 | 1551 | 478 | 353 | 3392 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 773 | 2029:1786 | 1561 | 49.5% | 1546 | 0 | 0 | 0.5 | 2.3 | 0.0 | 0.5 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 606 | 2029 | 1056 | 57.4% | 606 | 0 | 0 | 0.7 | 4.0 | 0.0 | 0.7 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 235 | 1894 | 1043 | 22.5% | 235 | 0 | 0 | 0.1 | 2.2 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 789 | 1965 | 1965 | 40.2% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 756 | 2029 | 1183 | 63.9% | 756 | 0 | 0 | 2.0 | 9.7 | 13.7 | 14.6 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 61 | 1747 | 541 | 11.3% | 61 | 0 | 0 | 0.1 | 3.7 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 228 | 2077 | 2077 | 11.0% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 523 | 2077 | 2077 | 25.2% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 606 | 2077 | 2077 | 29.2% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:7/1 | Right | U | - | | - | - | - | 173 | 2005 | 2005 | 8.6% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 850 | 1965 | 1965 | 43.3% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 701 | 2077 | 2077 | 33.8% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:8/3 | Right | U | - | | - | - | - | 228 | 2005 | 2005 | 11.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1551 | 4070 | 4070 | 38.1% | - | - | - | 0.3 | 0.7 | 0.0 | 0.2 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 524 | 1965 | 1965 | 26.7% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 667 | 2105 | 2105 | 31.7% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 524 | 1915 | 985 | 53.2% | - | - | - | 2.2 | 15.3 | 6.7 | 7.3 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 667 | 2055:1827 | 1254 | 53.2% | - | - | - | 3.6 | 19.2 | 5.6 | 6.1 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 941 | 2055:1702 | 1081 | 87.0% | - | - | - | 6.9 | 26.3 | 14.7 | 17.9 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 750 | 2055 | 1057 | 71.0% | - | - | - | 3.9 | 18.8 | 11.0 | 12.3 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 26 | 1813 | 207 | 12.5% | - | - | - | 0.3 | 37.8 | 0.4 | 0.5 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 525 | 1965 | 1544 | 34.0% | - | - | - | 0.3 | 1.9 | 0.1 | 0.4 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 485 | 2105 | 1654 | 29.3% | - | - | - | 0.2 | 1.7 | 0.1 | 0.3 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 789 | 1915 | 1915 | 41.2% | - | - | - | 0.4 | 1.7 | 0.2 | 0.6 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 756 | 2055 | 2055 | 36.8% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 3.4
 PRC Over All Lanes (%): 3.4

Total Delay for Signalled Lanes (pcuHr): 17.37
 Total Delay Over All Lanes(pcuHr): 23.68

Cycle Time (s): 70

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 953 | 2029:1786 | 1493 | 63.8% | 1906 | 0 | 0 | 0.9 | 3.3 | 0.0 | 0.9 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 700 | 2029 | 1081 | 64.8% | 700 | 0 | 0 | 0.9 | 4.7 | 0.0 | 0.9 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 419 | 1894 | 855 | 49.0% | 419 | 0 | 0 | 0.5 | 4.1 | 0.0 | 0.5 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 550 | 1965 | 1965 | 28.0% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 444 | 2029 | 1125 | 39.5% | 444 | 0 | 0 | 0.4 | 3.5 | 5.1 | 5.4 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 128 | 1747 | 594 | 21.6% | 128 | 0 | 0 | 0.1 | 3.9 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 186 | 2077 | 2077 | 9.0% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:6/1 | Ahead | U | - | | - | - | - | 690 | 2077 | 2077 | 33.2% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 700 | 2077 | 2077 | 33.7% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:7/1 | Right | U | - | | - | - | - | 278 | 2005 | 2005 | 13.9% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 678 | 1965 | 1965 | 34.5% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:8/2 | Ahead | U | - | | - | - | - | 536 | 2077 | 2077 | 25.8% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 186 | 2005 | 2005 | 9.3% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1214 | 4070 | 4070 | 29.8% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 706 | 1965 | 1965 | 35.9% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 825 | 2105 | 2105 | 39.2% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 706 | 1915 | 985 | 71.7% | - | - | - | 3.8 | 19.5 | 10.4 | 11.6 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 825 | 2055:1827 | 1162 | 71.0% | - | - | - | 4.5 | 19.6 | 11.0 | 12.2 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 561 | 2055:1702 | 1056 | 53.1% | - | - | - | 2.3 | 14.9 | 7.1 | 7.6 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 420 | 2055 | 1057 | 39.7% | - | - | - | 1.5 | 13.2 | 4.9 | 5.2 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 104 | 1813 | 207 | 50.2% | - | - | - | 1.3 | 46.4 | 1.9 | 2.4 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 732 | 1965 | 1544 | 47.4% | - | - | - | 0.5 | 2.4 | 0.2 | 0.6 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 801 | 2105 | 1654 | 48.4% | - | - | - | 0.5 | 2.3 | 0.2 | 0.6 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 550 | 1915 | 1915 | 28.7% | - | - | - | 0.2 | 1.5 | 0.2 | 0.4 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 444 | 2055 | 2055 | 21.6% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 25.5
 PRC Over All Lanes (%): 25.5

Total Delay for Signalled Lanes (pcuHr): 14.49
 Total Delay Over All Lanes(pcuHr): 19.83

Cycle Time (s): 70

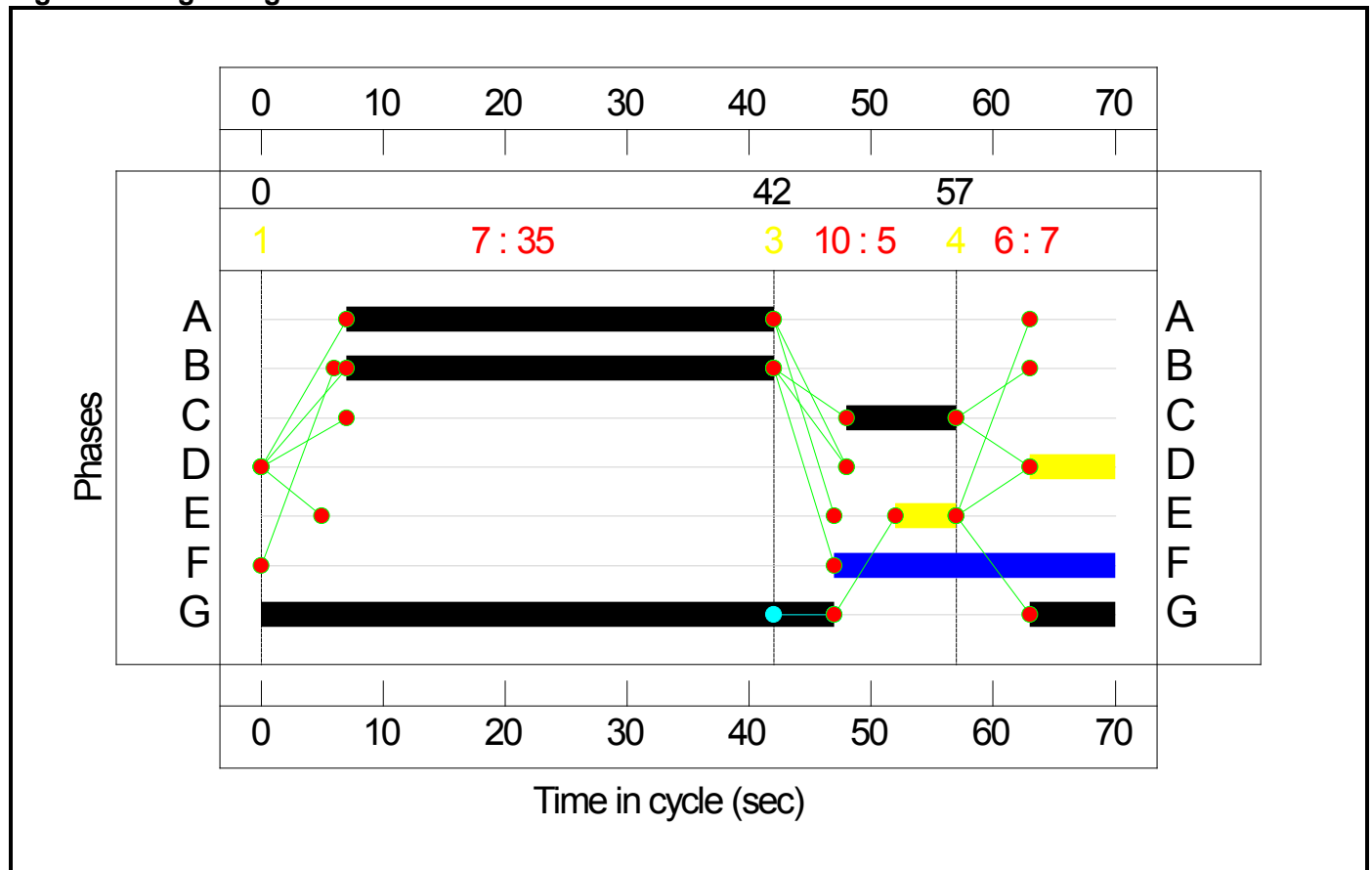
Scenario 5: '2024 DS1 AM Base + Development' (FG5: '2024 DS1 AM Base+Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 1334 | 225 | 154 | 1713 |
| | B | 957 | 0 | 250 | 190 | 1397 |
| | C | 52 | 173 | 0 | 11 | 236 |
| | D | 20 | 61 | 6 | 0 | 87 |
| | Tot. | 1029 | 1568 | 481 | 355 | 3433 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 783 | 2029:1786 | 1549 | 50.5% | 1566 | 0 | 0 | 0.5 | 2.3 | 0.0 | 0.5 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 614 | 2029 | 1055 | 58.2% | 614 | 0 | 0 | 0.7 | 4.1 | 0.0 | 0.7 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 236 | 1894 | 1030 | 22.9% | 236 | 0 | 0 | 0.1 | 2.3 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 796 | 1965 | 1965 | 40.5% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 769 | 2029 | 1183 | 65.0% | 769 | 0 | 0 | 2.2 | 10.1 | 14.0 | 14.9 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 61 | 1747 | 540 | 11.3% | 61 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 231 | 2077 | 2077 | 11.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 533 | 2077 | 2077 | 25.7% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 614 | 2077 | 2077 | 29.6% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:7/1 | Right | U | - | | - | - | - | 173 | 2005 | 2005 | 8.6% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 857 | 1965 | 1965 | 43.6% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 711 | 2077 | 2077 | 34.2% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:8/3 | Right | U | - | | - | - | - | 231 | 2005 | 2005 | 11.5% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1568 | 4070 | 4070 | 38.5% | - | - | - | 0.3 | 0.7 | 0.0 | 0.2 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 534 | 1965 | 1965 | 27.2% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 676 | 2105 | 2105 | 32.1% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 534 | 1915 | 985 | 54.2% | - | - | - | 2.3 | 15.4 | 7.0 | 7.6 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 676 | 2055:1827 | 1255 | 53.9% | - | - | - | 3.6 | 19.2 | 5.8 | 6.4 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 950 | 2055:1702 | 1081 | 87.9% | - | - | - | 7.2 | 27.2 | 15.1 | 18.5 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 763 | 2055 | 1057 | 72.2% | - | - | - | 4.1 | 19.2 | 11.4 | 12.7 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 26 | 1813 | 207 | 12.5% | - | - | - | 0.3 | 37.8 | 0.4 | 0.5 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 535 | 1965 | 1544 | 34.7% | - | - | - | 0.3 | 1.9 | 0.1 | 0.4 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 494 | 2105 | 1654 | 29.9% | - | - | - | 0.2 | 1.7 | 0.1 | 0.3 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 796 | 1915 | 1915 | 41.6% | - | - | - | 0.4 | 1.7 | 0.2 | 0.6 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 769 | 2055 | 2055 | 37.4% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.4
 PRC Over All Lanes (%): 2.4

Total Delay for Signalled Lanes (pcuHr): 17.94
 Total Delay Over All Lanes(pcuHr): 24.47

Cycle Time (s): 70

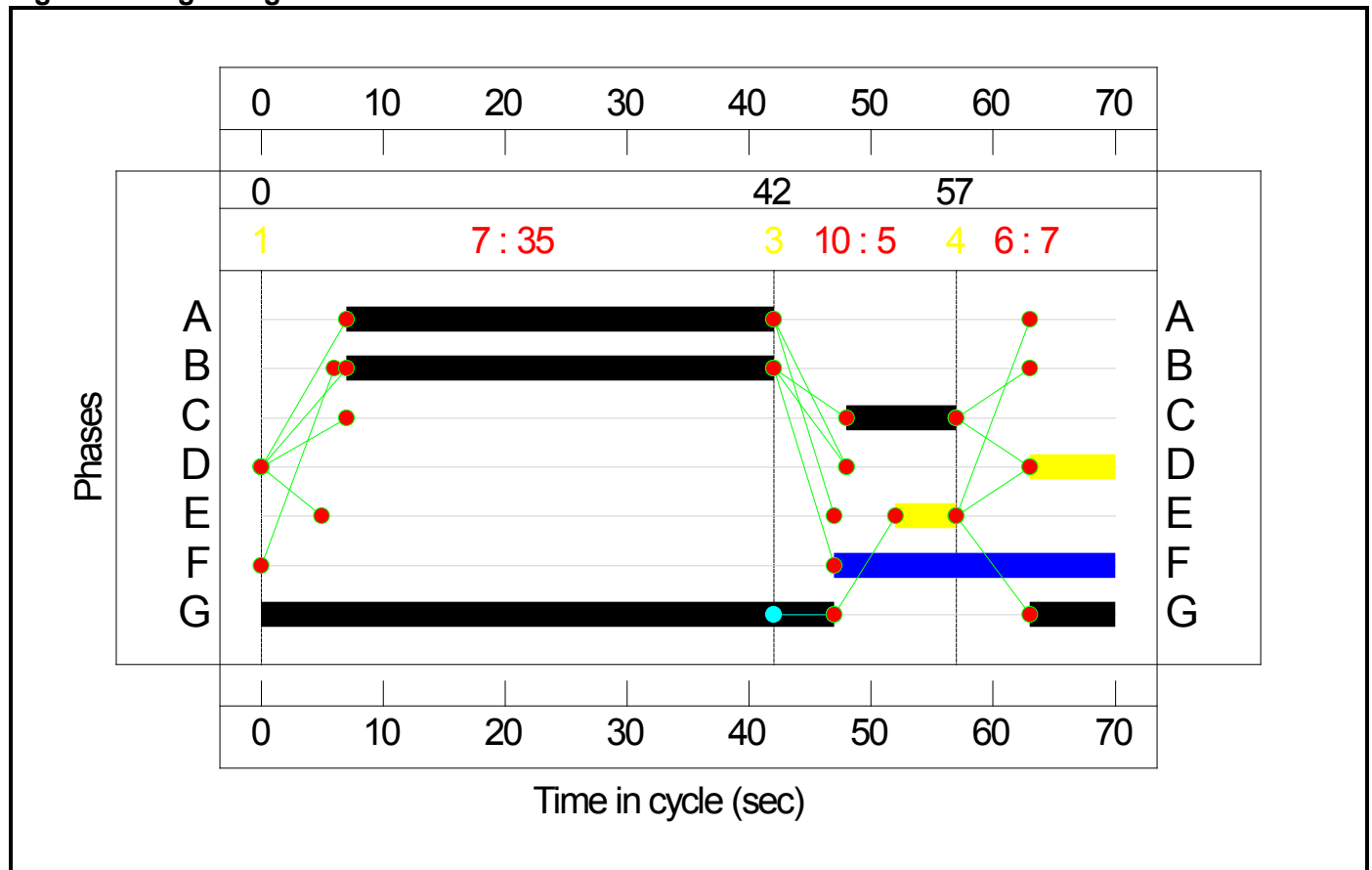
Scenario 6: '2024 DS1 PM Base + Development' (FG6: '2024 DS1 PM Base+Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 829 | 166 | 11 | 1006 |
| | B | 1342 | 0 | 263 | 71 | 1676 |
| | C | 136 | 278 | 0 | 7 | 421 |
| | D | 81 | 128 | 24 | 0 | 233 |
| | Tot. | 1559 | 1235 | 453 | 89 | 3336 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 973 | 2029:1786 | 1478 | 65.8% | 1946 | 0 | 0 | 1.0 | 3.6 | 0.0 | 1.0 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 703 | 2029 | 1079 | 65.2% | 703 | 0 | 0 | 0.9 | 4.8 | 0.0 | 0.9 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 421 | 1894 | 838 | 50.2% | 421 | 0 | 0 | 0.5 | 4.3 | 0.0 | 0.5 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 564 | 1965 | 1965 | 28.7% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 455 | 2029 | 1125 | 40.4% | 455 | 0 | 0 | 0.5 | 3.7 | 5.4 | 5.7 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 128 | 1747 | 591 | 21.7% | 128 | 0 | 0 | 0.1 | 3.9 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 190 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 710 | 2077 | 2077 | 34.2% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 703 | 2077 | 2077 | 33.8% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:7/1 | Right | U | - | | - | - | - | 278 | 2005 | 2005 | 13.9% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 692 | 1965 | 1965 | 35.2% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:8/2 | Ahead | U | - | | - | - | - | 543 | 2077 | 2077 | 26.1% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 190 | 2005 | 2005 | 9.5% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1235 | 4070 | 4070 | 30.3% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 717 | 1965 | 1965 | 36.5% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 839 | 2105 | 2105 | 39.9% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 717 | 1915 | 985 | 72.8% | - | - | - | 4.0 | 19.9 | 10.8 | 12.1 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 839 | 2055:1827 | 1161 | 72.3% | - | - | - | 4.6 | 19.9 | 11.2 | 12.5 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 575 | 2055:1702 | 1056 | 54.4% | - | - | - | 2.4 | 15.1 | 7.4 | 8.0 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 431 | 2055 | 1057 | 40.8% | - | - | - | 1.6 | 13.3 | 5.1 | 5.5 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 105 | 1813 | 207 | 50.7% | - | - | - | 1.4 | 46.6 | 1.9 | 2.4 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 745 | 1965 | 1544 | 48.3% | - | - | - | 0.5 | 2.4 | 0.2 | 0.6 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 814 | 2105 | 1654 | 49.2% | - | - | - | 0.5 | 2.3 | 0.2 | 0.7 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 564 | 1915 | 1915 | 29.5% | - | - | - | 0.2 | 1.5 | 0.3 | 0.5 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 455 | 2055 | 2055 | 22.1% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 23.6
 PRC Over All Lanes (%): 23.6

Total Delay for Signalled Lanes (pcuHr): 14.98
 Total Delay Over All Lanes(pcuHr): 20.54

Cycle Time (s): 70

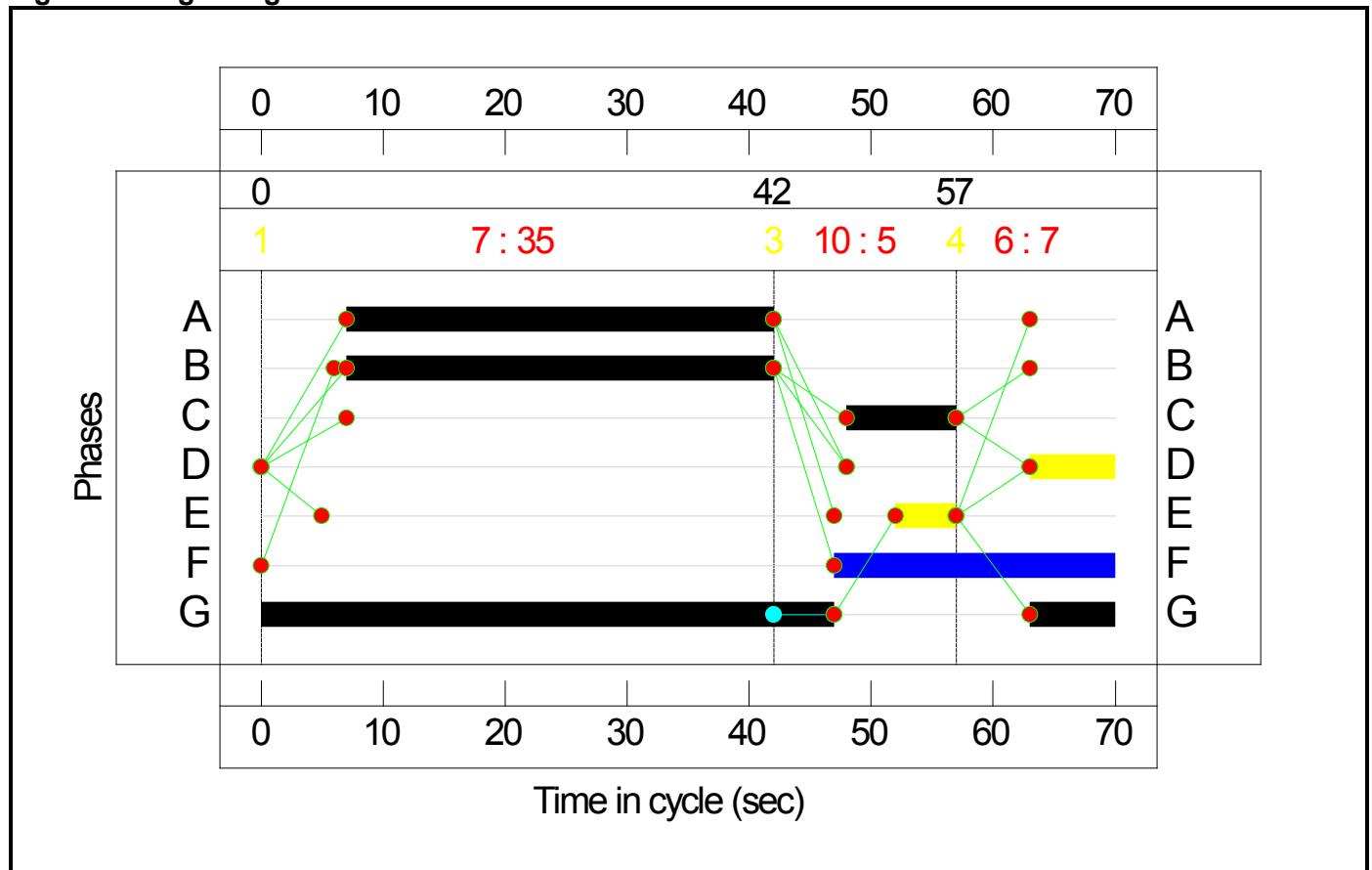
Scenario 7: '2019 DS2 AM Base' (FG7: '2019 DS2 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 1267 | 210 | 144 | 1621 |
| | B | 503 | 0 | 242 | 184 | 929 |
| | C | 42 | 167 | 0 | 10 | 219 |
| | D | 16 | 59 | 6 | 0 | 81 |
| | Tot. | 561 | 1493 | 458 | 338 | 2850 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 740 | 2029:1786 | 1580 | 46.8% | 1480 | 0 | 0 | 0.4 | 2.1 | 0.0 | 0.4 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 189 | 2029 | 1063 | 17.8% | 189 | 0 | 0 | 0.1 | 2.1 | 0.0 | 0.1 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 219 | 1894 | 1361 | 16.1% | 219 | 0 | 0 | 0.1 | 1.6 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 768 | 1965 | 1965 | 39.1% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 715 | 2029 | 1186 | 60.3% | 715 | 0 | 0 | 1.7 | 8.5 | 12.8 | 13.6 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 59 | 1747 | 546 | 10.8% | 59 | 0 | 0 | 0.1 | 3.7 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 216 | 2077 | 2077 | 10.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 498 | 2077 | 2077 | 24.0% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 189 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 167 | 2005 | 2005 | 8.3% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 827 | 1965 | 1965 | 42.1% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 666 | 2077 | 2077 | 32.1% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 216 | 2005 | 2005 | 10.8% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1493 | 4070 | 4070 | 36.7% | - | - | - | 0.3 | 0.7 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 540 | 1965 | 1965 | 27.5% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 199 | 2105 | 2105 | 9.5% | - | - | - | 0.1 | 0.9 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 540 | 1915 | 985 | 54.8% | - | - | - | 2.3 | 15.5 | 7.1 | 7.7 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 199 | 2055:1827 | 268 | 74.3% | - | - | - | 3.0 | 53.4 | 3.6 | 5.0 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 912 | 2055:1702 | 1080 | 84.4% | - | - | - | 6.1 | 24.1 | 14.0 | 16.6 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 709 | 2055 | 1057 | 67.1% | - | - | - | 3.5 | 17.8 | 10.0 | 11.1 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 22 | 1809 | 207 | 10.6% | - | - | - | 0.2 | 37.6 | 0.4 | 0.4 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 540 | 1965 | 1544 | 35.0% | - | - | - | 0.3 | 2.0 | 0.1 | 0.4 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 21 | 2105 | 1654 | 1.3% | - | - | - | 0.0 | 1.1 | 0.0 | 0.0 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 768 | 1915 | 1915 | 40.1% | - | - | - | 0.3 | 1.6 | 0.2 | 0.5 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 715 | 2055 | 2055 | 34.8% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%):

6.6

Total Delay for Signalled Lanes (pcuHr):

15.41

Cycle Time (s): 70

PRC Over All Lanes (%):

6.6

Total Delay Over All Lanes(pcuHr):

20.24

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 622 | 2029:1786 | 1873 | 33.2% | 1244 | 0 | 0 | 0.2 | 1.4 | 0.0 | 0.2 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 356 | 2029 | 1088 | 32.7% | 356 | 0 | 0 | 0.2 | 2.5 | 0.0 | 0.2 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 392 | 1894 | 1335 | 29.4% | 392 | 0 | 0 | 0.2 | 1.9 | 0.0 | 0.2 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 503 | 1965 | 1965 | 25.6% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 410 | 2029 | 1130 | 36.3% | 410 | 0 | 0 | 0.4 | 3.1 | 4.2 | 4.5 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 124 | 1747 | 604 | 20.5% | 124 | 0 | 0 | 0.1 | 3.7 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 174 | 2077 | 2077 | 8.4% | - | - | - | 0.0 | 0.9 | 0.0 | 0.0 |
| J1:6/1 | Ahead | U | - | | - | - | - | 368 | 2077 | 2077 | 17.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 356 | 2077 | 2077 | 17.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 269 | 2005 | 2005 | 13.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 627 | 1965 | 1965 | 31.9% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:8/2 | Ahead | U | - | | - | - | - | 505 | 2077 | 2077 | 24.3% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 174 | 2005 | 2005 | 8.7% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1132 | 4070 | 4070 | 27.8% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 387 | 1965 | 1965 | 19.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 460 | 2105 | 2105 | 21.9% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|-----|-----|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 387 | 1915 | 985 | 39.3% | - | - | - | 1.4 | 13.4 | 4.5 | 4.8 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 460 | 2055:1827 | 1236 | 37.2% | - | - | - | 1.9 | 15.2 | 4.4 | 4.7 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 513 | 2055:1702 | 1056 | 48.6% | - | - | - | 2.0 | 14.2 | 6.3 | 6.8 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 387 | 2055 | 1057 | 36.6% | - | - | - | 1.4 | 12.9 | 4.4 | 4.7 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 92 | 1811 | 207 | 44.5% | - | - | - | 1.1 | 44.5 | 1.7 | 2.1 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 390 | 1965 | 1544 | 25.3% | - | - | - | 0.2 | 1.7 | 0.1 | 0.3 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 450 | 2105 | 1654 | 27.2% | - | - | - | 0.2 | 1.6 | 0.1 | 0.3 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 503 | 1915 | 1915 | 26.3% | - | - | - | 0.2 | 1.4 | 0.2 | 0.4 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 410 | 2055 | 2055 | 20.0% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%):

85.3

PRC Over All Lanes (%):

85.3

Total Delay for Signalled Lanes (pcuHr):

8.32

Total Delay Over All Lanes(pcuHr):

11.22

Cycle Time (s): 70

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 908 | 2029:1786 | 1458 | 62.3% | 1816 | 0 | 0 | 0.8 | 3.3 | 0.0 | 0.8 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 190 | 2029 | 1056 | 18.0% | 190 | 0 | 0 | 0.1 | 2.1 | 0.0 | 0.1 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 239 | 1894 | 1245 | 19.2% | 239 | 0 | 0 | 0.1 | 1.8 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 796 | 1965 | 1965 | 40.5% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 769 | 2029 | 1183 | 65.0% | 769 | 0 | 0 | 2.2 | 10.1 | 14.0 | 14.9 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 61 | 1747 | 540 | 11.3% | 61 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 228 | 2077 | 2077 | 11.0% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 658 | 2077 | 2077 | 31.7% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 190 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 173 | 2005 | 2005 | 8.6% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 857 | 1965 | 1965 | 43.6% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 714 | 2077 | 2077 | 34.4% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:8/3 | Right | U | - | | - | - | - | 228 | 2005 | 2005 | 11.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1571 | 4070 | 4070 | 38.6% | - | - | - | 0.3 | 0.7 | 0.0 | 0.2 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 712 | 1965 | 1965 | 36.2% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 202 | 2105 | 2105 | 9.6% | - | - | - | 0.1 | 0.9 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 712 | 1915 | 985 | 72.3% | - | - | - | 3.9 | 19.7 | 10.7 | 12.0 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 202 | 2055:1827 | 262 | 77.0% | - | - | - | 3.2 | 57.2 | 3.7 | 5.3 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 948 | 2055:1702 | 1081 | 87.7% | - | - | - | 7.1 | 27.0 | 15.1 | 18.5 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 763 | 2055 | 1057 | 72.2% | - | - | - | 4.1 | 19.2 | 11.4 | 12.7 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 27 | 1814 | 207 | 13.0% | - | - | - | 0.3 | 37.9 | 0.5 | 0.5 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 713 | 1965 | 1544 | 46.2% | - | - | - | 0.5 | 2.3 | 0.2 | 0.6 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 21 | 2105 | 1654 | 1.3% | - | - | - | 0.0 | 1.1 | 0.0 | 0.0 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 796 | 1915 | 1915 | 41.6% | - | - | - | 0.4 | 1.7 | 0.2 | 0.6 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 769 | 2055 | 2055 | 37.4% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.6
 PRC Over All Lanes (%): 2.6

Total Delay for Signalled Lanes (pcuHr): 19.04
 Total Delay Over All Lanes(pcuHr): 25.08

Cycle Time (s): 70

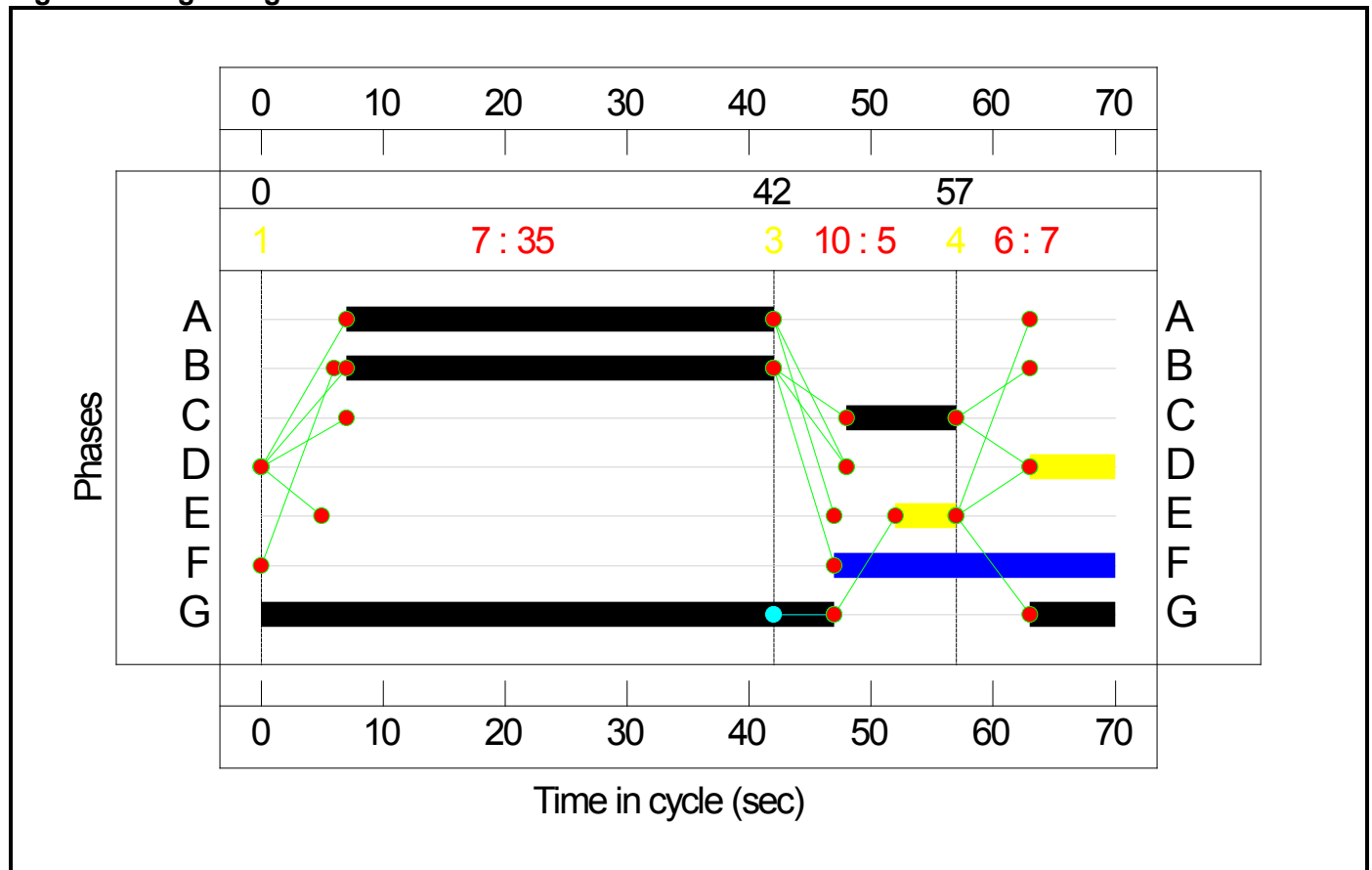
Scenario 10: '2024 DS2 PM Base' (FG10: '2024 DS2 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | Destination | | | | | |
|--------|-------------|------|------|-----|----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 794 | 162 | 11 | 967 |
| | B | 799 | 0 | 263 | 71 | 1133 |
| | C | 142 | 278 | 0 | 7 | 427 |
| | D | 84 | 128 | 24 | 0 | 236 |
| | Tot. | 1025 | 1200 | 449 | 89 | 2763 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 704 | 2029:1786 | 1777 | 39.6% | 1408 | 0 | 0 | 0.3 | 1.7 | 0.0 | 0.3 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 429 | 2029 | 1081 | 39.7% | 429 | 0 | 0 | 0.3 | 2.8 | 0.0 | 0.3 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 427 | 1894 | 1229 | 34.7% | 427 | 0 | 0 | 0.3 | 2.2 | 0.0 | 0.3 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 542 | 1965 | 1965 | 27.6% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 438 | 2029 | 1125 | 38.9% | 438 | 0 | 0 | 0.4 | 3.4 | 5.0 | 5.3 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 128 | 1747 | 596 | 21.5% | 128 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 186 | 2077 | 2077 | 9.0% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:6/1 | Ahead | U | - | | - | - | - | 441 | 2077 | 2077 | 21.2% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 429 | 2077 | 2077 | 20.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 278 | 2005 | 2005 | 13.9% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 670 | 1965 | 1965 | 34.1% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:8/2 | Ahead | U | - | | - | - | - | 530 | 2077 | 2077 | 25.5% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 186 | 2005 | 2005 | 9.3% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1200 | 4070 | 4070 | 29.5% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 462 | 1965 | 1965 | 23.5% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 557 | 2105 | 2105 | 26.5% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|-----|-----|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 462 | 1915 | 985 | 46.9% | - | - | - | 1.8 | 14.3 | 5.6 | 6.1 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 557 | 2055:1827 | 1208 | 46.1% | - | - | - | 2.4 | 15.8 | 5.9 | 6.3 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 553 | 2055:1702 | 1057 | 52.3% | - | - | - | 2.3 | 14.8 | 7.0 | 7.5 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 414 | 2055 | 1057 | 39.2% | - | - | - | 1.5 | 13.1 | 4.8 | 5.2 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 108 | 1814 | 207 | 52.1% | - | - | - | 1.4 | 47.1 | 2.0 | 2.5 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 468 | 1965 | 1544 | 30.3% | - | - | - | 0.2 | 1.8 | 0.1 | 0.3 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 557 | 2105 | 1654 | 33.7% | - | - | - | 0.3 | 1.8 | 0.1 | 0.4 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 542 | 1915 | 1915 | 28.3% | - | - | - | 0.2 | 1.5 | 0.2 | 0.4 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 438 | 2055 | 2055 | 21.3% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 71.9
PRC Over All Lanes (%): 71.9

Total Delay for Signalled Lanes (pcuHr): 9.99
Total Delay Over All Lanes(pcuHr): 13.43

Cycle Time (s): 70

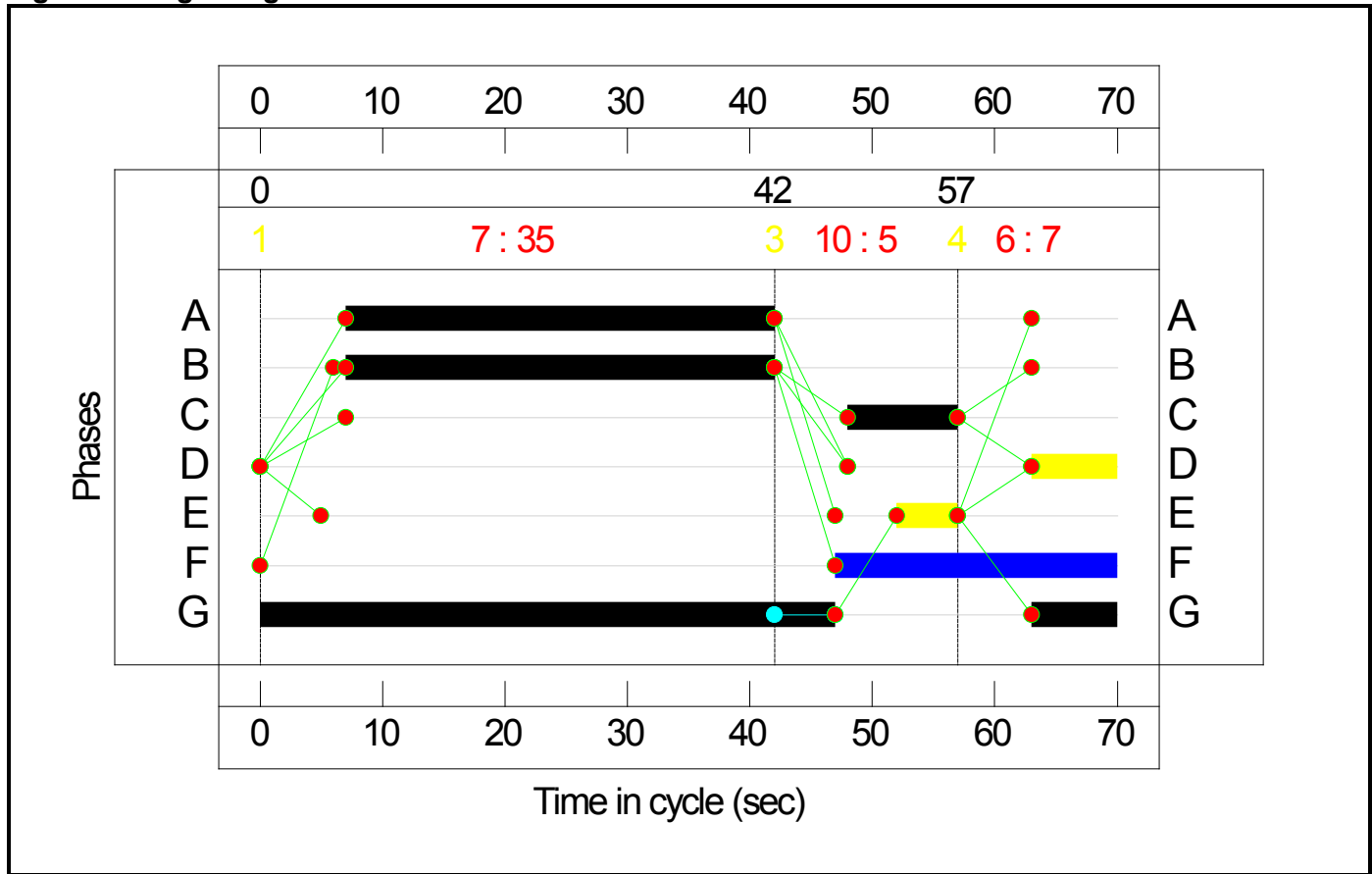
Scenario 11: '2024 DS2 AM Base + Development' (FG11: '2024 DS2 AM Base + Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 1350 | 224 | 154 | 1728 |
| | B | 677 | 0 | 250 | 190 | 1117 |
| | C | 57 | 173 | 0 | 11 | 241 |
| | D | 22 | 61 | 6 | 0 | 89 |
| | Tot. | 756 | 1584 | 480 | 355 | 3175 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 927 | 2029:1786 | 1445 | 64.2% | 1854 | 0 | 0 | 0.9 | 3.5 | 0.0 | 0.9 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 190 | 2029 | 1055 | 18.0% | 190 | 0 | 0 | 0.1 | 2.1 | 0.0 | 0.1 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 241 | 1894 | 1232 | 19.6% | 241 | 0 | 0 | 0.1 | 1.8 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 801 | 1965 | 1965 | 40.8% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 779 | 2029 | 1183 | 65.9% | 779 | 0 | 0 | 2.3 | 10.4 | 14.2 | 15.1 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 61 | 1747 | 539 | 11.3% | 61 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 230 | 2077 | 2077 | 11.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 677 | 2077 | 2077 | 32.6% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 190 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 173 | 2005 | 2005 | 8.6% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 862 | 1965 | 1965 | 43.9% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 722 | 2077 | 2077 | 34.8% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:8/3 | Right | U | - | | - | - | - | 230 | 2005 | 2005 | 11.5% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1584 | 4070 | 4070 | 38.9% | - | - | - | 0.3 | 0.7 | 0.0 | 0.2 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 734 | 1965 | 1965 | 37.4% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 201 | 2105 | 2105 | 9.5% | - | - | - | 0.1 | 0.9 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 734 | 1915 | 985 | 74.5% | - | - | - | 4.2 | 20.5 | 11.2 | 12.7 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 201 | 2055:1827 | 261 | 77.0% | - | - | - | 3.2 | 57.4 | 3.7 | 5.3 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 955 | 2055:1702 | 1081 | 88.3% | - | - | - | 7.4 | 27.7 | 15.2 | 18.8 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 773 | 2055 | 1057 | 73.1% | - | - | - | 4.2 | 19.5 | 11.6 | 12.9 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 28 | 1814 | 207 | 13.5% | - | - | - | 0.3 | 37.9 | 0.5 | 0.6 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 735 | 1965 | 1544 | 47.6% | - | - | - | 0.5 | 2.4 | 0.2 | 0.6 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 21 | 2105 | 1654 | 1.3% | - | - | - | 0.0 | 1.1 | 0.0 | 0.0 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 801 | 1915 | 1915 | 41.8% | - | - | - | 0.4 | 1.7 | 0.2 | 0.6 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 779 | 2055 | 2055 | 37.9% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 1.9
 PRC Over All Lanes (%): 1.9

Total Delay for Signalled Lanes (pcuHr): 19.72
 Total Delay Over All Lanes(pcuHr): 25.97

Cycle Time (s): 70

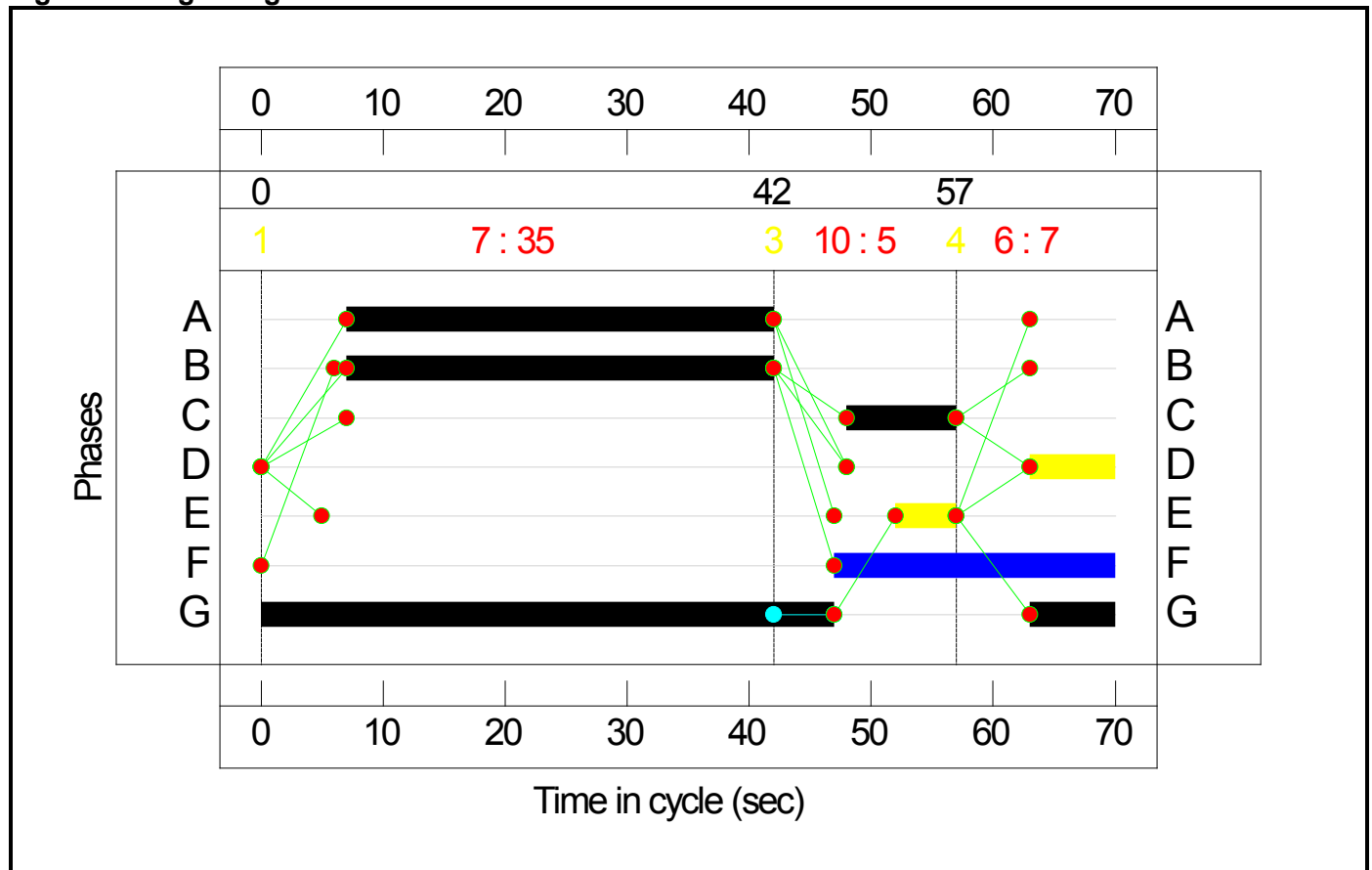
Scenario 12: '2024 DS2 PM Base + Development' (FG12: '2024 DS2 PM Base + Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 814 | 166 | 11 | 991 |
| | B | 822 | 0 | 263 | 71 | 1156 |
| | C | 144 | 278 | 0 | 7 | 429 |
| | D | 86 | 128 | 24 | 0 | 238 |
| | Tot. | 1052 | 1220 | 453 | 89 | 2814 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 715 | 2029:1786 | 1741 | 41.1% | 1430 | 0 | 0 | 0.3 | 1.8 | 0.0 | 0.3 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 441 | 2029 | 1079 | 40.9% | 441 | 0 | 0 | 0.3 | 2.8 | 0.0 | 0.3 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 429 | 1894 | 1213 | 35.4% | 429 | 0 | 0 | 0.3 | 2.3 | 0.0 | 0.3 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 556 | 1965 | 1965 | 28.3% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 448 | 2029 | 1125 | 39.8% | 448 | 0 | 0 | 0.4 | 3.6 | 5.1 | 5.5 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 128 | 1747 | 593 | 21.6% | 128 | 0 | 0 | 0.1 | 3.9 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 190 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 452 | 2077 | 2077 | 21.8% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 441 | 2077 | 2077 | 21.2% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 278 | 2005 | 2005 | 13.9% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 684 | 1965 | 1965 | 34.8% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:8/2 | Ahead | U | - | | - | - | - | 536 | 2077 | 2077 | 25.8% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 190 | 2005 | 2005 | 9.5% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1220 | 4070 | 4070 | 30.0% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 472 | 1965 | 1965 | 24.0% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 572 | 2105 | 2105 | 27.2% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|-----|-----|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 472 | 1915 | 985 | 47.9% | - | - | - | 1.9 | 14.5 | 5.9 | 6.4 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 572 | 2055:1827 | 1204 | 47.5% | - | - | - | 2.5 | 15.9 | 6.0 | 6.5 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 567 | 2055:1702 | 1056 | 53.7% | - | - | - | 2.4 | 15.0 | 7.1 | 7.7 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 424 | 2055 | 1057 | 40.1% | - | - | - | 1.6 | 13.2 | 4.9 | 5.3 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 110 | 1814 | 207 | 53.1% | - | - | - | 1.5 | 47.5 | 2.0 | 2.6 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 478 | 1965 | 1544 | 31.0% | - | - | - | 0.2 | 1.8 | 0.1 | 0.3 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 574 | 2105 | 1654 | 34.7% | - | - | - | 0.3 | 1.8 | 0.1 | 0.4 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 556 | 1915 | 1915 | 29.0% | - | - | - | 0.2 | 1.5 | 0.2 | 0.5 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 448 | 2055 | 2055 | 21.8% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 67.7
 PRC Over All Lanes (%): 67.7

Total Delay for Signalled Lanes (pcuHr): 10.33
 Total Delay Over All Lanes(pcuHr): 13.89

Cycle Time (s): 70

Pegasus Group LinSig Report

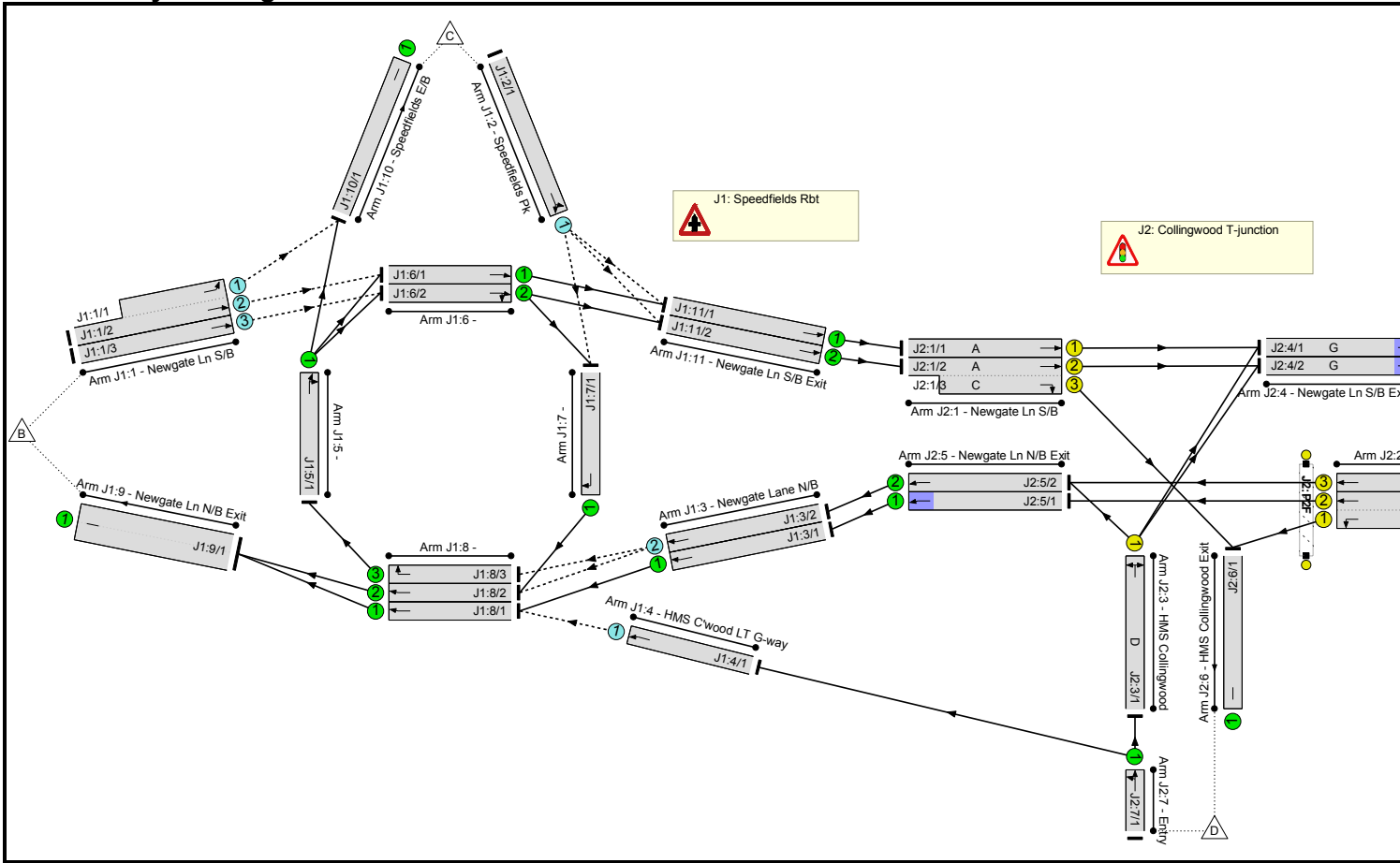
User and Project Details

| | |
|------------------------|--|
| Project: | Collingwood signals & Speedfield Rbt |
| Title: | Land to the West of Newgate Lane, Fareham |
| Location: | |
| Company: | Pegasus Group |
| Address: | |
| Linsig Version: | 3, 2, 39, 0 |

Scenarios

| Number | Scenario Name | Flow Group | Network Control Plan | Time | Cycle Time (s) | PRC (%) | Delay (pcuHr) |
|--------|--------------------------------|------------------------|----------------------|---------------|----------------|---------|---------------|
| 1 | 2019 DS1 AM Base | 2019 DS1 AM Base | Plan 1 | 08:00 - 09:00 | 70 | 7.6 | 20.17 |
| 2 | 2019 DS1 PM Base | 2019 DS1 PM Base | Plan 1 | 17:00 - 18:00 | 70 | 44.1 | 16.07 |
| 3 | 2024 DS1 AM Base | 2024 DS1 AM Base | Plan 1 | 08:00 - 09:00 | 70 | 3.4 | 23.68 |
| 4 | 2024 DS1 PM Base | 2024 DS1 PM Base | Plan 1 | 17:00 - 18:00 | 70 | 25.5 | 19.83 |
| 5 | 2024 DS1 AM Base + Development | 2024 DS1 AM Base+Dev | Plan 1 | 08:00 - 09:00 | 70 | 2.7 | 24.32 |
| 6 | 2024 DS1 PM Base + Development | 2024 DS1 PM Base+Dev | Plan 1 | 17:00 - 18:00 | 70 | 24.1 | 20.43 |
| 7 | 2019 DS2 AM Base | 2019 DS2 AM Base | Plan 1 | 08:00 - 09:00 | 70 | 6.6 | 20.24 |
| 8 | 2019 DS2 PM Base | 2019 DS2 PM Base | Plan 1 | 17:00 - 18:00 | 70 | 85.3 | 11.22 |
| 9 | 2024 DS2 AM Base | 2024 DS2 AM Base | Plan 1 | 08:00 - 09:00 | 70 | 2.6 | 25.08 |
| 10 | 2024 DS2 PM Base | 2024 DS2 PM Base | Plan 1 | 17:00 - 18:00 | 70 | 71.9 | 13.43 |
| 11 | 2024 DS2 AM Base + Development | 2024 DS2 AM Base + Dev | Plan 1 | 08:00 - 09:00 | 70 | 2.1 | 25.80 |
| 12 | 2024 DS2 PM Base + Development | 2024 DS2 PM Base + Dev | Plan 1 | 17:00 - 18:00 | 70 | 68.0 | 13.84 |

Network Layout Diagram



Lane Input Data

| Junction: J1: Speedfields Rbt | | | | | | | | | | | | |
|---------------------------------|-----------|--------|-------------|-----------|-----------------------|---------------|-----------------------------------|----------------|----------|---------------|-----------------|--------------------|
| Lane | Lane Type | Phases | Start Disp. | End Disp. | Physical Length (PCU) | Sat Flow Type | Def User Saturation Flow (PCU/Hr) | Lane Width (m) | Gradient | Nearside Lane | Turns | Turning Radius (m) |
| J1:1/1 (Newgate Ln S/B) | O | | 2 | 3 | 8.7 | Geom | - | 3.50 | 0.00 | Y | Arm J1:10 Left | 15.00 |
| J1:1/2 (Newgate Ln S/B) | O | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | N | Arm J1:6 Ahead | 40.00 |
| J1:1/3 (Newgate Ln S/B) | O | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | N | Arm J1:6 Ahead | 40.00 |
| J1:2/1 (Speedfields Pk) | O | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J1:7 Ahead | 40.00 |
| | | | | | | | | | | | Arm J1:11 Left | 40.00 |
| J1:3/1 (Newgate Lane N/B) | U | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J1:8 Ahead | Inf |
| J1:3/2 (Newgate Lane N/B) | O | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | N | Arm J1:8 Ahead | 40.00 |
| J1:4/1 (HMS C'wood LT G-way) | O | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J1:8 Ahead | 12.00 |
| J1:5/1 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:6 Right | 20.00 |
| | | | | | | | | | | | Arm J1:10 Ahead | 40.00 |
| J1:6/1 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:11 Ahead | 40.00 |
| J1:6/2 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:7 Right | 20.00 |
| | | | | | | | | | | | Arm J1:11 Ahead | 40.00 |
| J1:7/1 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:8 Right | 20.00 |
| J1:8/1 | U | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J1:9 Ahead | Inf |
| J1:8/2 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:9 Ahead | 40.00 |
| J1:8/3 | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:5 Right | 20.00 |

| | | | | | | | | | | | | |
|-------------------------------------|---|--|---|---|------|------|------|------|------|---|----------------------|-----|
| J1:9/1 (Newgate Ln N/B Exit) | U | | 2 | 3 | 60.0 | User | 4070 | - | - | - | - | - |
| J1:10/1 (Speedfields E/B) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| J1:11/1 (Newgate Ln S/B Exit) | U | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J2:1 Ahead | Inf |
| J1:11/2 (Newgate Ln S/B Exit) | U | | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | N | Arm J2:1 Ahead | Inf |

| Junction: J2: Collingwood T-junction | | | | | | | | | | | | |
|---------------------------------------|-----------|--------|-------------|-----------|-----------------------|---------------|-----------------------------------|----------------|----------|---------------|---------------------------------|--------------------|
| Lane | Lane Type | Phases | Start Disp. | End Disp. | Physical Length (PCU) | Sat Flow Type | Def User Saturation Flow (PCU/Hr) | Lane Width (m) | Gradient | Nearside Lane | Turns | Turning Radius (m) |
| J2:1/1 (Newgate Ln S/B) | U | A | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | Y | Arm J2:4 Ahead | Inf |
| J2:1/2 (Newgate Ln S/B) | U | A | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | N | Arm J2:4 Ahead | Inf |
| J2:1/3 (Newgate Ln S/B) | U | C | 2 | 3 | 15.7 | Geom | - | 3.00 | 0.00 | N | Arm J2:6 Right | 12.00 |
| J2:2/1 (Newgate Ln N/B) | U | B | 2 | 3 | 5.2 | Geom | - | 3.00 | 0.00 | Y | Arm J2:6 Left | 12.00 |
| J2:2/2 (Newgate Ln N/B) | U | B | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | N | Arm J2:5 Ahead | Inf |
| J2:2/3 (Newgate Ln N/B) | U | B | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | N | Arm J2:5 Ahead | Inf |
| J2:3/1 (HMS Collingwood) | U | D | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | Y | Arm J2:4 Right Arm J2:5 Left | 15.00 10.00 |
| J2:4/1 (Newgate Ln S/B Exit Merge) | U | G | 2 | 3 | 5.2 | Geom | - | 3.50 | 0.00 | Y | Arm J2:8 Ahead | Inf |
| J2:4/2 (Newgate Ln S/B Exit Merge) | U | G | 2 | 3 | 5.2 | Geom | - | 3.50 | 0.00 | N | Arm J2:8 Ahead | Inf |
| J2:5/1 (Newgate Ln N/B Exit) | U | | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | Y | Arm J1:3 Ahead | Inf |
| J2:5/2 (Newgate Ln N/B Exit) | U | | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | N | Arm J1:3 Ahead | Inf |
| J2:6/1 (HMS Collingwood Exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| J2:7/1 (Entry) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| J2:8/1 | U | | 2 | 3 | 19.1 | Inf | - | - | - | - | - | - |

Give-Way Lane Input Data

| Junction: J1: Speedfields Rbt | | | | | | | | | | | |
|--------------------------------------|-------------------|-----------------------------------|-----------------------------------|---------------|------------------|--------------|--------------------------|----------------------------|-----|------------------------|-------------------------------|
| Lane | Movement | Max Flow when Giving Way (PCU/Hr) | Min Flow when Giving Way (PCU/Hr) | Opposing Lane | Opp. Lane Coeff. | Opp. Mvmnts. | Right Turn Storage (PCU) | Non-Blocking Storage (PCU) | RTF | Right Turn Move up (s) | Max Turns in Intergreen (PCU) |
| J1:1/1 (Newgate Ln S/B) | J1:10/1 (Left) | 1189 | 0 | J1:5/1 | 0.58 | All | - | - | - | - | - |
| J1:1/2 (Newgate Ln S/B) | J1:6/1 (Ahead) | 1189 | 0 | J1:5/1 | 0.58 | All | - | - | - | - | - |
| J1:1/3 (Newgate Ln S/B) | J1:6/2 (Ahead) | 1189 | 0 | J1:5/1 | 0.58 | All | - | - | - | - | - |
| J1:2/1 (Speedfields Pk) | J1:7/1 (Ahead) | 1856 | 0 | J1:6/1 | 0.72 | All | - | - | - | - | - |
| | | | | J1:6/2 | 0.72 | All | | | | | |
| | J1:11/1 (Left) | 1856 | 0 | J1:6/1 | 0.72 | All | | | | | |
| | | | | J1:6/2 | 0.72 | All | | | | | |
| | J1:11/2 (Left) | 1856 | 0 | J1:6/1 | 0.72 | All | | | | | |
| | | | | J1:6/2 | 0.72 | All | | | | | |
| J1:3/2 (Newgate Lane N/B) | J1:8/2 (Ahead) | 1278 | 0 | J1:7/1 | 0.55 | All | - | - | - | - | - |
| | J1:8/3 (Ahead) | 1278 | 0 | J1:7/1 | 0.55 | All | | | | | |
| J1:4/1 (HMS C'wood LT G-way) | J1:8/1 (Ahead) | 715 | 0 | J1:3/1 | 0.22 | All | - | - | - | - | - |

Junction: J2: Collingwood T-junction

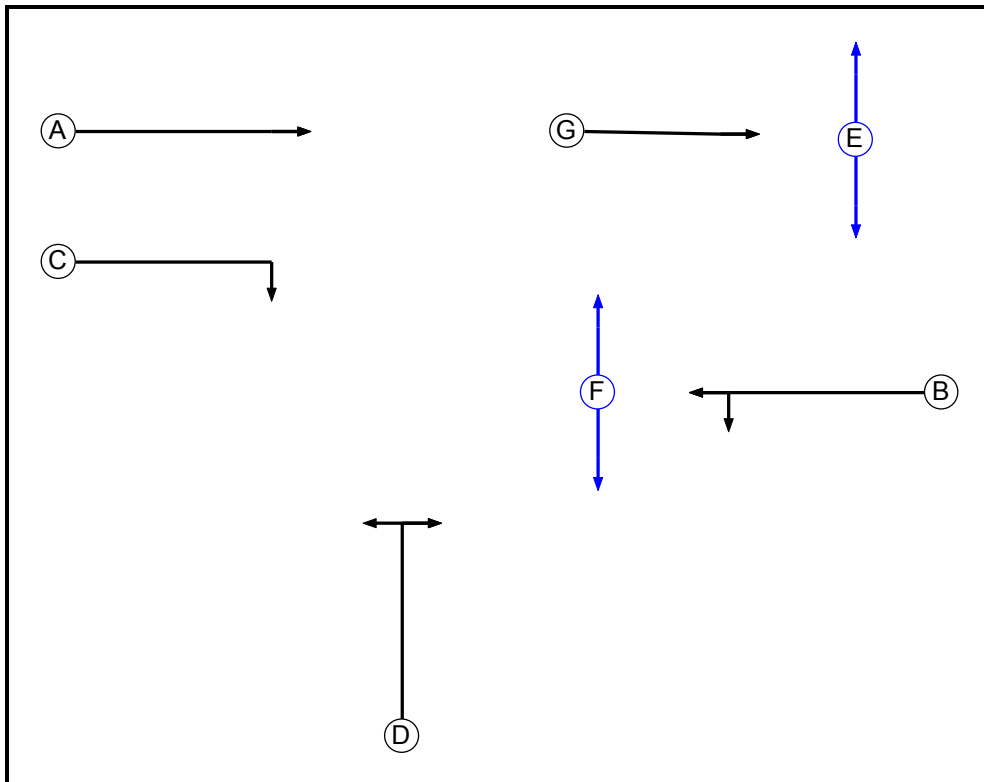
There are no Opposed Lanes in this Junction

Lane Connector Input Data

| Junction: J1: Speedfields Rbt | | | | |
|--------------------------------------|------------------|-----------------|-------------------------|---------------------------|
| Org Lane | Dest Lane | Junction | Mean Cruise Time | Platoon Dispersion |
| J1:1/1 | J1:10/1 | Internal | 10 | 35 |
| J1:1/2 | J1:6/1 | Internal | 2 | 35 |
| J1:1/3 | J1:6/2 | Internal | 2 | 35 |
| J1:2/1 | J1:7/1 | Internal | 2 | 35 |
| J1:2/1 | J1:11/1 | Internal | 2 | 35 |
| J1:2/1 | J1:11/2 | Internal | 2 | 35 |
| J1:3/1 | J1:8/1 | Internal | 2 | 35 |
| J1:3/2 | J1:8/2 | Internal | 2 | 35 |
| J1:3/2 | J1:8/3 | Internal | 2 | 35 |
| J1:4/1 | J1:8/1 | Internal | 2 | 35 |
| J1:5/1 | J1:6/1 | Internal | 2 | 35 |
| J1:5/1 | J1:6/2 | Internal | 2 | 35 |
| J1:5/1 | J1:10/1 | Internal | 10 | 35 |
| J1:6/1 | J1:11/1 | Internal | 2 | 35 |
| J1:6/2 | J1:7/1 | Internal | 2 | 35 |
| J1:6/2 | J1:11/2 | Internal | 2 | 35 |
| J1:7/1 | J1:8/2 | Internal | 2 | 35 |
| J1:8/1 | J1:9/1 | Internal | 2 | 35 |
| J1:8/2 | J1:9/1 | Internal | 2 | 35 |
| J1:8/3 | J1:5/1 | Internal | 2 | 35 |
| J1:11/1 | J2:1/1 | Leaving | 13 | 35 |
| J1:11/2 | J2:1/2 | Leaving | 13 | 35 |
| J2:5/1 | J1:3/1 | Entering | 13 | 35 |
| J2:5/2 | J1:3/2 | Entering | 13 | 35 |
| J2:7/1 | J1:4/1 | Entering | 1 | 35 |

| Junction: J2: Collingwood T-junction | | | | |
|--------------------------------------|-----------|----------|------------------|--------------------|
| Org Lane | Dest Lane | Junction | Mean Cruise Time | Platoon Dispersion |
| J1:11/1 | J2:1/1 | Entering | 13 | 35 |
| J1:11/2 | J2:1/2 | Entering | 13 | 35 |
| J2:1/1 | J2:4/1 | Internal | 5 | 35 |
| J2:1/2 | J2:4/2 | Internal | 5 | 35 |
| J2:1/3 | J2:6/1 | Internal | 10 | 35 |
| J2:2/1 | J2:6/1 | Internal | 10 | 35 |
| J2:2/2 | J2:5/1 | Internal | 2 | 35 |
| J2:2/3 | J2:5/2 | Internal | 2 | 35 |
| J2:3/1 | J2:4/1 | Internal | 6 | 35 |
| J2:3/1 | J2:4/2 | Internal | 6 | 35 |
| J2:3/1 | J2:5/2 | Internal | 2 | 35 |
| J2:4/1 | J2:8/1 | Internal | 10 | 35 |
| J2:4/2 | J2:8/1 | Internal | 10 | 35 |
| J2:5/1 | J1:3/1 | Leaving | 13 | 35 |
| J2:5/2 | J1:3/2 | Leaving | 13 | 35 |
| J2:7/1 | J1:4/1 | Leaving | 1 | 35 |
| J2:7/1 | J2:3/1 | Internal | 1 | 35 |

Phase Diagram



Phase Input Data

| Phase Name | Phase Type | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|------------|----------|
| A | Traffic | | 7 | 7 |
| B | Traffic | | 7 | 7 |
| C | Traffic | | 7 | 7 |
| D | Traffic | | 7 | 7 |
| E | Pedestrian | | 5 | 5 |
| F | Pedestrian | | 5 | 5 |
| G | Traffic | | 7 | 2 |

Phase Intergreens Matrix

| | | Starting Phase | | | | | | |
|-------------------|---|----------------|---|---|---|---|---|---|
| | | A | B | C | D | E | F | G |
| Terminating Phase | A | - | - | 6 | 5 | - | - | - |
| | B | - | - | 6 | 6 | - | 5 | - |
| | C | - | 6 | - | 6 | - | - | - |
| | D | 7 | 7 | 7 | - | 5 | - | - |
| | E | 6 | - | - | 6 | - | - | 6 |
| | F | - | 6 | - | - | - | - | - |
| | G | - | - | - | - | 5 | - | - |

Phases in Stage

| Stage No. | Phases in Stage |
|-----------|-----------------|
| 1 | A B G |
| 2 | A C F G |
| 3 | C E F |
| 4 | D F G |

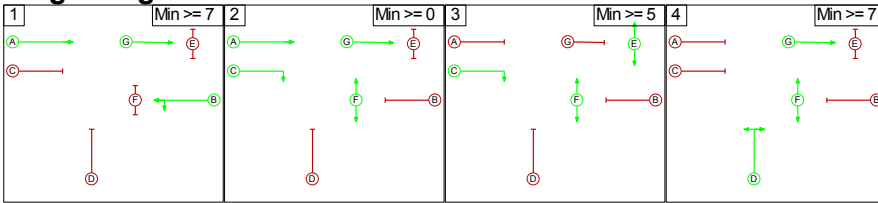
Phase Delays

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-------------|-------------|-------|--------|-------|------------|
| 1 | 3 | G | Losing | 5 | 5 |
| 2 | 3 | G | Losing | 5 | 5 |
| 4 | 3 | G | Losing | 5 | 5 |

Prohibited Stage Change

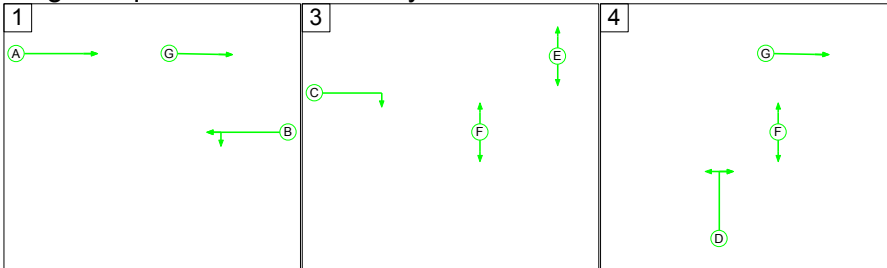
| | | To Stage | | | |
|------------|---|----------|---|----|---|
| | | 1 | 2 | 3 | 4 |
| From Stage | 1 | - | 6 | 10 | 6 |
| | 2 | 6 | - | 10 | 6 |
| | 3 | 6 | 6 | - | 6 |
| | 4 | 7 | 7 | 10 | - |

Stage Diagram



Stage Sequence Summary

Stage Sequence: Peds Each Cycle



Network Control Plans

| Plan | Controller | Sequence Name | Sequence |
|--------|-----------------------------|-----------------|----------|
| Plan 1 | C1 - Collingwood T-Junction | Peds Each Cycle | 1,3,4 |

Traffic Flow Groups

| Flow Group | Start Time | End Time | Duration | Formula |
|------------------------------|------------|----------|----------|---------|
| 1: '2019 DS1 AM Base' | 08:00 | 09:00 | 01:00 | |
| 2: '2019 DS1 PM Base' | 17:00 | 18:00 | 01:00 | |
| 3: '2024 DS1 AM Base' | 08:00 | 09:00 | 01:00 | |
| 4: '2024 DS1 PM Base' | 17:00 | 18:00 | 01:00 | |
| 5: '2024 DS1 AM Base+Dev' | 08:00 | 09:00 | 01:00 | |
| 6: '2024 DS1 PM Base+Dev' | 17:00 | 18:00 | 01:00 | |
| 7: '2019 DS2 AM Base' | 08:00 | 09:00 | 01:00 | |
| 8: '2019 DS2 PM Base' | 17:00 | 18:00 | 01:00 | |
| 9: '2024 DS2 AM Base' | 08:00 | 09:00 | 01:00 | |
| 10: '2024 DS2 PM Base' | 17:00 | 18:00 | 01:00 | |
| 11: '2024 DS2 AM Base + Dev' | 08:00 | 09:00 | 01:00 | |
| 12: '2024 DS2 PM Base + Dev' | 17:00 | 18:00 | 01:00 | |

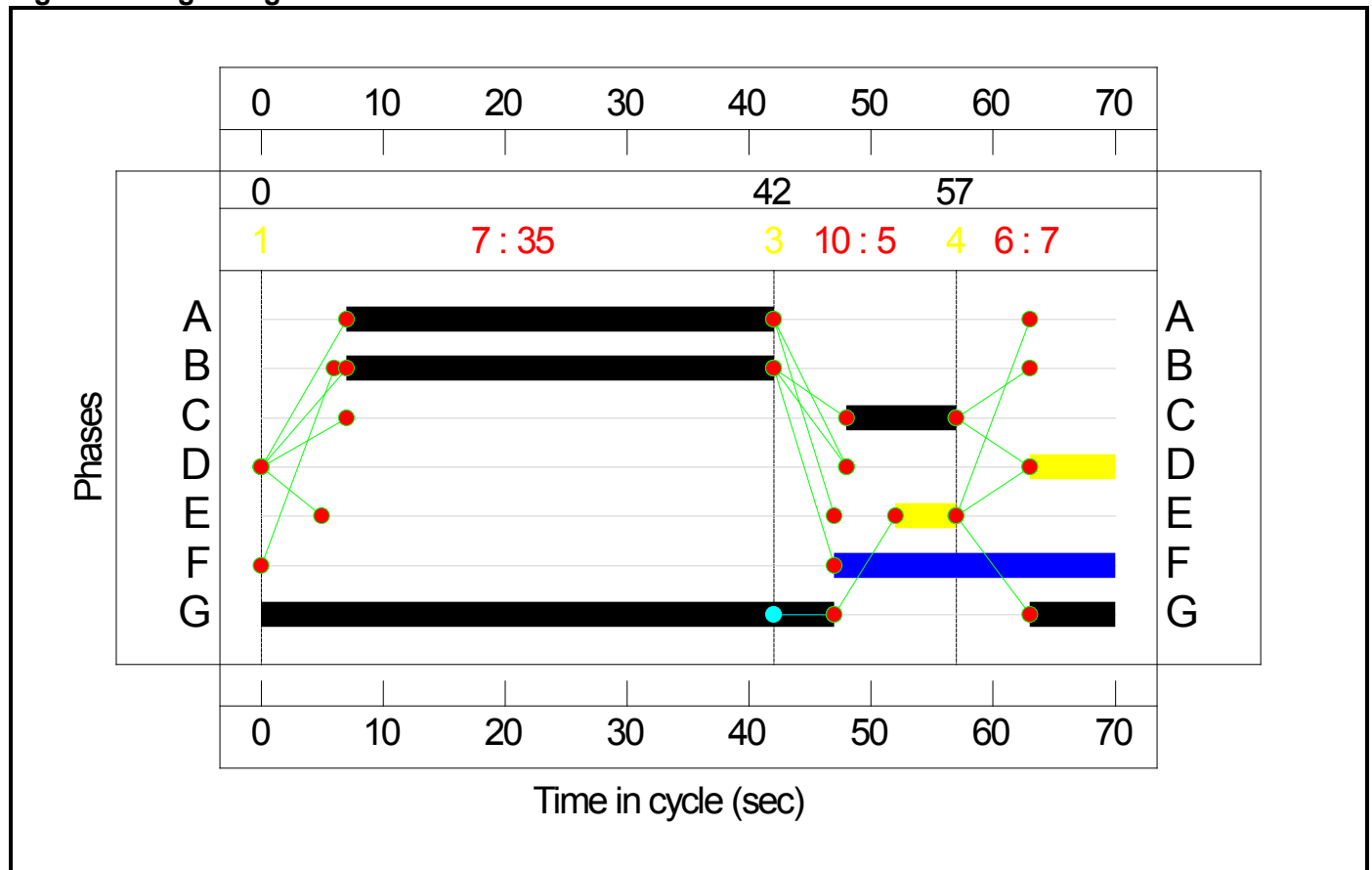
Scenario 1: '2019 DS1 AM Base' (FG1: '2019 DS1 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 1248 | 210 | 144 | 1602 |
| | B | 769 | 0 | 242 | 184 | 1195 |
| | C | 42 | 167 | 0 | 10 | 219 |
| | D | 16 | 59 | 6 | 0 | 81 |
| | Tot. | 827 | 1474 | 458 | 338 | 3097 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 726 | 2029:1786 | 1595 | 45.5% | 1452 | 0 | 0 | 0.4 | 2.1 | 0.0 | 0.4 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 469 | 2029 | 1063 | 44.1% | 469 | 0 | 0 | 0.4 | 3.0 | 0.0 | 0.4 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 219 | 1894 | 1170 | 18.7% | 219 | 0 | 0 | 0.1 | 1.9 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 760 | 1965 | 1965 | 38.7% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 704 | 2029 | 1186 | 59.4% | 704 | 0 | 0 | 1.6 | 8.2 | 12.6 | 13.3 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 59 | 1747 | 548 | 10.8% | 59 | 0 | 0 | 0.1 | 3.7 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 216 | 2077 | 2077 | 10.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 484 | 2077 | 2077 | 23.3% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 469 | 2077 | 2077 | 22.6% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 167 | 2005 | 2005 | 8.3% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 819 | 1965 | 1965 | 41.7% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 655 | 2077 | 2077 | 31.5% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 216 | 2005 | 2005 | 10.8% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1474 | 4070 | 4070 | 36.2% | - | - | - | 0.3 | 0.7 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 488 | 1965 | 1965 | 24.8% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 517 | 2105 | 2105 | 24.6% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 488 | 1915 | 985 | 49.6% | - | - | - | 2.0 | 14.7 | 6.1 | 6.6 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 517 | 2055:1827 | 906 | 57.0% | - | - | - | 3.1 | 21.5 | 3.6 | 4.3 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 904 | 2055:1702 | 1081 | 83.7% | - | - | - | 5.9 | 23.5 | 13.6 | 16.1 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 698 | 2055 | 1057 | 66.0% | - | - | - | 3.4 | 17.5 | 9.9 | 10.9 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 22 | 1809 | 207 | 10.6% | - | - | - | 0.2 | 37.6 | 0.4 | 0.4 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 489 | 1965 | 1544 | 31.7% | - | - | - | 0.3 | 1.9 | 0.1 | 0.3 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 338 | 2105 | 1654 | 20.4% | - | - | - | 0.1 | 1.5 | 0.1 | 0.2 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 760 | 1915 | 1915 | 39.7% | - | - | - | 0.3 | 1.6 | 0.2 | 0.5 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 704 | 2055 | 2055 | 34.3% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 7.6
 PRC Over All Lanes (%): 7.6

Total Delay for Signalled Lanes (pcuHr): 15.00
 Total Delay Over All Lanes(pcuHr): 20.17

Cycle Time (s): 70

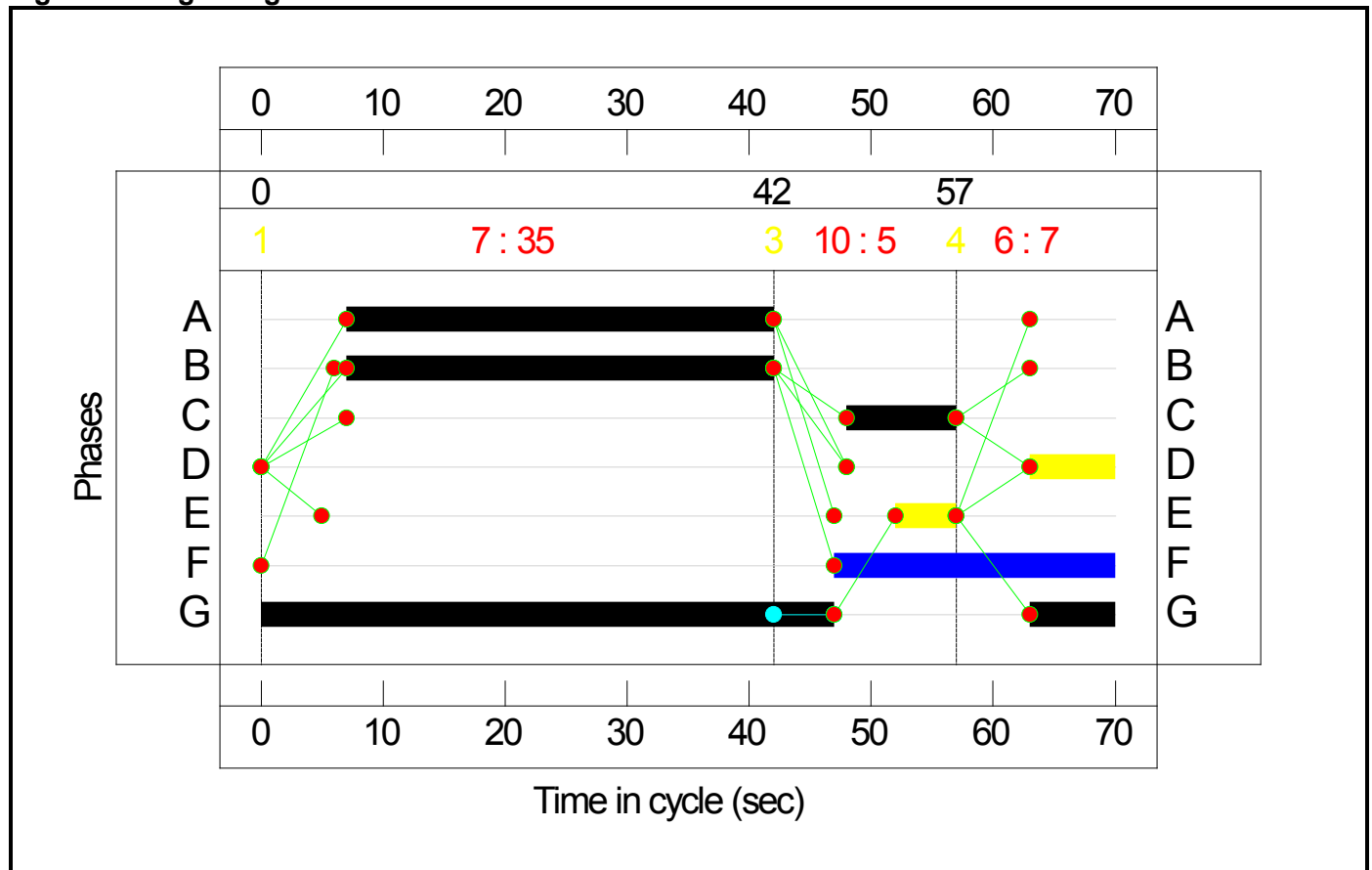
Scenario 2: '2019 DS1 PM Base' (FG2: '2019 DS1 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 753 | 151 | 10 | 914 |
| | B | 1144 | 0 | 254 | 69 | 1467 |
| | C | 116 | 269 | 0 | 7 | 392 |
| | D | 69 | 124 | 23 | 0 | 216 |
| | Tot. | 1329 | 1146 | 428 | 86 | 2989 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 852 | 2029:1786 | 1550 | 55.0% | 1704 | 0 | 0 | 0.6 | 2.6 | 0.0 | 0.6 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 615 | 2029 | 1088 | 56.5% | 615 | 0 | 0 | 0.6 | 3.8 | 0.0 | 0.6 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 392 | 1894 | 982 | 39.9% | 392 | 0 | 0 | 0.3 | 3.0 | 0.0 | 0.3 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 511 | 1965 | 1965 | 26.0% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 416 | 2029 | 1130 | 36.8% | 416 | 0 | 0 | 0.4 | 3.2 | 4.5 | 4.8 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 124 | 1747 | 603 | 20.6% | 124 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 174 | 2077 | 2077 | 8.4% | - | - | - | 0.0 | 0.9 | 0.0 | 0.0 |
| J1:6/1 | Ahead | U | - | | - | - | - | 598 | 2077 | 2077 | 28.8% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 615 | 2077 | 2077 | 29.6% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:7/1 | Right | U | - | | - | - | - | 269 | 2005 | 2005 | 13.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 635 | 1965 | 1965 | 32.3% | - | - | - | 0.2 | 1.4 | 0.0 | 0.2 |
| J1:8/2 | Ahead | U | - | | - | - | - | 511 | 2077 | 2077 | 24.6% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 174 | 2005 | 2005 | 8.7% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1146 | 4070 | 4070 | 28.2% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 615 | 1965 | 1965 | 31.3% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 721 | 2105 | 2105 | 34.3% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|-----|-----|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 615 | 1915 | 985 | 62.4% | - | - | - | 2.9 | 17.0 | 8.5 | 9.4 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 721 | 2055:1827 | 1173 | 61.5% | - | - | - | 3.5 | 17.6 | 8.8 | 9.6 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 521 | 2055:1702 | 1056 | 49.3% | - | - | - | 2.1 | 14.3 | 6.4 | 6.9 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 393 | 2055 | 1057 | 37.2% | - | - | - | 1.4 | 12.9 | 4.6 | 4.9 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 92 | 1811 | 207 | 44.5% | - | - | - | 1.1 | 44.5 | 1.7 | 2.1 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 626 | 1965 | 1544 | 40.5% | - | - | - | 0.4 | 2.1 | 0.1 | 0.5 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 703 | 2105 | 1654 | 42.5% | - | - | - | 0.4 | 2.0 | 0.1 | 0.5 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 511 | 1915 | 1915 | 26.7% | - | - | - | 0.2 | 1.4 | 0.2 | 0.4 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 416 | 2055 | 2055 | 20.2% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 44.1
 PRC Over All Lanes (%): 44.1

Total Delay for Signalled Lanes (pcuHr): 11.81
 Total Delay Over All Lanes(pcuHr): 16.07

Cycle Time (s): 70

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 773 | 2029:1786 | 1561 | 49.5% | 1546 | 0 | 0 | 0.5 | 2.3 | 0.0 | 0.5 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 606 | 2029 | 1056 | 57.4% | 606 | 0 | 0 | 0.7 | 4.0 | 0.0 | 0.7 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 235 | 1894 | 1043 | 22.5% | 235 | 0 | 0 | 0.1 | 2.2 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 789 | 1965 | 1965 | 40.2% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 756 | 2029 | 1183 | 63.9% | 756 | 0 | 0 | 2.0 | 9.7 | 13.7 | 14.6 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 61 | 1747 | 541 | 11.3% | 61 | 0 | 0 | 0.1 | 3.7 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 228 | 2077 | 2077 | 11.0% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 523 | 2077 | 2077 | 25.2% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 606 | 2077 | 2077 | 29.2% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:7/1 | Right | U | - | | - | - | - | 173 | 2005 | 2005 | 8.6% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 850 | 1965 | 1965 | 43.3% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 701 | 2077 | 2077 | 33.8% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:8/3 | Right | U | - | | - | - | - | 228 | 2005 | 2005 | 11.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1551 | 4070 | 4070 | 38.1% | - | - | - | 0.3 | 0.7 | 0.0 | 0.2 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 524 | 1965 | 1965 | 26.7% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 667 | 2105 | 2105 | 31.7% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 524 | 1915 | 985 | 53.2% | - | - | - | 2.2 | 15.3 | 6.7 | 7.3 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 667 | 2055:1827 | 1254 | 53.2% | - | - | - | 3.6 | 19.2 | 5.6 | 6.1 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 941 | 2055:1702 | 1081 | 87.0% | - | - | - | 6.9 | 26.3 | 14.7 | 17.9 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 750 | 2055 | 1057 | 71.0% | - | - | - | 3.9 | 18.8 | 11.0 | 12.3 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 26 | 1813 | 207 | 12.5% | - | - | - | 0.3 | 37.8 | 0.4 | 0.5 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 525 | 1965 | 1544 | 34.0% | - | - | - | 0.3 | 1.9 | 0.1 | 0.4 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 485 | 2105 | 1654 | 29.3% | - | - | - | 0.2 | 1.7 | 0.1 | 0.3 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 789 | 1915 | 1915 | 41.2% | - | - | - | 0.4 | 1.7 | 0.2 | 0.6 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 756 | 2055 | 2055 | 36.8% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 3.4
 PRC Over All Lanes (%): 3.4

Total Delay for Signalled Lanes (pcuHr): 17.37
 Total Delay Over All Lanes(pcuHr): 23.68

Cycle Time (s): 70

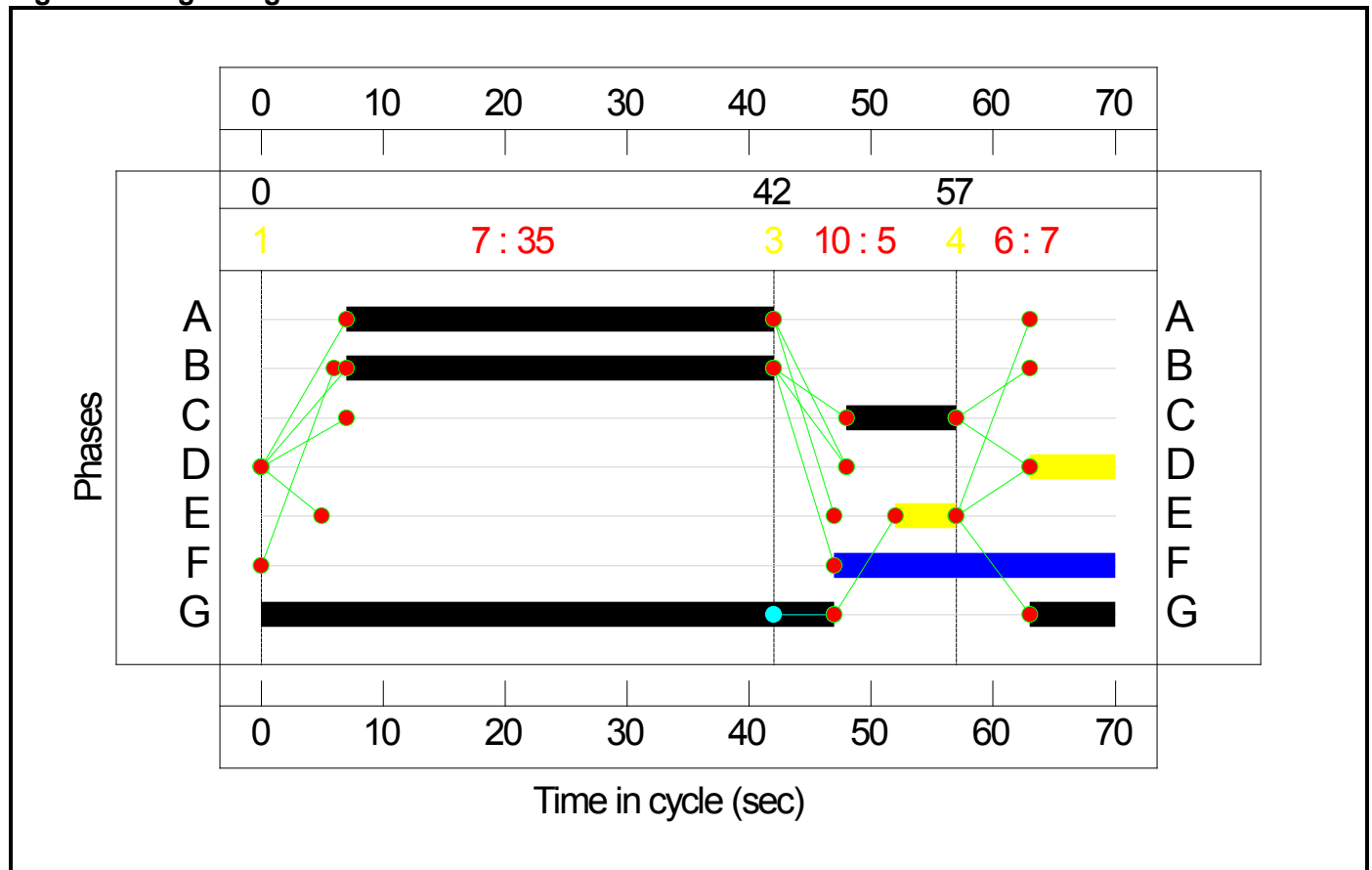
Scenario 4: '2024 DS1 PM Base' (FG4: '2024 DS1 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | Destination | | | | | |
|--------|-------------|------|------|-----|----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 808 | 162 | 11 | 981 |
| | B | 1319 | 0 | 263 | 71 | 1653 |
| | C | 134 | 278 | 0 | 7 | 419 |
| | D | 80 | 128 | 24 | 0 | 232 |
| | Tot. | 1533 | 1214 | 449 | 89 | 3285 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 953 | 2029:1786 | 1493 | 63.8% | 1906 | 0 | 0 | 0.9 | 3.3 | 0.0 | 0.9 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 700 | 2029 | 1081 | 64.8% | 700 | 0 | 0 | 0.9 | 4.7 | 0.0 | 0.9 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 419 | 1894 | 855 | 49.0% | 419 | 0 | 0 | 0.5 | 4.1 | 0.0 | 0.5 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 550 | 1965 | 1965 | 28.0% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 444 | 2029 | 1125 | 39.5% | 444 | 0 | 0 | 0.4 | 3.5 | 5.1 | 5.4 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 128 | 1747 | 594 | 21.6% | 128 | 0 | 0 | 0.1 | 3.9 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 186 | 2077 | 2077 | 9.0% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:6/1 | Ahead | U | - | | - | - | - | 690 | 2077 | 2077 | 33.2% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 700 | 2077 | 2077 | 33.7% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:7/1 | Right | U | - | | - | - | - | 278 | 2005 | 2005 | 13.9% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 678 | 1965 | 1965 | 34.5% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:8/2 | Ahead | U | - | | - | - | - | 536 | 2077 | 2077 | 25.8% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 186 | 2005 | 2005 | 9.3% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1214 | 4070 | 4070 | 29.8% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 706 | 1965 | 1965 | 35.9% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 825 | 2105 | 2105 | 39.2% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 706 | 1915 | 985 | 71.7% | - | - | - | 3.8 | 19.5 | 10.4 | 11.6 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 825 | 2055:1827 | 1162 | 71.0% | - | - | - | 4.5 | 19.6 | 11.0 | 12.2 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 561 | 2055:1702 | 1056 | 53.1% | - | - | - | 2.3 | 14.9 | 7.1 | 7.6 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 420 | 2055 | 1057 | 39.7% | - | - | - | 1.5 | 13.2 | 4.9 | 5.2 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 104 | 1813 | 207 | 50.2% | - | - | - | 1.3 | 46.4 | 1.9 | 2.4 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 732 | 1965 | 1544 | 47.4% | - | - | - | 0.5 | 2.4 | 0.2 | 0.6 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 801 | 2105 | 1654 | 48.4% | - | - | - | 0.5 | 2.3 | 0.2 | 0.6 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 550 | 1915 | 1915 | 28.7% | - | - | - | 0.2 | 1.5 | 0.2 | 0.4 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 444 | 2055 | 2055 | 21.6% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 25.5
 PRC Over All Lanes (%): 25.5

Total Delay for Signalled Lanes (pcuHr): 14.49
 Total Delay Over All Lanes(pcuHr): 19.83

Cycle Time (s): 70

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 781 | 2029:1786 | 1552 | 50.3% | 1562 | 0 | 0 | 0.5 | 2.3 | 0.0 | 0.5 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 613 | 2029 | 1055 | 58.1% | 613 | 0 | 0 | 0.7 | 4.1 | 0.0 | 0.7 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 236 | 1894 | 1032 | 22.9% | 236 | 0 | 0 | 0.1 | 2.3 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 794 | 1965 | 1965 | 40.4% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 767 | 2029 | 1183 | 64.8% | 767 | 0 | 0 | 2.1 | 10.1 | 13.9 | 14.8 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 61 | 1747 | 540 | 11.3% | 61 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 230 | 2077 | 2077 | 11.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 531 | 2077 | 2077 | 25.6% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 613 | 2077 | 2077 | 29.5% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:7/1 | Right | U | - | | - | - | - | 173 | 2005 | 2005 | 8.6% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 855 | 1965 | 1965 | 43.5% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 710 | 2077 | 2077 | 34.2% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:8/3 | Right | U | - | | - | - | - | 230 | 2005 | 2005 | 11.5% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1565 | 4070 | 4070 | 38.5% | - | - | - | 0.3 | 0.7 | 0.0 | 0.2 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 532 | 1965 | 1965 | 27.1% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 675 | 2105 | 2105 | 32.1% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 532 | 1915 | 985 | 54.0% | - | - | - | 2.3 | 15.4 | 6.9 | 7.5 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 675 | 2055:1827 | 1255 | 53.8% | - | - | - | 3.6 | 19.2 | 5.8 | 6.4 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 948 | 2055:1702 | 1081 | 87.7% | - | - | - | 7.1 | 27.0 | 15.1 | 18.4 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 761 | 2055 | 1057 | 72.0% | - | - | - | 4.0 | 19.1 | 11.2 | 12.5 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 26 | 1813 | 207 | 12.5% | - | - | - | 0.3 | 37.8 | 0.4 | 0.5 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 533 | 1965 | 1544 | 34.5% | - | - | - | 0.3 | 1.9 | 0.1 | 0.4 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 493 | 2105 | 1654 | 29.8% | - | - | - | 0.2 | 1.7 | 0.1 | 0.3 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 794 | 1915 | 1915 | 41.5% | - | - | - | 0.4 | 1.7 | 0.2 | 0.6 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 767 | 2055 | 2055 | 37.3% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.7
 PRC Over All Lanes (%): 2.7

Total Delay for Signalled Lanes (pcuHr): 17.83
 Total Delay Over All Lanes(pcuHr): 24.32

Cycle Time (s): 70

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 968 | 2029:1786 | 1481 | 65.4% | 1936 | 0 | 0 | 0.9 | 3.5 | 0.0 | 0.9 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 704 | 2029 | 1079 | 65.3% | 704 | 0 | 0 | 0.9 | 4.8 | 0.0 | 0.9 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 421 | 1894 | 841 | 50.0% | 421 | 0 | 0 | 0.5 | 4.3 | 0.0 | 0.5 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 562 | 1965 | 1965 | 28.6% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 454 | 2029 | 1125 | 40.4% | 454 | 0 | 0 | 0.5 | 3.6 | 5.4 | 5.7 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 128 | 1747 | 591 | 21.6% | 128 | 0 | 0 | 0.1 | 3.9 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 190 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 705 | 2077 | 2077 | 33.9% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 704 | 2077 | 2077 | 33.9% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:7/1 | Right | U | - | | - | - | - | 278 | 2005 | 2005 | 13.9% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 690 | 1965 | 1965 | 35.1% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:8/2 | Ahead | U | - | | - | - | - | 542 | 2077 | 2077 | 26.1% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 190 | 2005 | 2005 | 9.5% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1232 | 4070 | 4070 | 30.3% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 714 | 1965 | 1965 | 36.3% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 838 | 2105 | 2105 | 39.8% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 714 | 1915 | 985 | 72.5% | - | - | - | 3.9 | 19.8 | 10.7 | 12.0 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 838 | 2055:1827 | 1161 | 72.2% | - | - | - | 4.6 | 19.9 | 11.2 | 12.5 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 573 | 2055:1702 | 1056 | 54.2% | - | - | - | 2.4 | 15.1 | 7.4 | 8.0 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 430 | 2055 | 1057 | 40.7% | - | - | - | 1.6 | 13.3 | 5.0 | 5.4 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 105 | 1813 | 207 | 50.7% | - | - | - | 1.4 | 46.6 | 1.9 | 2.4 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 742 | 1965 | 1544 | 48.1% | - | - | - | 0.5 | 2.4 | 0.2 | 0.6 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 813 | 2105 | 1654 | 49.2% | - | - | - | 0.5 | 2.3 | 0.2 | 0.7 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 562 | 1915 | 1915 | 29.3% | - | - | - | 0.2 | 1.5 | 0.3 | 0.5 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 454 | 2055 | 2055 | 22.1% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 24.1
 PRC Over All Lanes (%): 24.1

Total Delay for Signalled Lanes (pcuHr): 14.91
 Total Delay Over All Lanes(pcuHr): 20.43

Cycle Time (s): 70

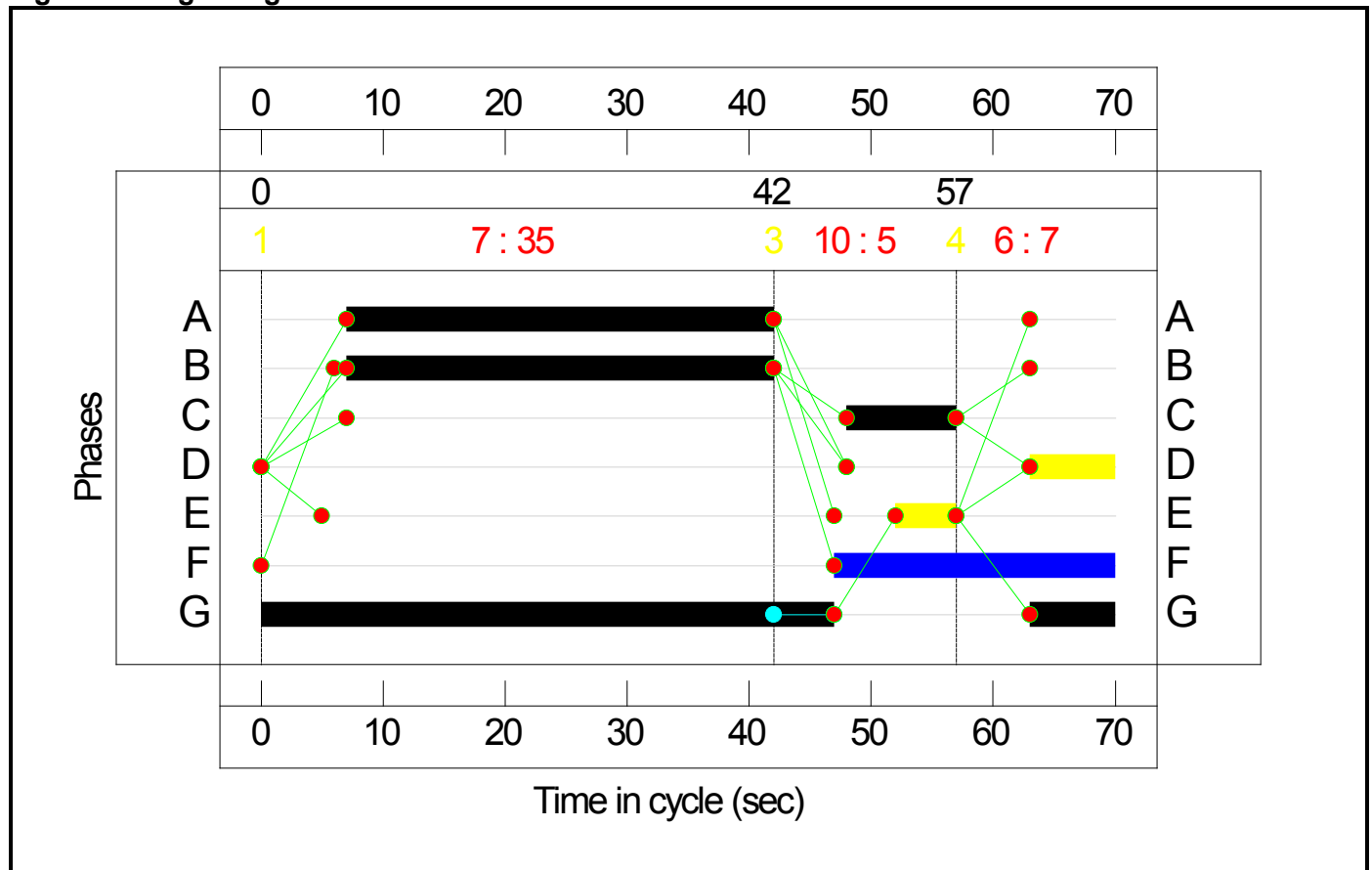
Scenario 7: '2019 DS2 AM Base' (FG7: '2019 DS2 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 1267 | 210 | 144 | 1621 |
| | B | 503 | 0 | 242 | 184 | 929 |
| | C | 42 | 167 | 0 | 10 | 219 |
| | D | 16 | 59 | 6 | 0 | 81 |
| | Tot. | 561 | 1493 | 458 | 338 | 2850 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 740 | 2029:1786 | 1580 | 46.8% | 1480 | 0 | 0 | 0.4 | 2.1 | 0.0 | 0.4 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 189 | 2029 | 1063 | 17.8% | 189 | 0 | 0 | 0.1 | 2.1 | 0.0 | 0.1 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 219 | 1894 | 1361 | 16.1% | 219 | 0 | 0 | 0.1 | 1.6 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 768 | 1965 | 1965 | 39.1% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 715 | 2029 | 1186 | 60.3% | 715 | 0 | 0 | 1.7 | 8.5 | 12.8 | 13.6 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 59 | 1747 | 546 | 10.8% | 59 | 0 | 0 | 0.1 | 3.7 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 216 | 2077 | 2077 | 10.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 498 | 2077 | 2077 | 24.0% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 189 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 167 | 2005 | 2005 | 8.3% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 827 | 1965 | 1965 | 42.1% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 666 | 2077 | 2077 | 32.1% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 216 | 2005 | 2005 | 10.8% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1493 | 4070 | 4070 | 36.7% | - | - | - | 0.3 | 0.7 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 540 | 1965 | 1965 | 27.5% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 199 | 2105 | 2105 | 9.5% | - | - | - | 0.1 | 0.9 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 540 | 1915 | 985 | 54.8% | - | - | - | 2.3 | 15.5 | 7.1 | 7.7 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 199 | 2055:1827 | 268 | 74.3% | - | - | - | 3.0 | 53.4 | 3.6 | 5.0 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 912 | 2055:1702 | 1080 | 84.4% | - | - | - | 6.1 | 24.1 | 14.0 | 16.6 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 709 | 2055 | 1057 | 67.1% | - | - | - | 3.5 | 17.8 | 10.0 | 11.1 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 22 | 1809 | 207 | 10.6% | - | - | - | 0.2 | 37.6 | 0.4 | 0.4 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 540 | 1965 | 1544 | 35.0% | - | - | - | 0.3 | 2.0 | 0.1 | 0.4 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 21 | 2105 | 1654 | 1.3% | - | - | - | 0.0 | 1.1 | 0.0 | 0.0 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 768 | 1915 | 1915 | 40.1% | - | - | - | 0.3 | 1.6 | 0.2 | 0.5 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 715 | 2055 | 2055 | 34.8% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 6.6
 PRC Over All Lanes (%): 6.6

Total Delay for Signalled Lanes (pcuHr): 15.41
 Total Delay Over All Lanes(pcuHr): 20.24

Cycle Time (s): 70

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 622 | 2029:1786 | 1873 | 33.2% | 1244 | 0 | 0 | 0.2 | 1.4 | 0.0 | 0.2 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 356 | 2029 | 1088 | 32.7% | 356 | 0 | 0 | 0.2 | 2.5 | 0.0 | 0.2 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 392 | 1894 | 1335 | 29.4% | 392 | 0 | 0 | 0.2 | 1.9 | 0.0 | 0.2 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 503 | 1965 | 1965 | 25.6% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 410 | 2029 | 1130 | 36.3% | 410 | 0 | 0 | 0.4 | 3.1 | 4.2 | 4.5 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 124 | 1747 | 604 | 20.5% | 124 | 0 | 0 | 0.1 | 3.7 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 174 | 2077 | 2077 | 8.4% | - | - | - | 0.0 | 0.9 | 0.0 | 0.0 |
| J1:6/1 | Ahead | U | - | | - | - | - | 368 | 2077 | 2077 | 17.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 356 | 2077 | 2077 | 17.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 269 | 2005 | 2005 | 13.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 627 | 1965 | 1965 | 31.9% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:8/2 | Ahead | U | - | | - | - | - | 505 | 2077 | 2077 | 24.3% | - | - | - | 0.2 | 1.1 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 174 | 2005 | 2005 | 8.7% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1132 | 4070 | 4070 | 27.8% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 387 | 1965 | 1965 | 19.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 460 | 2105 | 2105 | 21.9% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|-----|-----|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 387 | 1915 | 985 | 39.3% | - | - | - | 1.4 | 13.4 | 4.5 | 4.8 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 460 | 2055:1827 | 1236 | 37.2% | - | - | - | 1.9 | 15.2 | 4.4 | 4.7 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 513 | 2055:1702 | 1056 | 48.6% | - | - | - | 2.0 | 14.2 | 6.3 | 6.8 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 387 | 2055 | 1057 | 36.6% | - | - | - | 1.4 | 12.9 | 4.4 | 4.7 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 92 | 1811 | 207 | 44.5% | - | - | - | 1.1 | 44.5 | 1.7 | 2.1 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 390 | 1965 | 1544 | 25.3% | - | - | - | 0.2 | 1.7 | 0.1 | 0.3 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 450 | 2105 | 1654 | 27.2% | - | - | - | 0.2 | 1.6 | 0.1 | 0.3 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 503 | 1915 | 1915 | 26.3% | - | - | - | 0.2 | 1.4 | 0.2 | 0.4 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 410 | 2055 | 2055 | 20.0% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%):

85.3

Total Delay for Signalled Lanes (pcuHr):

8.32

Cycle Time (s): 70

PRC Over All Lanes (%):

85.3

Total Delay Over All Lanes(pcuHr):

11.22

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 908 | 2029:1786 | 1458 | 62.3% | 1816 | 0 | 0 | 0.8 | 3.3 | 0.0 | 0.8 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 190 | 2029 | 1056 | 18.0% | 190 | 0 | 0 | 0.1 | 2.1 | 0.0 | 0.1 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 239 | 1894 | 1245 | 19.2% | 239 | 0 | 0 | 0.1 | 1.8 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 796 | 1965 | 1965 | 40.5% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 769 | 2029 | 1183 | 65.0% | 769 | 0 | 0 | 2.2 | 10.1 | 14.0 | 14.9 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 61 | 1747 | 540 | 11.3% | 61 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 228 | 2077 | 2077 | 11.0% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 658 | 2077 | 2077 | 31.7% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 190 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 173 | 2005 | 2005 | 8.6% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 857 | 1965 | 1965 | 43.6% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 714 | 2077 | 2077 | 34.4% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:8/3 | Right | U | - | | - | - | - | 228 | 2005 | 2005 | 11.4% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1571 | 4070 | 4070 | 38.6% | - | - | - | 0.3 | 0.7 | 0.0 | 0.2 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 712 | 1965 | 1965 | 36.2% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 202 | 2105 | 2105 | 9.6% | - | - | - | 0.1 | 0.9 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 712 | 1915 | 985 | 72.3% | - | - | - | 3.9 | 19.7 | 10.7 | 12.0 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 202 | 2055:1827 | 262 | 77.0% | - | - | - | 3.2 | 57.2 | 3.7 | 5.3 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 948 | 2055:1702 | 1081 | 87.7% | - | - | - | 7.1 | 27.0 | 15.1 | 18.5 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 763 | 2055 | 1057 | 72.2% | - | - | - | 4.1 | 19.2 | 11.4 | 12.7 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 27 | 1814 | 207 | 13.0% | - | - | - | 0.3 | 37.9 | 0.5 | 0.5 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 713 | 1965 | 1544 | 46.2% | - | - | - | 0.5 | 2.3 | 0.2 | 0.6 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 21 | 2105 | 1654 | 1.3% | - | - | - | 0.0 | 1.1 | 0.0 | 0.0 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 796 | 1915 | 1915 | 41.6% | - | - | - | 0.4 | 1.7 | 0.2 | 0.6 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 769 | 2055 | 2055 | 37.4% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.6
 PRC Over All Lanes (%): 2.6

Total Delay for Signalled Lanes (pcuHr): 19.04
 Total Delay Over All Lanes(pcuHr): 25.08

Cycle Time (s): 70

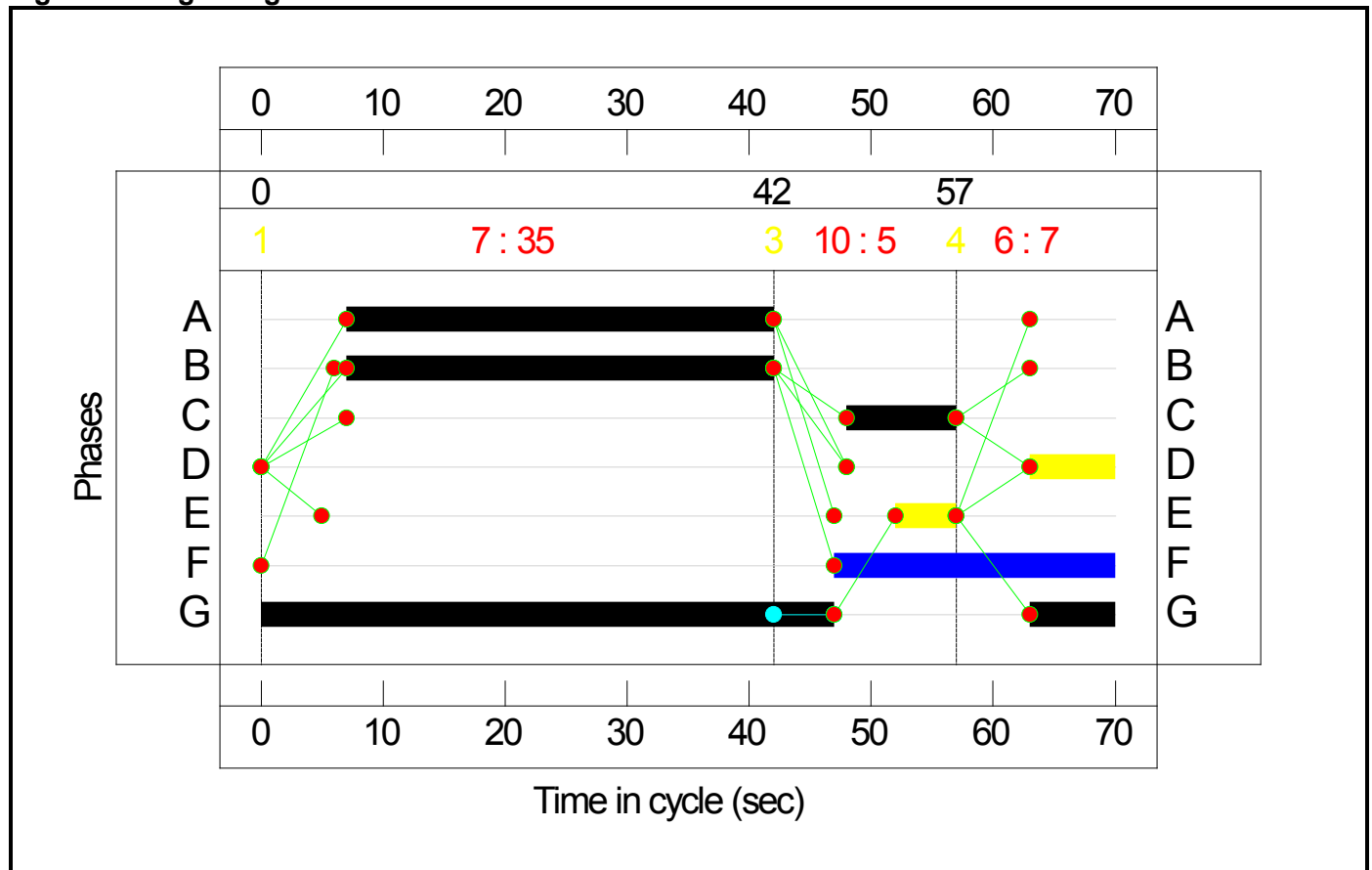
Scenario 10: '2024 DS2 PM Base' (FG10: '2024 DS2 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 794 | 162 | 11 | 967 |
| | B | 799 | 0 | 263 | 71 | 1133 |
| | C | 142 | 278 | 0 | 7 | 427 |
| | D | 84 | 128 | 24 | 0 | 236 |
| | Tot. | 1025 | 1200 | 449 | 89 | 2763 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 704 | 2029:1786 | 1777 | 39.6% | 1408 | 0 | 0 | 0.3 | 1.7 | 0.0 | 0.3 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 429 | 2029 | 1081 | 39.7% | 429 | 0 | 0 | 0.3 | 2.8 | 0.0 | 0.3 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 427 | 1894 | 1229 | 34.7% | 427 | 0 | 0 | 0.3 | 2.2 | 0.0 | 0.3 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 542 | 1965 | 1965 | 27.6% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 438 | 2029 | 1125 | 38.9% | 438 | 0 | 0 | 0.4 | 3.4 | 5.0 | 5.3 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 128 | 1747 | 596 | 21.5% | 128 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 186 | 2077 | 2077 | 9.0% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:6/1 | Ahead | U | - | | - | - | - | 441 | 2077 | 2077 | 21.2% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 429 | 2077 | 2077 | 20.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 278 | 2005 | 2005 | 13.9% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 670 | 1965 | 1965 | 34.1% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:8/2 | Ahead | U | - | | - | - | - | 530 | 2077 | 2077 | 25.5% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 186 | 2005 | 2005 | 9.3% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1200 | 4070 | 4070 | 29.5% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 462 | 1965 | 1965 | 23.5% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 557 | 2105 | 2105 | 26.5% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|-----|-----|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 462 | 1915 | 985 | 46.9% | - | - | - | 1.8 | 14.3 | 5.6 | 6.1 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 557 | 2055:1827 | 1208 | 46.1% | - | - | - | 2.4 | 15.8 | 5.9 | 6.3 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 553 | 2055:1702 | 1057 | 52.3% | - | - | - | 2.3 | 14.8 | 7.0 | 7.5 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 414 | 2055 | 1057 | 39.2% | - | - | - | 1.5 | 13.1 | 4.8 | 5.2 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 108 | 1814 | 207 | 52.1% | - | - | - | 1.4 | 47.1 | 2.0 | 2.5 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 468 | 1965 | 1544 | 30.3% | - | - | - | 0.2 | 1.8 | 0.1 | 0.3 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 557 | 2105 | 1654 | 33.7% | - | - | - | 0.3 | 1.8 | 0.1 | 0.4 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 542 | 1915 | 1915 | 28.3% | - | - | - | 0.2 | 1.5 | 0.2 | 0.4 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 438 | 2055 | 2055 | 21.3% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 71.9
 PRC Over All Lanes (%): 71.9

Total Delay for Signalled Lanes (pcuHr): 9.99
 Total Delay Over All Lanes(pcuHr): 13.43

Cycle Time (s): 70

Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 924 | 2029:1786 | 1447 | 63.9% | 1848 | 0 | 0 | 0.9 | 3.4 | 0.0 | 0.9 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 190 | 2029 | 1055 | 18.0% | 190 | 0 | 0 | 0.1 | 2.1 | 0.0 | 0.1 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 241 | 1894 | 1234 | 19.5% | 241 | 0 | 0 | 0.1 | 1.8 | 0.0 | 0.1 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 800 | 1965 | 1965 | 40.7% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 777 | 2029 | 1183 | 65.7% | 777 | 0 | 0 | 2.2 | 10.3 | 14.1 | 15.1 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 61 | 1747 | 539 | 11.3% | 61 | 0 | 0 | 0.1 | 3.8 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 230 | 2077 | 2077 | 11.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 674 | 2077 | 2077 | 32.5% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 190 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 173 | 2005 | 2005 | 8.6% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:8/1 | Ahead | U | - | | - | - | - | 861 | 1965 | 1965 | 43.8% | - | - | - | 0.4 | 1.6 | 0.0 | 0.4 |
| J1:8/2 | Ahead | U | - | | - | - | - | 720 | 2077 | 2077 | 34.7% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |
| J1:8/3 | Right | U | - | | - | - | - | 230 | 2005 | 2005 | 11.5% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1581 | 4070 | 4070 | 38.8% | - | - | - | 0.3 | 0.7 | 0.0 | 0.2 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 731 | 1965 | 1965 | 37.2% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 201 | 2105 | 2105 | 9.5% | - | - | - | 0.1 | 0.9 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|------|------|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 731 | 1915 | 985 | 74.2% | - | - | - | 4.1 | 20.4 | 11.0 | 12.4 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 201 | 2055:1827 | 261 | 77.0% | - | - | - | 3.2 | 57.4 | 3.7 | 5.3 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 953 | 2055:1702 | 1081 | 88.2% | - | - | - | 7.3 | 27.5 | 15.2 | 18.7 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 771 | 2055 | 1057 | 73.0% | - | - | - | 4.2 | 19.5 | 11.6 | 12.9 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 28 | 1814 | 207 | 13.5% | - | - | - | 0.3 | 37.9 | 0.5 | 0.6 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 732 | 1965 | 1544 | 47.4% | - | - | - | 0.5 | 2.4 | 0.2 | 0.6 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 21 | 2105 | 1654 | 1.3% | - | - | - | 0.0 | 1.1 | 0.0 | 0.0 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 800 | 1915 | 1915 | 41.8% | - | - | - | 0.4 | 1.7 | 0.2 | 0.6 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 777 | 2055 | 2055 | 37.8% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.1
 PRC Over All Lanes (%): 2.1

Total Delay for Signalled Lanes (pcuHr): 19.58
 Total Delay Over All Lanes(pcuHr): 25.80

Cycle Time (s): 70

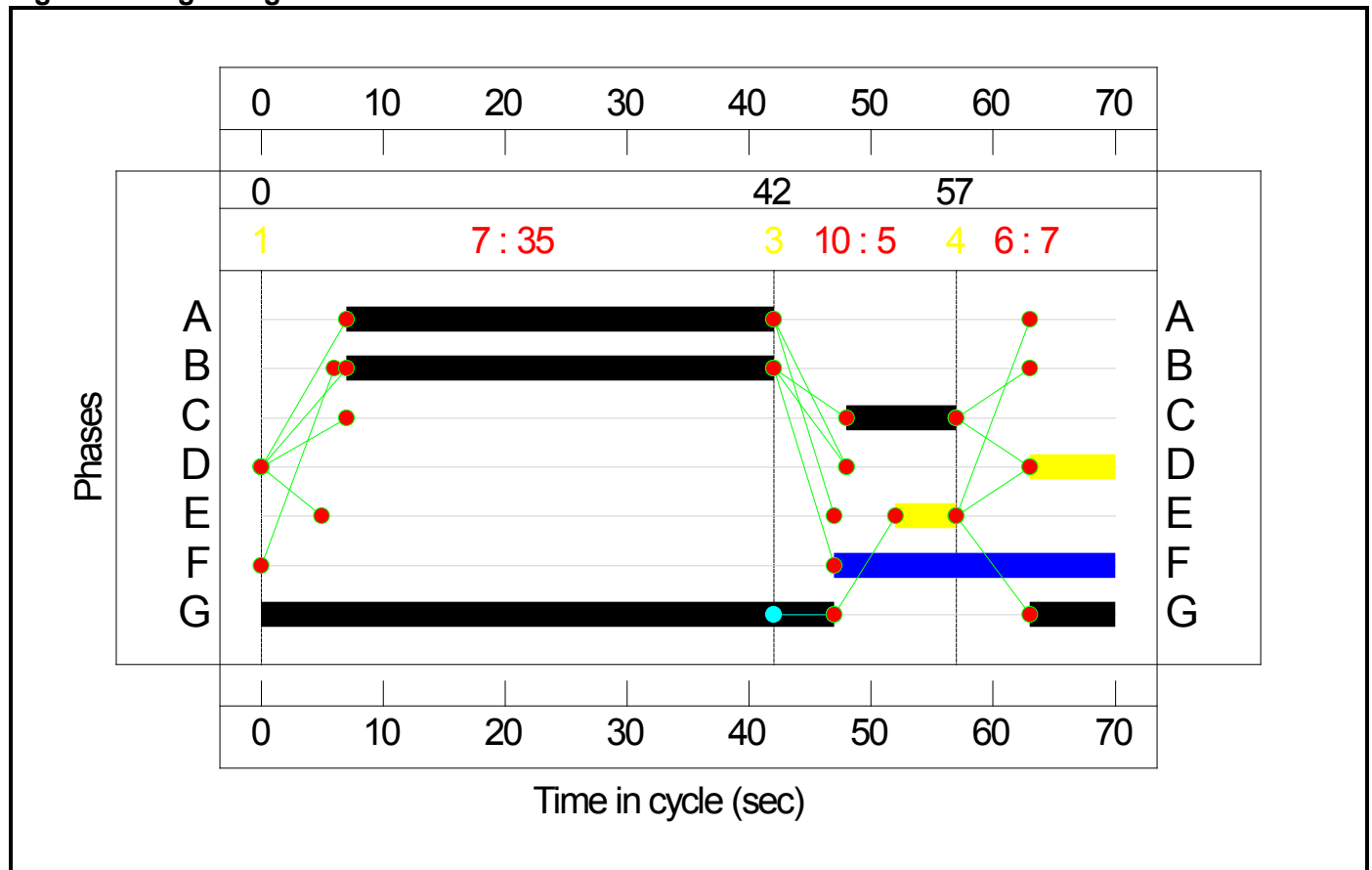
Scenario 12: '2024 DS2 PM Base + Development' (FG12: '2024 DS2 PM Base + Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|------|-----|----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 812 | 166 | 11 | 989 |
| | B | 818 | 0 | 263 | 71 | 1152 |
| | C | 144 | 278 | 0 | 7 | 429 |
| | D | 86 | 128 | 24 | 0 | 238 |
| | Tot. | 1048 | 1218 | 453 | 89 | 2808 |

Signal Timings Diagram



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln S/B Ahead Left | O | - | | - | - | - | 714 | 2029:1786 | 1743 | 41.0% | 1428 | 0 | 0 | 0.3 | 1.7 | 0.0 | 0.3 |
| J1:1/3 | Newgate Ln S/B Ahead | O | - | | - | - | - | 438 | 2029 | 1079 | 40.6% | 438 | 0 | 0 | 0.3 | 2.8 | 0.0 | 0.3 |
| J1:2/1 | Speedfields Pk Ahead Left | O | - | | - | - | - | 429 | 1894 | 1216 | 35.3% | 429 | 0 | 0 | 0.3 | 2.3 | 0.0 | 0.3 |
| J1:3/1 | Newgate Lane N/B Ahead | U | - | | - | - | - | 555 | 1965 | 1965 | 28.2% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:3/2 | Newgate Lane N/B Ahead | O | - | | - | - | - | 447 | 2029 | 1125 | 39.7% | 447 | 0 | 0 | 0.4 | 3.6 | 5.1 | 5.5 |
| J1:4/1 | HMS C'wood LT G-way Ahead | O | - | | - | - | - | 128 | 1747 | 593 | 21.6% | 128 | 0 | 0 | 0.1 | 3.9 | 0.0 | 0.1 |
| J1:5/1 | Right Ahead | U | - | | - | - | - | 190 | 2077 | 2077 | 9.1% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:6/1 | Ahead | U | - | | - | - | - | 451 | 2077 | 2077 | 21.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:6/2 | Right Ahead | U | - | | - | - | - | 438 | 2077 | 2077 | 21.1% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:7/1 | Right | U | - | | - | - | - | 278 | 2005 | 2005 | 13.9% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:8/1 | Ahead | U | - | | - | - | - | 683 | 1965 | 1965 | 34.8% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |
| J1:8/2 | Ahead | U | - | | - | - | - | 535 | 2077 | 2077 | 25.8% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:8/3 | Right | U | - | | - | - | - | 190 | 2005 | 2005 | 9.5% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:9/1 | Newgate Ln N/B Exit | U | - | | - | - | - | 1218 | 4070 | 4070 | 29.9% | - | - | - | 0.2 | 0.6 | 0.0 | 0.1 |
| J1:11/1 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 471 | 1965 | 1965 | 24.0% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Newgate Ln S/B Exit Ahead | U | - | | - | - | - | 569 | 2105 | 2105 | 27.0% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------------|---|-----|--|---|------|---|-----|-----------|------|-------|---|---|---|-----|------|-----|-----|
| J2:1/1 | Newgate Ln S/B Ahead | U | A | | 1 | 35 | - | 471 | 1915 | 985 | 47.8% | - | - | - | 1.9 | 14.4 | 5.9 | 6.3 |
| J2:1/2+J2:1/3 | Newgate Ln S/B Ahead Right | U | A C | | 1 | 35:9 | - | 569 | 2055:1827 | 1205 | 47.2% | - | - | - | 2.5 | 15.9 | 6.0 | 6.4 |
| J2:2/2+J2:2/1 | Newgate Ln N/B Ahead Left | U | B | | 1 | 35 | - | 566 | 2055:1702 | 1056 | 53.6% | - | - | - | 2.4 | 15.0 | 7.1 | 7.7 |
| J2:2/3 | Newgate Ln N/B Ahead | U | B | | 1 | 35 | - | 423 | 2055 | 1057 | 40.0% | - | - | - | 1.6 | 13.2 | 4.9 | 5.3 |
| J2:3/1 | HMS Collingwood Right Left | U | D | | 1 | 7 | - | 110 | 1814 | 207 | 53.1% | - | - | - | 1.5 | 47.5 | 2.0 | 2.6 |
| J2:4/1 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 477 | 1965 | 1544 | 30.9% | - | - | - | 0.2 | 1.8 | 0.1 | 0.3 |
| J2:4/2 | Newgate Ln S/B Exit Merge Ahead | U | G | | 1 | 54 | - | 571 | 2105 | 1654 | 34.5% | - | - | - | 0.3 | 1.8 | 0.1 | 0.4 |
| J2:5/1 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 555 | 1915 | 1915 | 29.0% | - | - | - | 0.2 | 1.5 | 0.2 | 0.5 |
| J2:5/2 | Newgate Ln N/B Exit Ahead | U | - | | - | - | - | 447 | 2055 | 2055 | 21.8% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J2:P1 | Newgate Ln S/B | - | E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J2:P2 | Newgate Ln N/B | - | F | | 1 | 23 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 68.0
 PRC Over All Lanes (%): 68.0

Total Delay for Signalled Lanes (pcuHr): 10.29
 Total Delay Over All Lanes(pcuHr): 13.84

Cycle Time (s): 70

APPENDIX I

LONGFIELD AVENUE / NEWGATE LANE MODELLING REPORTS

| |
|---|
| <h1>Junctions 9</h1> |
| <h2>ARCADY 9 - Roundabout Module</h2> |
| Version: 9.5.0.6896 © Copyright TRL Limited, 2018 |
| For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |

Filename: NGL-Longfield Ave Oct 19.j9

Path: \\Pg-brs-dc01\data\Bristol Projects\Bristol - Live Projects\BRS.4901 - BRS.5000\BRS.4989 - SUSTAINABLE LAND PLC - LAND TO THE NORTH OF GOSPORT ROAD, FAREHAM\Transport\7. Junction Modelling\c. ARCADY\Oct 19

Report generation date: 08/10/2019 10:57:26

-
- »2019 Base DS1, AM
 - »2019 Base DS1, PM
 - »2024 Base DS1, AM
 - »2024 Base DS1, PM
 - »2024 Base + Dev DS1, AM
 - »2024 Base + Dev DS1, PM
 - »2019 Base DS2, AM
 - »2019 Base DS2, PM
 - »2024 Base DS2, AM
 - »2024 Base DS2, PM
 - »2024 Base + Dev DS2, AM
 - »2024 Base + Dev DS2, PM

Summary of junction performance

| | AM | | | | | PM | | | | |
|----------------------------|-------------|-----------|------|-----|--------------|-------------|-----------|------|-----|--------------|
| | Queue (PCU) | Delay (s) | RFC | LOS | Junction LOS | Queue (PCU) | Delay (s) | RFC | LOS | Junction LOS |
| 2019 Base DS1 | | | | | | | | | | |
| Arm 1 | 0.2 | 9.61 | 0.13 | A | A | 0.4 | 17.75 | 0.31 | C | A |
| Arm 2 | 2.9 | 6.61 | 0.74 | A | | 1.4 | 4.08 | 0.58 | A | |
| Arm 3 | 0.7 | 4.26 | 0.42 | A | | 0.9 | 4.17 | 0.49 | A | |
| Arm 4 | 1.9 | 6.98 | 0.65 | A | | 2.9 | 9.95 | 0.75 | A | |
| 2024 Base DS1 | | | | | | | | | | |
| Arm 1 | 0.2 | 12.67 | 0.17 | B | A | 0.9 | 35.64 | 0.49 | E | B |
| Arm 2 | 3.6 | 7.80 | 0.78 | A | | 1.7 | 4.48 | 0.62 | A | |
| Arm 3 | 0.9 | 4.95 | 0.49 | A | | 1.2 | 4.93 | 0.56 | A | |
| Arm 4 | 3.2 | 10.35 | 0.76 | B | | 5.9 | 18.68 | 0.86 | C | |
| 2024 Base + Dev DS1 | | | | | | | | | | |
| Arm 1 | 0.2 | 13.09 | 0.18 | B | A | 1.1 | 40.80 | 0.53 | E | B |
| Arm 2 | 3.8 | 8.16 | 0.79 | A | | 1.7 | 4.62 | 0.63 | A | |
| Arm 3 | 1.0 | 5.08 | 0.50 | A | | 1.3 | 5.10 | 0.57 | A | |
| Arm 4 | 3.4 | 10.89 | 0.77 | B | | 6.7 | 21.00 | 0.88 | C | |
| 2019 Base DS2 | | | | | | | | | | |
| Arm 1 | 0.1 | 7.15 | 0.10 | A | A | 0.2 | 7.18 | 0.15 | A | A |
| Arm 2 | 2.4 | 5.72 | 0.70 | A | | 1.3 | 3.90 | 0.57 | A | |
| Arm 3 | 0.3 | 3.28 | 0.21 | A | | 0.2 | 2.72 | 0.19 | A | |
| Arm 4 | 1.4 | 5.11 | 0.57 | A | | 1.2 | 4.55 | 0.54 | A | |
| 2024 Base DS2 | | | | | | | | | | |
| Arm 1 | 0.2 | 8.56 | 0.13 | A | A | 0.2 | 8.67 | 0.19 | A | A |
| Arm 2 | 2.9 | 6.56 | 0.74 | A | | 1.5 | 4.25 | 0.60 | A | |
| Arm 3 | 0.3 | 3.54 | 0.24 | A | | 0.3 | 2.89 | 0.22 | A | |
| Arm 4 | 2.1 | 6.66 | 0.67 | A | | 1.7 | 5.68 | 0.63 | A | |
| 2024 Base + Dev DS2 | | | | | | | | | | |
| Arm 1 | 0.2 | 8.76 | 0.13 | A | A | 0.2 | 8.96 | 0.20 | A | A |
| Arm 2 | 3.0 | 6.75 | 0.75 | A | | 1.6 | 4.38 | 0.62 | A | |
| Arm 3 | 0.3 | 3.59 | 0.25 | A | | 0.3 | 2.95 | 0.22 | A | |
| Arm 4 | 2.2 | 6.92 | 0.68 | A | | 1.8 | 5.88 | 0.64 | A | |

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

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

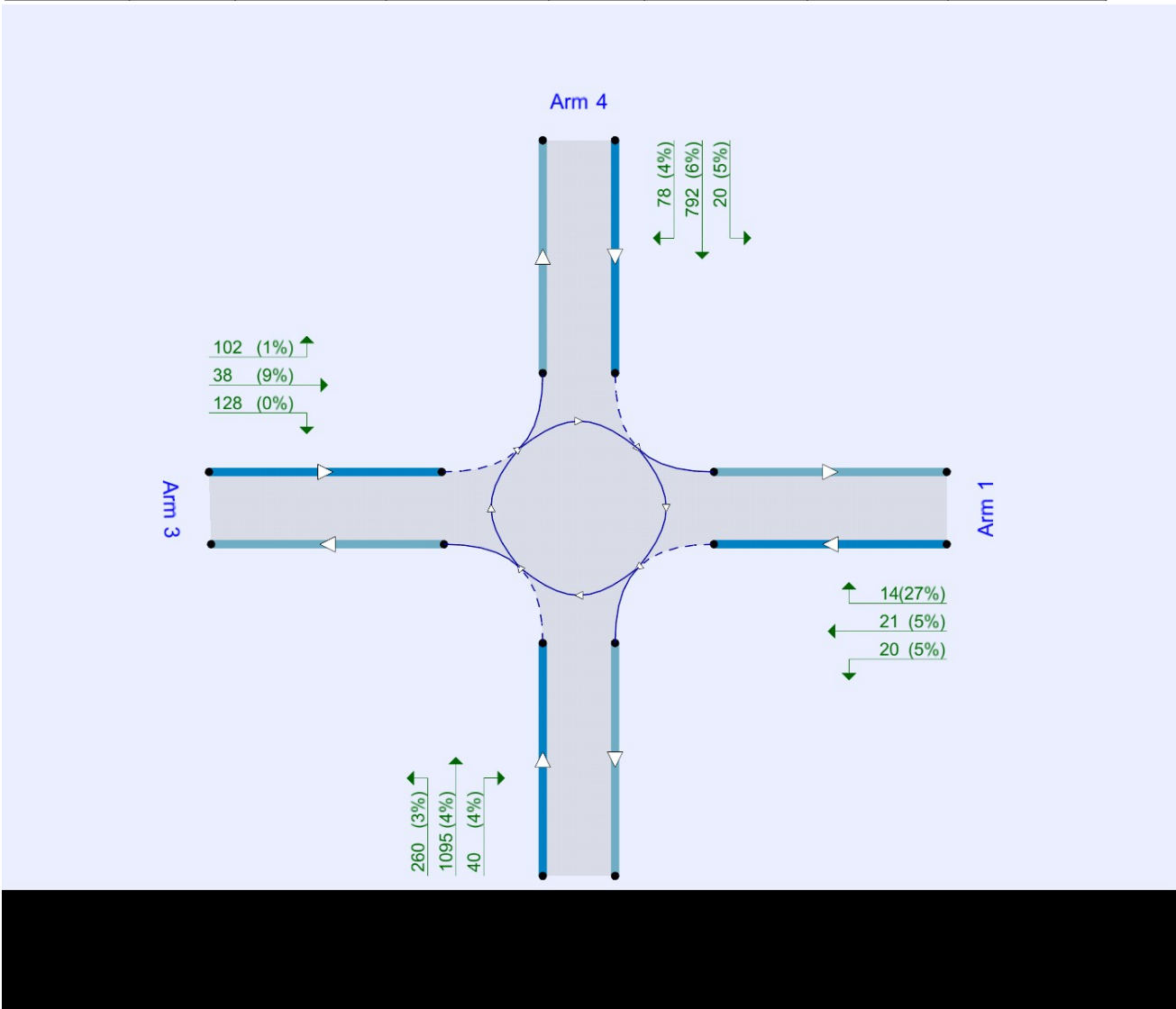
File summary

File Description

| | |
|-------------|--|
| Title | Longfield Avenue Roundabout |
| Location | |
| Site number | |
| Date | 08/10/2018 |
| Version | V3 |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | BRS.4989 |
| Enumerator | PEGASUSGROUP\Matthew Haywood |
| Description | Rev 3 - Updated for total of 190 dwellings |

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2019 Base DS1 | AM | without Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D2 | 2019 Base DS1 | PM | without Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D5 | 2024 Base DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D6 | 2024 Base DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D7 | 2024 Base + Dev DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D8 | 2024 Base + Dev DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D10 | 2019 Base DS2 | AM | with Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D11 | 2019 Base DS2 | PM | with Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D12 | 2024 Base DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D13 | 2024 Base DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D14 | 2024 Base + Dev DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D15 | 2024 Base + Dev DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

Analysis Set Details

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

2019 Base DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.34 | A |

Junction Network Options

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

Arms

Arms

| Arm | Name | Description |
|-----|----------------------|-------------|
| 1 | Davis Way | |
| 2 | Newgate Lane (South) | |
| 3 | Longfield Avenue | |
| 4 | Newgate Lane (North) | |

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 | 3.50 | 4.90 | 6.7 | 10.0 | 46.0 | 55.0 | |
| 2 | 7.30 | 7.35 | 0.0 | 40.0 | 46.0 | 28.0 | |
| 3 | 3.65 | 11.40 | 24.8 | 34.0 | 46.0 | 23.0 | |
| 4 | 3.15 | 9.40 | 41.6 | 11.0 | 46.0 | 66.0 | |

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

| Arm | Final slope | Final intercept (PCU/hr) |
|-----|-------------|--------------------------|
| 1 | 0.475 | 1136 |
| 2 | 0.747 | 2282 |
| 3 | 0.770 | 2381 |
| 4 | 0.608 | 1865 |

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2019 Base DS1 | AM | without Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 55 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1461 | 100.000 |
| 3 | | ONE HOUR | ✓ | 564 | 100.000 |
| 4 | | ONE HOUR | ✓ | 917 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | To | | | | |
|------|----|----|-----|-----|------|
| | 1 | 2 | 3 | 4 | |
| From | 1 | 0 | 20 | 21 | 14 |
| | 2 | 52 | 0 | 402 | 1007 |
| | 3 | 38 | 372 | 0 | 154 |
| | 4 | 20 | 800 | 97 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | To | | | | |
|------|----|---|---|---|----|
| | 1 | 2 | 3 | 4 | |
| From | 1 | 0 | 5 | 5 | 27 |
| | 2 | 4 | 0 | 3 | 4 |
| | 3 | 9 | 0 | 0 | 1 |
| | 4 | 5 | 6 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.13 | 9.61 | 0.2 | 0.5 | A | 50 | 76 |
| 2 | 0.74 | 6.61 | 2.9 | 6.2 | A | 1341 | 2011 |
| 3 | 0.42 | 4.26 | 0.7 | 3.1 | A | 518 | 776 |
| 4 | 0.65 | 6.98 | 1.9 | 2.9 | A | 841 | 1262 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 41 | 10 | 952 | 684 | 0.061 | 41 | 83 | 0.0 | 0.1 | 6.153 | A |
| 2 | 1100 | 275 | 99 | 2208 | 0.498 | 1096 | 894 | 0.0 | 1.0 | 3.347 | A |
| 3 | 425 | 106 | 805 | 1762 | 0.241 | 423 | 390 | 0.0 | 0.3 | 2.706 | A |
| 4 | 690 | 173 | 347 | 1654 | 0.417 | 687 | 881 | 0.0 | 0.8 | 3.936 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 49 | 12 | 1139 | 595 | 0.083 | 49 | 99 | 0.1 | 0.1 | 7.251 | A |
| 2 | 1313 | 328 | 118 | 2194 | 0.599 | 1311 | 1070 | 1.0 | 1.5 | 4.227 | A |
| 3 | 507 | 127 | 963 | 1640 | 0.309 | 507 | 467 | 0.3 | 0.4 | 3.196 | A |
| 4 | 824 | 206 | 415 | 1613 | 0.511 | 823 | 1055 | 0.8 | 1.1 | 4.824 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 61 | 15 | 1393 | 475 | 0.128 | 60 | 121 | 0.1 | 0.2 | 9.556 | A |
| 2 | 1609 | 402 | 145 | 2174 | 0.740 | 1603 | 1309 | 1.5 | 2.9 | 6.488 | A |
| 3 | 621 | 155 | 1177 | 1475 | 0.421 | 620 | 571 | 0.4 | 0.7 | 4.235 | A |
| 4 | 1010 | 252 | 508 | 1556 | 0.649 | 1006 | 1290 | 1.1 | 1.9 | 6.897 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 61 | 15 | 1397 | 473 | 0.128 | 61 | 121 | 0.2 | 0.2 | 9.606 | A |
| 2 | 1609 | 402 | 145 | 2174 | 0.740 | 1608 | 1312 | 2.9 | 2.9 | 6.608 | A |
| 3 | 621 | 155 | 1181 | 1472 | 0.422 | 621 | 572 | 0.7 | 0.7 | 4.259 | A |
| 4 | 1010 | 252 | 509 | 1556 | 0.649 | 1010 | 1294 | 1.9 | 1.9 | 6.984 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 49 | 12 | 1145 | 593 | 0.083 | 50 | 99 | 0.2 | 0.1 | 7.295 | A |
| 2 | 1313 | 328 | 119 | 2193 | 0.599 | 1319 | 1075 | 2.9 | 1.6 | 4.302 | A |
| 3 | 507 | 127 | 969 | 1636 | 0.310 | 508 | 469 | 0.7 | 0.5 | 3.217 | A |
| 4 | 824 | 206 | 416 | 1612 | 0.511 | 828 | 1060 | 1.9 | 1.1 | 4.887 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 41 | 10 | 957 | 682 | 0.061 | 42 | 83 | 0.1 | 0.1 | 6.188 | A |
| 2 | 1100 | 275 | 100 | 2208 | 0.498 | 1102 | 899 | 1.6 | 1.0 | 3.386 | A |
| 3 | 425 | 106 | 809 | 1758 | 0.241 | 425 | 392 | 0.5 | 0.3 | 2.722 | A |
| 4 | 690 | 173 | 348 | 1653 | 0.418 | 692 | 886 | 1.1 | 0.8 | 3.976 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 | 1.02 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 | 0.32 | 0.00 | 0.00 | 0.32 | 0.32 | | | N/A | N/A |
| 4 | 0.75 | 0.58 | 1.06 | 1.48 | 1.54 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 | 1.53 | 0.05 | 0.49 | 3.92 | 6.15 | | | N/A | N/A |
| 3 | 0.45 | 0.00 | 0.00 | 0.45 | 0.45 | | | N/A | N/A |
| 4 | 1.10 | 0.07 | 0.86 | 2.04 | 2.87 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.16 | 0.03 | 0.29 | 0.51 | 0.54 | | | N/A | N/A |
| 2 | 2.88 | 0.03 | 0.29 | 2.88 | 4.98 | | | N/A | N/A |
| 3 | 0.73 | 0.03 | 0.26 | 0.73 | 0.73 | | | N/A | N/A |
| 4 | 1.92 | 0.03 | 0.28 | 1.92 | 1.92 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.16 | 0.03 | 0.28 | 0.50 | 0.52 | | | N/A | N/A |
| 2 | 2.91 | 0.03 | 0.28 | 2.91 | 2.91 | | | N/A | N/A |
| 3 | 0.73 | 0.03 | 0.29 | 1.11 | 3.07 | | | N/A | N/A |
| 4 | 1.94 | 0.03 | 0.28 | 1.94 | 1.94 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 | 1.57 | 0.09 | 1.16 | 3.11 | 4.24 | | | N/A | N/A |
| 3 | 0.45 | 0.00 | 0.00 | 0.45 | 0.45 | | | N/A | N/A |
| 4 | 1.12 | 0.12 | 1.06 | 1.77 | 2.07 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 | 1.04 | 0.05 | 0.51 | 2.30 | 3.43 | | | N/A | N/A |
| 3 | 0.32 | 0.00 | 0.00 | 0.32 | 0.32 | | | N/A | N/A |
| 4 | 0.77 | 0.06 | 0.63 | 1.16 | 1.76 | | | N/A | N/A |

2019 Base DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.43 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2019 Base DS1 | PM | without Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 84 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1145 | 100.000 |
| 3 | | ONE HOUR | ✓ | 747 | 100.000 |
| 4 | | ONE HOUR | ✓ | 970 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|---|----|-----|-----|-----|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 22 | 29 | 33 |
| | 2 | 4 | 0 | 356 | 785 |
| | 3 | 4 | 638 | 0 | 105 |
| | 4 | 4 | 875 | 91 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---|----|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 5 | 0 | 0 |
| | 2 | 0 | 0 | 1 | 2 |
| | 3 | 0 | 0 | 0 | 0 |
| | 4 | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.31 | 17.75 | 0.4 | 1.5 | C | 77 | 116 |
| 2 | 0.58 | 4.08 | 1.4 | 2.0 | A | 1051 | 1576 |
| 3 | 0.49 | 4.17 | 0.9 | 1.9 | A | 685 | 1028 |
| 4 | 0.75 | 9.95 | 2.9 | 9.7 | A | 890 | 1335 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 63 | 16 | 1203 | 565 | 0.112 | 63 | 9 | 0.0 | 0.1 | 7.244 | A |
| 2 | 862 | 216 | 114 | 2197 | 0.392 | 859 | 1151 | 0.0 | 0.7 | 2.728 | A |
| 3 | 562 | 141 | 617 | 1907 | 0.295 | 561 | 357 | 0.0 | 0.4 | 2.671 | A |
| 4 | 730 | 183 | 485 | 1570 | 0.465 | 727 | 693 | 0.0 | 0.9 | 4.296 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 76 | 19 | 1439 | 453 | 0.167 | 75 | 11 | 0.1 | 0.2 | 9.639 | A |
| 2 | 1029 | 257 | 137 | 2180 | 0.472 | 1028 | 1378 | 0.7 | 0.9 | 3.170 | A |
| 3 | 672 | 168 | 738 | 1813 | 0.370 | 671 | 427 | 0.4 | 0.6 | 3.150 | A |
| 4 | 872 | 218 | 580 | 1512 | 0.577 | 870 | 829 | 0.9 | 1.4 | 5.646 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 92 | 23 | 1759 | 301 | 0.307 | 92 | 13 | 0.2 | 0.4 | 17.330 | C |
| 2 | 1261 | 315 | 167 | 2157 | 0.584 | 1259 | 1683 | 0.9 | 1.4 | 4.057 | A |
| 3 | 822 | 206 | 903 | 1686 | 0.488 | 821 | 523 | 0.6 | 0.9 | 4.155 | A |
| 4 | 1068 | 267 | 710 | 1433 | 0.745 | 1062 | 1014 | 1.4 | 2.8 | 9.675 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 92 | 23 | 1766 | 298 | 0.311 | 92 | 13 | 0.4 | 0.4 | 17.749 | C |
| 2 | 1261 | 315 | 168 | 2157 | 0.585 | 1261 | 1690 | 1.4 | 1.4 | 4.078 | A |
| 3 | 822 | 206 | 905 | 1685 | 0.488 | 822 | 524 | 0.9 | 0.9 | 4.174 | A |
| 4 | 1068 | 267 | 711 | 1433 | 0.745 | 1068 | 1016 | 2.8 | 2.9 | 9.951 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 76 | 19 | 1449 | 448 | 0.169 | 76 | 11 | 0.4 | 0.2 | 9.832 | A |
| 2 | 1029 | 257 | 139 | 2179 | 0.472 | 1031 | 1387 | 1.4 | 0.9 | 3.190 | A |
| 3 | 672 | 168 | 741 | 1811 | 0.371 | 673 | 429 | 0.9 | 0.6 | 3.168 | A |
| 4 | 872 | 218 | 582 | 1511 | 0.577 | 878 | 832 | 2.9 | 1.4 | 5.796 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 63 | 16 | 1210 | 562 | 0.113 | 64 | 9 | 0.2 | 0.1 | 7.323 | A |
| 2 | 862 | 216 | 116 | 2196 | 0.393 | 863 | 1158 | 0.9 | 0.7 | 2.745 | A |
| 3 | 562 | 141 | 620 | 1904 | 0.295 | 563 | 359 | 0.6 | 0.4 | 2.686 | A |
| 4 | 730 | 183 | 487 | 1569 | 0.465 | 732 | 696 | 1.4 | 0.9 | 4.359 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 | 0.65 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 | 0.42 | 0.00 | 0.00 | 0.42 | 0.42 | | | N/A | N/A |
| 4 | 0.87 | 0.56 | 1.01 | 1.41 | 1.47 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 2 | 0.90 | 0.07 | 0.80 | 1.56 | 1.96 | | | N/A | N/A |
| 3 | 0.59 | 0.07 | 0.74 | 1.35 | 1.42 | | | N/A | N/A |
| 4 | 1.36 | 0.05 | 0.62 | 3.23 | 4.83 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.44 | 0.03 | 0.26 | 0.47 | 0.50 | | | N/A | N/A |
| 2 | 1.41 | 0.03 | 0.26 | 1.41 | 1.41 | | | N/A | N/A |
| 3 | 0.94 | 0.03 | 0.25 | 0.94 | 0.94 | | | N/A | N/A |
| 4 | 2.84 | 0.03 | 0.29 | 2.84 | 9.73 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.45 | 0.03 | 0.34 | 1.39 | 1.54 | | | N/A | N/A |
| 2 | 1.42 | 0.03 | 0.27 | 1.42 | 1.42 | | | N/A | N/A |
| 3 | 0.95 | 0.03 | 0.27 | 0.95 | 1.95 | | | N/A | N/A |
| 4 | 2.90 | 0.03 | 0.28 | 2.90 | 3.79 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 2 | 0.92 | 0.52 | 1.01 | 1.44 | 1.49 | | | N/A | N/A |
| 3 | 0.59 | 0.55 | 1.00 | 1.40 | 1.45 | | | N/A | N/A |
| 4 | 1.40 | 0.07 | 0.90 | 3.02 | 4.34 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 | 0.66 | 0.09 | 0.82 | 1.38 | 1.46 | | | N/A | N/A |
| 3 | 0.42 | 0.00 | 0.00 | 0.42 | 0.42 | | | N/A | N/A |
| 4 | 0.89 | 0.04 | 0.41 | 2.03 | 3.35 | | | N/A | N/A |

2024 Base DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 8.16 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2024 Base DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 59 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1537 | 100.000 |
| 3 | | ONE HOUR | ✓ | 630 | 100.000 |
| 4 | | ONE HOUR | ✓ | 1043 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|---|----|-----|-----|------|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 23 | 22 | 14 |
| | 2 | 55 | 0 | 423 | 1059 |
| | 3 | 39 | 431 | 0 | 159 |
| | 4 | 21 | 922 | 100 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | | |
|------|---|----|---|---|----|--|
| | | 1 | 2 | 3 | 4 | |
| From | 1 | 0 | 5 | 5 | 27 | |
| | 2 | 4 | 0 | 3 | 4 | |
| | 3 | 9 | 0 | 0 | 1 | |
| | 4 | 5 | 6 | 4 | 0 | |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.17 | 12.67 | 0.2 | 0.5 | B | 54 | 82 |
| 2 | 0.78 | 7.80 | 3.6 | 10.7 | A | 1411 | 2116 |
| 3 | 0.49 | 4.95 | 0.9 | 2.7 | A | 578 | 867 |
| 4 | 0.76 | 10.35 | 3.2 | 11.9 | B | 957 | 1435 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 45 | 11 | 1089 | 619 | 0.072 | 44 | 86 | 0.0 | 0.1 | 6.860 | A |
| 2 | 1157 | 289 | 102 | 2206 | 0.525 | 1153 | 1031 | 0.0 | 1.1 | 3.533 | A |
| 3 | 474 | 119 | 846 | 1730 | 0.274 | 473 | 409 | 0.0 | 0.4 | 2.878 | A |
| 4 | 785 | 196 | 394 | 1625 | 0.483 | 781 | 925 | 0.0 | 1.0 | 4.475 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 53 | 13 | 1304 | 517 | 0.103 | 53 | 103 | 0.1 | 0.1 | 8.498 | A |
| 2 | 1382 | 345 | 122 | 2191 | 0.631 | 1379 | 1235 | 1.1 | 1.7 | 4.590 | A |
| 3 | 566 | 142 | 1013 | 1602 | 0.353 | 565 | 489 | 0.4 | 0.5 | 3.495 | A |
| 4 | 937 | 234 | 472 | 1578 | 0.594 | 935 | 1107 | 1.0 | 1.5 | 5.881 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 65 | 16 | 1593 | 380 | 0.172 | 65 | 126 | 0.1 | 0.2 | 12.502 | B |
| 2 | 1692 | 423 | 149 | 2171 | 0.780 | 1685 | 1508 | 1.7 | 3.5 | 7.584 | A |
| 3 | 693 | 173 | 1237 | 1429 | 0.485 | 692 | 597 | 0.5 | 0.9 | 4.907 | A |
| 4 | 1148 | 287 | 577 | 1514 | 0.758 | 1141 | 1352 | 1.5 | 3.2 | 10.003 | B |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 65 | 16 | 1600 | 376 | 0.173 | 65 | 126 | 0.2 | 0.2 | 12.669 | B |
| 2 | 1692 | 423 | 150 | 2170 | 0.780 | 1692 | 1515 | 3.5 | 3.6 | 7.805 | A |
| 3 | 693 | 173 | 1242 | 1425 | 0.487 | 693 | 600 | 0.9 | 0.9 | 4.952 | A |
| 4 | 1148 | 287 | 578 | 1513 | 0.758 | 1148 | 1357 | 3.2 | 3.2 | 10.352 | B |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 53 | 13 | 1314 | 512 | 0.104 | 54 | 104 | 0.2 | 0.1 | 8.607 | A |
| 2 | 1382 | 345 | 124 | 2190 | 0.631 | 1389 | 1244 | 3.6 | 1.8 | 4.706 | A |
| 3 | 566 | 142 | 1020 | 1596 | 0.355 | 568 | 493 | 0.9 | 0.6 | 3.530 | A |
| 4 | 937 | 234 | 474 | 1577 | 0.594 | 944 | 1114 | 3.2 | 1.6 | 6.055 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 45 | 11 | 1097 | 615 | 0.072 | 45 | 86 | 0.1 | 0.1 | 6.915 | A |
| 2 | 1157 | 289 | 103 | 2205 | 0.525 | 1160 | 1039 | 1.8 | 1.2 | 3.583 | A |
| 3 | 474 | 119 | 852 | 1726 | 0.275 | 475 | 411 | 0.6 | 0.4 | 2.899 | A |
| 4 | 785 | 196 | 396 | 1624 | 0.483 | 787 | 930 | 1.6 | 1.0 | 4.548 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.08 | 0.00 | 0.00 | 0.08 | 0.08 | | | N/A | N/A |
| 2 | 1.14 | 0.57 | 1.04 | 1.45 | 1.50 | | | N/A | N/A |
| 3 | 0.38 | 0.00 | 0.00 | 0.38 | 0.38 | | | N/A | N/A |
| 4 | 0.98 | 0.58 | 1.05 | 1.48 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 | 1.75 | 0.05 | 0.47 | 4.65 | 7.59 | | | N/A | N/A |
| 3 | 0.55 | 0.06 | 0.66 | 1.34 | 1.43 | | | N/A | N/A |
| 4 | 1.52 | 0.06 | 0.63 | 3.73 | 5.59 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.22 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 | 3.54 | 0.03 | 0.30 | 3.54 | 10.73 | | | N/A | N/A |
| 3 | 0.94 | 0.03 | 0.26 | 0.94 | 0.94 | | | N/A | N/A |
| 4 | 3.16 | 0.03 | 0.31 | 3.16 | 11.86 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.23 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 | 3.61 | 0.03 | 0.28 | 3.61 | 3.61 | | | N/A | N/A |
| 3 | 0.95 | 0.03 | 0.28 | 0.95 | 2.72 | | | N/A | N/A |
| 4 | 3.23 | 0.03 | 0.29 | 3.23 | 4.62 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 | 1.80 | 0.07 | 1.05 | 4.14 | 5.95 | | | N/A | N/A |
| 3 | 0.56 | 0.55 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |
| 4 | 1.57 | 0.07 | 0.91 | 3.63 | 5.17 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 | 1.16 | 0.04 | 0.44 | 2.87 | 4.62 | | | N/A | N/A |
| 3 | 0.38 | 0.00 | 0.00 | 0.38 | 0.38 | | | N/A | N/A |
| 4 | 1.00 | 0.04 | 0.42 | 2.41 | 3.96 | | | N/A | N/A |

2024 Base DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 10.23 | B |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2024 Base DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 89 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1214 | 100.000 |
| 3 | | ONE HOUR | ✓ | 830 | 100.000 |
| 4 | | ONE HOUR | ✓ | 1081 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|---|----|-----|-----|-----|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 25 | 30 | 34 |
| | 2 | 4 | 0 | 377 | 832 |
| | 3 | 4 | 717 | 0 | 109 |
| | 4 | 4 | 982 | 94 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---|----|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 4 | 0 | 0 |
| | 2 | 0 | 0 | 1 | 2 |
| | 3 | 0 | 0 | 0 | 0 |
| | 4 | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.49 | 35.64 | 0.9 | 4.3 | E | 81 | 122 |
| 2 | 0.62 | 4.48 | 1.7 | 2.7 | A | 1114 | 1671 |
| 3 | 0.56 | 4.93 | 1.2 | 1.5 | A | 761 | 1142 |
| 4 | 0.86 | 18.68 | 5.9 | 30.3 | C | 992 | 1487 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 67 | 17 | 1344 | 498 | 0.134 | 66 | 9 | 0.0 | 0.2 | 8.424 | A |
| 2 | 914 | 228 | 118 | 2194 | 0.417 | 911 | 1292 | 0.0 | 0.7 | 2.842 | A |
| 3 | 625 | 156 | 653 | 1879 | 0.332 | 623 | 376 | 0.0 | 0.5 | 2.857 | A |
| 4 | 814 | 203 | 544 | 1534 | 0.530 | 809 | 732 | 0.0 | 1.1 | 4.982 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 80 | 20 | 1608 | 372 | 0.214 | 79 | 11 | 0.2 | 0.3 | 12.407 | B |
| 2 | 1091 | 273 | 142 | 2176 | 0.501 | 1090 | 1546 | 0.7 | 1.0 | 3.360 | A |
| 3 | 746 | 186 | 782 | 1780 | 0.419 | 745 | 450 | 0.5 | 0.7 | 3.475 | A |
| 4 | 971 | 243 | 651 | 1469 | 0.661 | 968 | 875 | 1.1 | 1.9 | 7.211 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 98 | 24 | 1958 | 206 | 0.474 | 95 | 14 | 0.3 | 0.9 | 32.257 | D |
| 2 | 1337 | 334 | 171 | 2154 | 0.620 | 1334 | 1882 | 1.0 | 1.6 | 4.440 | A |
| 3 | 913 | 228 | 956 | 1646 | 0.555 | 911 | 549 | 0.7 | 1.2 | 4.890 | A |
| 4 | 1190 | 297 | 797 | 1381 | 0.862 | 1175 | 1071 | 1.9 | 5.6 | 16.640 | C |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 98 | 24 | 1973 | 199 | 0.491 | 97 | 14 | 0.9 | 0.9 | 35.644 | E |
| 2 | 1337 | 334 | 174 | 2152 | 0.621 | 1336 | 1897 | 1.6 | 1.7 | 4.477 | A |
| 3 | 913 | 228 | 958 | 1644 | 0.556 | 913 | 552 | 1.2 | 1.2 | 4.929 | A |
| 4 | 1190 | 297 | 798 | 1380 | 0.862 | 1188 | 1073 | 5.6 | 5.9 | 18.681 | C |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 80 | 20 | 1629 | 362 | 0.220 | 82 | 11 | 0.9 | 0.3 | 13.122 | B |
| 2 | 1091 | 273 | 146 | 2174 | 0.502 | 1094 | 1566 | 1.7 | 1.0 | 3.392 | A |
| 3 | 746 | 186 | 785 | 1777 | 0.420 | 748 | 454 | 1.2 | 0.7 | 3.507 | A |
| 4 | 971 | 243 | 654 | 1468 | 0.662 | 987 | 879 | 5.9 | 2.0 | 7.795 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 67 | 17 | 1354 | 493 | 0.136 | 67 | 9 | 0.3 | 0.2 | 8.568 | A |
| 2 | 914 | 228 | 120 | 2193 | 0.417 | 915 | 1302 | 1.0 | 0.7 | 2.863 | A |
| 3 | 625 | 156 | 656 | 1876 | 0.333 | 626 | 379 | 0.7 | 0.5 | 2.880 | A |
| 4 | 814 | 203 | 547 | 1533 | 0.531 | 817 | 735 | 2.0 | 1.2 | 5.105 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 2 | 0.72 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 | 0.50 | 0.00 | 0.00 | 0.50 | 0.50 | | | N/A | N/A |
| 4 | 1.13 | 0.56 | 1.04 | 1.15 | 1.15 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.27 | 0.00 | 0.00 | 0.27 | 0.27 | | | N/A | N/A |
| 2 | 1.01 | 0.06 | 0.76 | 1.93 | 2.74 | | | N/A | N/A |
| 3 | 0.72 | 0.07 | 0.76 | 1.41 | 1.49 | | | N/A | N/A |
| 4 | 1.93 | 0.05 | 0.48 | 5.15 | 8.35 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.85 | 0.03 | 0.28 | 0.85 | 1.86 | | | N/A | N/A |
| 2 | 1.64 | 0.03 | 0.26 | 1.64 | 1.64 | | | N/A | N/A |
| 3 | 1.23 | 0.03 | 0.26 | 1.23 | 1.23 | | | N/A | N/A |
| 4 | 5.55 | 0.04 | 0.37 | 13.22 | 30.29 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.93 | 0.04 | 0.36 | 2.24 | 4.25 | | | N/A | N/A |
| 2 | 1.65 | 0.03 | 0.27 | 1.65 | 1.65 | | | N/A | N/A |
| 3 | 1.24 | 0.03 | 0.27 | 1.24 | 1.24 | | | N/A | N/A |
| 4 | 5.90 | 0.03 | 0.31 | 6.20 | 27.11 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.29 | 0.03 | 0.27 | 0.49 | 0.71 | | | N/A | N/A |
| 2 | 1.03 | 0.36 | 1.04 | 1.18 | 1.62 | | | N/A | N/A |
| 3 | 0.73 | 0.32 | 0.96 | 1.39 | 1.45 | | | N/A | N/A |
| 4 | 2.02 | 0.05 | 0.45 | 5.50 | 9.18 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.16 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 2 | 0.73 | 0.08 | 0.80 | 1.42 | 1.50 | | | N/A | N/A |
| 3 | 0.50 | 0.05 | 0.46 | 1.28 | 1.39 | | | N/A | N/A |
| 4 | 1.16 | 0.03 | 0.33 | 2.48 | 5.83 | | | N/A | N/A |

2024 Base + Dev DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 8.53 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D7 | 2024 Base + Dev DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 60 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1557 | 100.000 |
| 3 | | ONE HOUR | ✓ | 636 | 100.000 |
| 4 | | ONE HOUR | ✓ | 1055 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|---|----|-----|-----|------|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 23 | 22 | 14 |
| | 2 | 55 | 0 | 428 | 1073 |
| | 3 | 39 | 438 | 0 | 159 |
| | 4 | 21 | 934 | 100 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | | |
|------|---|----|---|---|----|--|
| | | 1 | 2 | 3 | 4 | |
| From | 1 | 0 | 5 | 5 | 27 | |
| | 2 | 4 | 0 | 3 | 4 | |
| | 3 | 9 | 0 | 0 | 1 | |
| | 4 | 5 | 5 | 4 | 0 | |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.18 | 13.09 | 0.2 | 0.5 | B | 55 | 82 |
| 2 | 0.79 | 8.16 | 3.8 | 12.5 | A | 1428 | 2142 |
| 3 | 0.50 | 5.08 | 1.0 | 2.6 | A | 584 | 875 |
| 4 | 0.77 | 10.89 | 3.4 | 13.6 | B | 968 | 1452 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 45 | 11 | 1103 | 612 | 0.073 | 44 | 86 | 0.0 | 0.1 | 6.938 | A |
| 2 | 1172 | 293 | 102 | 2206 | 0.531 | 1167 | 1046 | 0.0 | 1.2 | 3.578 | A |
| 3 | 479 | 120 | 857 | 1722 | 0.278 | 477 | 413 | 0.0 | 0.4 | 2.907 | A |
| 4 | 794 | 199 | 399 | 1622 | 0.490 | 790 | 935 | 0.0 | 1.0 | 4.539 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 54 | 13 | 1321 | 509 | 0.105 | 53 | 104 | 0.1 | 0.1 | 8.649 | A |
| 2 | 1399 | 350 | 122 | 2191 | 0.639 | 1397 | 1252 | 1.2 | 1.8 | 4.686 | A |
| 3 | 572 | 143 | 1025 | 1592 | 0.359 | 571 | 494 | 0.4 | 0.6 | 3.547 | A |
| 4 | 949 | 237 | 478 | 1574 | 0.603 | 946 | 1118 | 1.0 | 1.6 | 6.017 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 66 | 16 | 1613 | 370 | 0.177 | 65 | 126 | 0.1 | 0.2 | 12.899 | B |
| 2 | 1714 | 428 | 149 | 2171 | 0.789 | 1706 | 1529 | 1.8 | 3.7 | 7.904 | A |
| 3 | 700 | 175 | 1252 | 1417 | 0.494 | 699 | 603 | 0.6 | 1.0 | 5.030 | A |
| 4 | 1162 | 290 | 585 | 1510 | 0.770 | 1155 | 1366 | 1.6 | 3.4 | 10.479 | B |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 66 | 16 | 1621 | 367 | 0.179 | 66 | 127 | 0.2 | 0.2 | 13.094 | B |
| 2 | 1714 | 428 | 150 | 2170 | 0.790 | 1713 | 1536 | 3.7 | 3.8 | 8.160 | A |
| 3 | 700 | 175 | 1258 | 1413 | 0.496 | 700 | 606 | 1.0 | 1.0 | 5.082 | A |
| 4 | 1162 | 290 | 586 | 1509 | 0.770 | 1162 | 1372 | 3.4 | 3.4 | 10.894 | B |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 54 | 13 | 1332 | 504 | 0.106 | 54 | 104 | 0.2 | 0.1 | 8.770 | A |
| 2 | 1399 | 350 | 124 | 2190 | 0.639 | 1407 | 1262 | 3.8 | 1.9 | 4.815 | A |
| 3 | 572 | 143 | 1033 | 1586 | 0.360 | 573 | 498 | 1.0 | 0.6 | 3.585 | A |
| 4 | 949 | 237 | 480 | 1573 | 0.603 | 956 | 1126 | 3.4 | 1.6 | 6.214 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 45 | 11 | 1111 | 609 | 0.074 | 45 | 87 | 0.1 | 0.1 | 6.996 | A |
| 2 | 1172 | 293 | 103 | 2205 | 0.531 | 1175 | 1053 | 1.9 | 1.2 | 3.633 | A |
| 3 | 479 | 120 | 862 | 1718 | 0.279 | 480 | 415 | 0.6 | 0.4 | 2.929 | A |
| 4 | 794 | 199 | 401 | 1621 | 0.490 | 797 | 940 | 1.6 | 1.0 | 4.615 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 | 1.17 | 0.57 | 1.04 | 1.45 | 1.50 | | | N/A | N/A |
| 3 | 0.39 | 0.00 | 0.00 | 0.39 | 0.39 | | | N/A | N/A |
| 4 | 1.00 | 0.58 | 1.05 | 1.48 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 | 1.81 | 0.05 | 0.46 | 4.83 | 7.95 | | | N/A | N/A |
| 3 | 0.56 | 0.06 | 0.69 | 1.35 | 1.43 | | | N/A | N/A |
| 4 | 1.57 | 0.05 | 0.60 | 3.91 | 5.94 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.23 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 | 3.74 | 0.03 | 0.30 | 3.74 | 12.54 | | | N/A | N/A |
| 3 | 0.97 | 0.03 | 0.26 | 0.97 | 0.97 | | | N/A | N/A |
| 4 | 3.35 | 0.03 | 0.31 | 3.35 | 13.63 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.24 | 0.03 | 0.29 | 0.52 | 0.55 | | | N/A | N/A |
| 2 | 3.81 | 0.03 | 0.28 | 3.81 | 3.81 | | | N/A | N/A |
| 3 | 0.98 | 0.03 | 0.28 | 0.98 | 2.65 | | | N/A | N/A |
| 4 | 3.44 | 0.03 | 0.29 | 3.44 | 5.74 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 | 1.86 | 0.07 | 1.01 | 4.45 | 6.40 | | | N/A | N/A |
| 3 | 0.57 | 0.55 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |
| 4 | 1.63 | 0.06 | 0.85 | 3.88 | 5.65 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 | 1.19 | 0.04 | 0.43 | 2.97 | 4.93 | | | N/A | N/A |
| 3 | 0.39 | 0.03 | 0.27 | 0.49 | 0.77 | | | N/A | N/A |
| 4 | 1.02 | 0.04 | 0.41 | 2.53 | 4.21 | | | N/A | N/A |

2024 Base + Dev DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 11.23 | B |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D8 | 2024 Base + Dev DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 89 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1236 | 100.000 |
| 3 | | ONE HOUR | ✓ | 840 | 100.000 |
| 4 | | ONE HOUR | ✓ | 1095 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|---|----|-----|-----|-----|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 25 | 30 | 34 |
| | 2 | 4 | 0 | 384 | 848 |
| | 3 | 4 | 727 | 0 | 109 |
| | 4 | 4 | 997 | 94 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---|----|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 4 | 0 | 0 |
| | 2 | 0 | 0 | 1 | 2 |
| | 3 | 0 | 0 | 0 | 0 |
| | 4 | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.53 | 40.80 | 1.1 | 4.9 | E | 82 | 123 |
| 2 | 0.63 | 4.62 | 1.7 | 2.9 | A | 1135 | 1702 |
| 3 | 0.57 | 5.10 | 1.3 | 1.5 | A | 771 | 1157 |
| 4 | 0.88 | 21.00 | 6.7 | 33.7 | C | 1005 | 1507 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 67 | 17 | 1363 | 489 | 0.137 | 66 | 9 | 0.0 | 0.2 | 8.604 | A |
| 2 | 931 | 233 | 118 | 2194 | 0.424 | 928 | 1311 | 0.0 | 0.7 | 2.879 | A |
| 3 | 633 | 158 | 665 | 1870 | 0.338 | 631 | 381 | 0.0 | 0.5 | 2.900 | A |
| 4 | 824 | 206 | 552 | 1529 | 0.539 | 820 | 743 | 0.0 | 1.2 | 5.089 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 80 | 20 | 1630 | 362 | 0.221 | 80 | 11 | 0.2 | 0.3 | 12.884 | B |
| 2 | 1111 | 278 | 142 | 2176 | 0.511 | 1110 | 1568 | 0.7 | 1.1 | 3.422 | A |
| 3 | 755 | 189 | 796 | 1769 | 0.427 | 754 | 456 | 0.5 | 0.7 | 3.545 | A |
| 4 | 984 | 246 | 661 | 1463 | 0.673 | 981 | 889 | 1.2 | 2.0 | 7.481 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 98 | 25 | 1984 | 194 | 0.505 | 95 | 14 | 0.3 | 1.0 | 35.984 | E |
| 2 | 1361 | 340 | 171 | 2155 | 0.632 | 1359 | 1908 | 1.1 | 1.7 | 4.572 | A |
| 3 | 925 | 231 | 973 | 1633 | 0.567 | 923 | 557 | 0.7 | 1.3 | 5.058 | A |
| 4 | 1206 | 301 | 808 | 1374 | 0.878 | 1189 | 1087 | 2.0 | 6.2 | 18.236 | C |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 98 | 25 | 2000 | 186 | 0.527 | 98 | 14 | 1.0 | 1.1 | 40.802 | E |
| 2 | 1361 | 340 | 174 | 2152 | 0.632 | 1361 | 1924 | 1.7 | 1.7 | 4.615 | A |
| 3 | 925 | 231 | 975 | 1631 | 0.567 | 925 | 560 | 1.3 | 1.3 | 5.103 | A |
| 4 | 1206 | 301 | 810 | 1372 | 0.878 | 1204 | 1090 | 6.2 | 6.7 | 21.001 | C |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 80 | 20 | 1655 | 350 | 0.229 | 83 | 11 | 1.1 | 0.3 | 13.778 | B |
| 2 | 1111 | 278 | 146 | 2173 | 0.511 | 1114 | 1592 | 1.7 | 1.1 | 3.456 | A |
| 3 | 755 | 189 | 800 | 1766 | 0.428 | 758 | 461 | 1.3 | 0.8 | 3.579 | A |
| 4 | 984 | 246 | 664 | 1462 | 0.674 | 1003 | 894 | 6.7 | 2.1 | 8.215 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 67 | 17 | 1374 | 484 | 0.139 | 68 | 10 | 0.3 | 0.2 | 8.763 | A |
| 2 | 931 | 233 | 120 | 2193 | 0.425 | 932 | 1321 | 1.1 | 0.8 | 2.901 | A |
| 3 | 633 | 158 | 668 | 1867 | 0.339 | 634 | 384 | 0.8 | 0.5 | 2.920 | A |
| 4 | 824 | 206 | 555 | 1528 | 0.540 | 828 | 747 | 2.1 | 1.2 | 5.224 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 2 | 0.74 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 | 0.51 | 0.51 | 1.00 | 1.40 | 1.45 | | | N/A | N/A |
| 4 | 1.17 | 0.56 | 1.07 | 1.17 | 1.57 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.28 | 0.00 | 0.00 | 0.28 | 0.28 | | | N/A | N/A |
| 2 | 1.05 | 0.06 | 0.73 | 2.05 | 2.94 | | | N/A | N/A |
| 3 | 0.74 | 0.07 | 0.76 | 1.27 | 1.27 | | | N/A | N/A |
| 4 | 2.03 | 0.05 | 0.47 | 5.47 | 8.90 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.96 | 0.03 | 0.28 | 0.96 | 2.85 | | | N/A | N/A |
| 2 | 1.72 | 0.03 | 0.26 | 1.72 | 1.72 | | | N/A | N/A |
| 3 | 1.29 | 0.03 | 0.26 | 1.29 | 1.29 | | | N/A | N/A |
| 4 | 6.21 | 0.04 | 0.40 | 16.20 | 33.72 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 1.06 | 0.04 | 0.36 | 2.65 | 4.92 | | | N/A | N/A |
| 2 | 1.73 | 0.03 | 0.27 | 1.73 | 1.73 | | | N/A | N/A |
| 3 | 1.30 | 0.03 | 0.27 | 1.30 | 1.49 | | | N/A | N/A |
| 4 | 6.68 | 0.03 | 0.33 | 9.68 | 33.45 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.31 | 0.03 | 0.29 | 0.67 | 1.09 | | | N/A | N/A |
| 2 | 1.07 | 0.29 | 1.06 | 1.41 | 1.75 | | | N/A | N/A |
| 3 | 0.75 | 0.28 | 0.95 | 1.39 | 1.45 | | | N/A | N/A |
| 4 | 2.14 | 0.04 | 0.44 | 5.83 | 10.00 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.16 | 0.03 | 0.26 | 0.47 | 0.50 | | | N/A | N/A |
| 2 | 0.75 | 0.08 | 0.79 | 1.16 | 1.16 | | | N/A | N/A |
| 3 | 0.51 | 0.05 | 0.48 | 1.29 | 1.40 | | | N/A | N/A |
| 4 | 1.20 | 0.03 | 0.32 | 2.40 | 6.11 | | | N/A | N/A |

2019 Base DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 5.29 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|-------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D10 | 2019 Base DS2 | AM | with Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 55 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1395 | 100.000 |
| 3 | | ONE HOUR | ✓ | 268 | 100.000 |
| 4 | | ONE HOUR | ✓ | 890 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|---|----|-----|-----|------|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 20 | 21 | 14 |
| | 2 | 40 | 0 | 260 | 1095 |
| | 3 | 38 | 128 | 0 | 102 |
| | 4 | 20 | 792 | 78 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---|----|---|---|----|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 5 | 5 | 27 |
| | 2 | 4 | 0 | 3 | 4 |
| | 3 | 9 | 0 | 0 | 1 |
| | 4 | 5 | 6 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.10 | 7.15 | 0.1 | 0.5 | A | 50 | 76 |
| 2 | 0.70 | 5.72 | 2.4 | 5.0 | A | 1280 | 1920 |
| 3 | 0.21 | 3.28 | 0.3 | 0.9 | A | 246 | 369 |
| 4 | 0.57 | 5.11 | 1.4 | 1.7 | A | 817 | 1226 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 41 | 10 | 749 | 781 | 0.053 | 41 | 74 | 0.0 | 0.1 | 5.354 | A |
| 2 | 1050 | 262 | 85 | 2219 | 0.473 | 1046 | 705 | 0.0 | 0.9 | 3.180 | A |
| 3 | 202 | 50 | 862 | 1718 | 0.118 | 201 | 269 | 0.0 | 0.1 | 2.406 | A |
| 4 | 670 | 168 | 155 | 1771 | 0.379 | 668 | 908 | 0.0 | 0.6 | 3.454 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 49 | 12 | 897 | 710 | 0.070 | 49 | 88 | 0.1 | 0.1 | 5.989 | A |
| 2 | 1254 | 313 | 102 | 2206 | 0.568 | 1252 | 844 | 0.9 | 1.4 | 3.914 | A |
| 3 | 241 | 60 | 1031 | 1588 | 0.152 | 241 | 322 | 0.1 | 0.2 | 2.710 | A |
| 4 | 800 | 200 | 185 | 1752 | 0.457 | 799 | 1087 | 0.6 | 0.9 | 4.001 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 61 | 15 | 1097 | 615 | 0.098 | 60 | 108 | 0.1 | 0.1 | 7.136 | A |
| 2 | 1535 | 384 | 124 | 2189 | 0.701 | 1531 | 1033 | 1.4 | 2.4 | 5.651 | A |
| 3 | 295 | 74 | 1261 | 1410 | 0.209 | 295 | 394 | 0.2 | 0.3 | 3.272 | A |
| 4 | 980 | 245 | 227 | 1727 | 0.568 | 978 | 1330 | 0.9 | 1.4 | 5.084 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 61 | 15 | 1099 | 614 | 0.099 | 61 | 108 | 0.1 | 0.1 | 7.151 | A |
| 2 | 1535 | 384 | 125 | 2189 | 0.701 | 1535 | 1035 | 2.4 | 2.4 | 5.722 | A |
| 3 | 295 | 74 | 1265 | 1408 | 0.210 | 295 | 395 | 0.3 | 0.3 | 3.279 | A |
| 4 | 980 | 245 | 227 | 1727 | 0.568 | 980 | 1333 | 1.4 | 1.4 | 5.112 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 49 | 12 | 900 | 709 | 0.070 | 50 | 88 | 0.1 | 0.1 | 6.005 | A |
| 2 | 1254 | 313 | 102 | 2206 | 0.568 | 1258 | 847 | 2.4 | 1.4 | 3.963 | A |
| 3 | 241 | 60 | 1036 | 1584 | 0.152 | 241 | 324 | 0.3 | 0.2 | 2.718 | A |
| 4 | 800 | 200 | 186 | 1752 | 0.457 | 802 | 1092 | 1.4 | 0.9 | 4.027 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 41 | 10 | 753 | 779 | 0.053 | 41 | 74 | 0.1 | 0.1 | 5.373 | A |
| 2 | 1050 | 262 | 85 | 2219 | 0.473 | 1052 | 709 | 1.4 | 0.9 | 3.214 | A |
| 3 | 202 | 50 | 866 | 1715 | 0.118 | 202 | 271 | 0.2 | 0.1 | 2.414 | A |
| 4 | 670 | 168 | 155 | 1771 | 0.379 | 671 | 913 | 0.9 | 0.7 | 3.478 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.06 | 0.00 | 0.00 | 0.06 | 0.06 | | | N/A | N/A |
| 2 | 0.93 | 0.57 | 1.04 | 1.46 | 1.51 | | | N/A | N/A |
| 3 | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 | 0.64 | 0.58 | 1.06 | 1.48 | 1.54 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.08 | 0.03 | 0.28 | 0.50 | 0.53 | | | N/A | N/A |
| 2 | 1.35 | 0.05 | 0.53 | 3.26 | 4.96 | | | N/A | N/A |
| 3 | 0.18 | 0.00 | 0.00 | 0.18 | 0.18 | | | N/A | N/A |
| 4 | 0.88 | 0.09 | 0.89 | 1.18 | 1.71 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.12 | 0.03 | 0.29 | 0.51 | 0.54 | | | N/A | N/A |
| 2 | 2.39 | 0.03 | 0.28 | 2.39 | 2.39 | | | N/A | N/A |
| 3 | 0.27 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 | 1.37 | 0.03 | 0.27 | 1.37 | 1.37 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.12 | 0.03 | 0.28 | 0.50 | 0.52 | | | N/A | N/A |
| 2 | 2.42 | 0.03 | 0.27 | 2.42 | 2.42 | | | N/A | N/A |
| 3 | 0.27 | 0.03 | 0.28 | 0.50 | 0.92 | | | N/A | N/A |
| 4 | 1.38 | 0.03 | 0.28 | 1.38 | 1.38 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.08 | 0.00 | 0.00 | 0.08 | 0.08 | | | N/A | N/A |
| 2 | 1.38 | 0.12 | 1.19 | 2.39 | 3.02 | | | N/A | N/A |
| 3 | 0.18 | 0.00 | 0.00 | 0.18 | 0.18 | | | N/A | N/A |
| 4 | 0.90 | 0.36 | 1.03 | 1.49 | 1.55 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.06 | 0.00 | 0.00 | 0.06 | 0.06 | | | N/A | N/A |
| 2 | 0.94 | 0.06 | 0.70 | 1.81 | 2.48 | | | N/A | N/A |
| 3 | 0.14 | 0.00 | 0.00 | 0.14 | 0.14 | | | N/A | N/A |
| 4 | 0.65 | 0.07 | 0.77 | 1.43 | 1.51 | | | N/A | N/A |

2019 Base DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.11 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|-------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D11 | 2019 Base DS2 | PM | with Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 84 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1121 | 100.000 |
| 3 | | ONE HOUR | ✓ | 279 | 100.000 |
| 4 | | ONE HOUR | ✓ | 859 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|---|----|-----|-----|-----|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 22 | 29 | 33 |
| | 2 | 4 | 0 | 269 | 848 |
| | 3 | 4 | 172 | 0 | 104 |
| | 4 | 4 | 783 | 72 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---|----|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 5 | 0 | 0 |
| | 2 | 0 | 0 | 1 | 2 |
| | 3 | 0 | 0 | 0 | 0 |
| | 4 | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.15 | 7.18 | 0.2 | 0.5 | A | 77 | 116 |
| 2 | 0.57 | 3.90 | 1.3 | 1.8 | A | 1029 | 1543 |
| 3 | 0.19 | 2.72 | 0.2 | 0.5 | A | 256 | 384 |
| 4 | 0.54 | 4.55 | 1.2 | 1.5 | A | 788 | 1182 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 63 | 16 | 770 | 771 | 0.082 | 63 | 9 | 0.0 | 0.1 | 5.146 | A |
| 2 | 844 | 211 | 100 | 2207 | 0.382 | 842 | 733 | 0.0 | 0.6 | 2.672 | A |
| 3 | 210 | 53 | 665 | 1870 | 0.112 | 210 | 277 | 0.0 | 0.1 | 2.168 | A |
| 4 | 647 | 162 | 135 | 1783 | 0.363 | 644 | 739 | 0.0 | 0.6 | 3.188 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 76 | 19 | 922 | 698 | 0.108 | 75 | 11 | 0.1 | 0.1 | 5.845 | A |
| 2 | 1008 | 252 | 120 | 2193 | 0.460 | 1007 | 877 | 0.6 | 0.9 | 3.080 | A |
| 3 | 251 | 63 | 795 | 1769 | 0.142 | 251 | 332 | 0.1 | 0.2 | 2.370 | A |
| 4 | 772 | 193 | 161 | 1767 | 0.437 | 771 | 885 | 0.6 | 0.8 | 3.650 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 92 | 23 | 1128 | 600 | 0.154 | 92 | 13 | 0.1 | 0.2 | 7.167 | A |
| 2 | 1235 | 309 | 147 | 2173 | 0.568 | 1233 | 1074 | 0.9 | 1.3 | 3.881 | A |
| 3 | 307 | 77 | 973 | 1632 | 0.188 | 307 | 406 | 0.2 | 0.2 | 2.716 | A |
| 4 | 946 | 236 | 197 | 1745 | 0.542 | 944 | 1083 | 0.8 | 1.2 | 4.534 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 92 | 23 | 1130 | 600 | 0.154 | 92 | 13 | 0.2 | 0.2 | 7.184 | A |
| 2 | 1235 | 309 | 147 | 2172 | 0.568 | 1235 | 1075 | 1.3 | 1.3 | 3.897 | A |
| 3 | 307 | 77 | 975 | 1631 | 0.188 | 307 | 407 | 0.2 | 0.2 | 2.719 | A |
| 4 | 946 | 236 | 198 | 1745 | 0.542 | 946 | 1084 | 1.2 | 1.2 | 4.552 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 76 | 19 | 925 | 697 | 0.108 | 76 | 11 | 0.2 | 0.1 | 5.864 | A |
| 2 | 1008 | 252 | 120 | 2192 | 0.460 | 1010 | 880 | 1.3 | 0.9 | 3.095 | A |
| 3 | 251 | 63 | 798 | 1767 | 0.142 | 251 | 333 | 0.2 | 0.2 | 2.374 | A |
| 4 | 772 | 193 | 162 | 1767 | 0.437 | 774 | 887 | 1.2 | 0.8 | 3.671 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 63 | 16 | 774 | 769 | 0.082 | 63 | 9 | 0.1 | 0.1 | 5.166 | A |
| 2 | 844 | 211 | 101 | 2207 | 0.382 | 845 | 736 | 0.9 | 0.6 | 2.687 | A |
| 3 | 210 | 53 | 667 | 1868 | 0.112 | 210 | 278 | 0.2 | 0.1 | 2.171 | A |
| 4 | 647 | 162 | 135 | 1783 | 0.363 | 648 | 742 | 0.8 | 0.6 | 3.206 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 | 0.63 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 | 0.57 | 0.56 | 1.01 | 1.41 | 1.47 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 | 0.86 | 0.07 | 0.81 | 1.36 | 1.80 | | | N/A | N/A |
| 3 | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 | 0.78 | 0.09 | 0.83 | 1.19 | 1.19 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.18 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 | 1.32 | 0.03 | 0.26 | 1.32 | 1.32 | | | N/A | N/A |
| 3 | 0.23 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 4 | 1.18 | 0.03 | 0.26 | 1.18 | 1.18 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.18 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 2 | 1.33 | 0.03 | 0.27 | 1.33 | 1.33 | | | N/A | N/A |
| 3 | 0.23 | 0.03 | 0.25 | 0.45 | 0.48 | | | N/A | N/A |
| 4 | 1.19 | 0.03 | 0.27 | 1.19 | 1.19 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 | 0.87 | 0.54 | 1.01 | 1.42 | 1.48 | | | N/A | N/A |
| 3 | 0.17 | 0.00 | 0.00 | 0.17 | 0.17 | | | N/A | N/A |
| 4 | 0.79 | 0.52 | 0.99 | 1.41 | 1.46 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 | 0.63 | 0.09 | 0.82 | 1.38 | 1.45 | | | N/A | N/A |
| 3 | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 | 0.58 | 0.07 | 0.73 | 1.36 | 1.44 | | | N/A | N/A |

2024 Base DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.33 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D12 | 2024 Base DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 60 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1469 | 100.000 |
| 3 | | ONE HOUR | ✓ | 297 | 100.000 |
| 4 | | ONE HOUR | ✓ | 1035 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|---|----|-----|-----|------|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 24 | 22 | 14 |
| | 2 | 42 | 0 | 274 | 1153 |
| | 3 | 39 | 152 | 0 | 106 |
| | 4 | 21 | 934 | 81 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | | |
|------|---|----|---|---|----|--|
| | | 1 | 2 | 3 | 4 | |
| From | 1 | 0 | 5 | 5 | 27 | |
| | 2 | 4 | 0 | 3 | 4 | |
| | 3 | 9 | 0 | 0 | 1 | |
| | 4 | 5 | 5 | 4 | 0 | |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.13 | 8.56 | 0.2 | 0.5 | A | 55 | 82 |
| 2 | 0.74 | 6.56 | 2.9 | 6.2 | A | 1348 | 2021 |
| 3 | 0.24 | 3.54 | 0.3 | 1.3 | A | 272 | 409 |
| 4 | 0.67 | 6.66 | 2.1 | 3.5 | A | 950 | 1425 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 45 | 11 | 875 | 721 | 0.062 | 45 | 77 | 0.0 | 0.1 | 5.825 | A |
| 2 | 1106 | 276 | 88 | 2217 | 0.499 | 1102 | 832 | 0.0 | 1.0 | 3.341 | A |
| 3 | 223 | 56 | 907 | 1683 | 0.133 | 223 | 282 | 0.0 | 0.2 | 2.495 | A |
| 4 | 779 | 195 | 175 | 1758 | 0.443 | 776 | 955 | 0.0 | 0.8 | 3.847 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 54 | 13 | 1047 | 639 | 0.084 | 54 | 92 | 0.1 | 0.1 | 6.732 | A |
| 2 | 1320 | 330 | 105 | 2204 | 0.599 | 1318 | 996 | 1.0 | 1.5 | 4.213 | A |
| 3 | 267 | 67 | 1085 | 1546 | 0.173 | 267 | 338 | 0.2 | 0.2 | 2.850 | A |
| 4 | 931 | 233 | 210 | 1738 | 0.536 | 929 | 1142 | 0.8 | 1.2 | 4.682 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 66 | 16 | 1281 | 528 | 0.125 | 66 | 112 | 0.1 | 0.2 | 8.519 | A |
| 2 | 1617 | 404 | 128 | 2186 | 0.740 | 1612 | 1218 | 1.5 | 2.9 | 6.446 | A |
| 3 | 327 | 82 | 1327 | 1360 | 0.240 | 326 | 413 | 0.2 | 0.3 | 3.526 | A |
| 4 | 1140 | 285 | 257 | 1709 | 0.667 | 1136 | 1397 | 1.2 | 2.1 | 6.583 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 66 | 16 | 1284 | 526 | 0.125 | 66 | 112 | 0.2 | 0.2 | 8.557 | A |
| 2 | 1617 | 404 | 129 | 2186 | 0.740 | 1617 | 1221 | 2.9 | 2.9 | 6.565 | A |
| 3 | 327 | 82 | 1331 | 1357 | 0.241 | 327 | 414 | 0.3 | 0.3 | 3.540 | A |
| 4 | 1140 | 285 | 257 | 1709 | 0.667 | 1140 | 1401 | 2.1 | 2.1 | 6.661 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 54 | 13 | 1052 | 636 | 0.084 | 54 | 92 | 0.2 | 0.1 | 6.766 | A |
| 2 | 1320 | 330 | 105 | 2203 | 0.599 | 1326 | 1001 | 2.9 | 1.6 | 4.285 | A |
| 3 | 267 | 67 | 1092 | 1541 | 0.173 | 267 | 340 | 0.3 | 0.2 | 2.865 | A |
| 4 | 931 | 233 | 210 | 1737 | 0.536 | 934 | 1149 | 2.1 | 1.2 | 4.743 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 45 | 11 | 880 | 718 | 0.063 | 45 | 77 | 0.1 | 0.1 | 5.853 | A |
| 2 | 1106 | 276 | 88 | 2216 | 0.499 | 1108 | 837 | 1.6 | 1.0 | 3.381 | A |
| 3 | 223 | 56 | 912 | 1679 | 0.133 | 224 | 284 | 0.2 | 0.2 | 2.505 | A |
| 4 | 779 | 195 | 176 | 1758 | 0.443 | 781 | 960 | 1.2 | 0.8 | 3.888 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 | 1.03 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 | 0.83 | 0.58 | 1.05 | 1.47 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.10 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 | 1.53 | 0.05 | 0.49 | 3.93 | 6.17 | | | N/A | N/A |
| 3 | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 | 1.20 | 0.06 | 0.82 | 2.52 | 3.52 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.15 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 | 2.87 | 0.03 | 0.29 | 2.87 | 4.89 | | | N/A | N/A |
| 3 | 0.32 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 | 2.06 | 0.03 | 0.28 | 2.06 | 2.06 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.16 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 | 2.91 | 0.03 | 0.28 | 2.91 | 2.91 | | | N/A | N/A |
| 3 | 0.32 | 0.03 | 0.32 | 1.03 | 1.29 | | | N/A | N/A |
| 4 | 2.09 | 0.03 | 0.28 | 2.09 | 2.09 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 | 1.57 | 0.09 | 1.17 | 3.11 | 4.24 | | | N/A | N/A |
| 3 | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 | 1.23 | 0.12 | 1.11 | 1.97 | 2.57 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 | 1.04 | 0.05 | 0.51 | 2.30 | 3.43 | | | N/A | N/A |
| 3 | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 | 0.85 | 0.06 | 0.67 | 1.52 | 2.00 | | | N/A | N/A |

2024 Base DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.79 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D13 | 2024 Base DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 90 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1189 | 100.000 |
| 3 | | ONE HOUR | ✓ | 310 | 100.000 |
| 4 | | ONE HOUR | ✓ | 986 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|---|----|-----|-----|-----|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 25 | 30 | 34 |
| | 2 | 4 | 0 | 285 | 900 |
| | 3 | 4 | 199 | 0 | 107 |
| | 4 | 4 | 908 | 74 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---|----|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 4 | 0 | 0 |
| | 2 | 0 | 0 | 1 | 2 |
| | 3 | 0 | 0 | 0 | 0 |
| | 4 | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.19 | 8.67 | 0.2 | 0.9 | A | 82 | 123 |
| 2 | 0.60 | 4.25 | 1.5 | 2.4 | A | 1091 | 1637 |
| 3 | 0.22 | 2.89 | 0.3 | 1.0 | A | 285 | 427 |
| 4 | 0.63 | 5.68 | 1.7 | 2.6 | A | 905 | 1357 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 67 | 17 | 886 | 716 | 0.094 | 67 | 9 | 0.0 | 0.1 | 5.612 | A |
| 2 | 895 | 224 | 104 | 2205 | 0.406 | 892 | 849 | 0.0 | 0.7 | 2.778 | A |
| 3 | 234 | 58 | 704 | 1839 | 0.127 | 233 | 292 | 0.0 | 0.1 | 2.241 | A |
| 4 | 742 | 186 | 156 | 1770 | 0.419 | 740 | 781 | 0.0 | 0.7 | 3.515 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 81 | 20 | 1060 | 633 | 0.127 | 80 | 11 | 0.1 | 0.1 | 6.593 | A |
| 2 | 1069 | 267 | 124 | 2190 | 0.488 | 1068 | 1017 | 0.7 | 1.0 | 3.255 | A |
| 3 | 279 | 70 | 842 | 1733 | 0.161 | 279 | 350 | 0.1 | 0.2 | 2.475 | A |
| 4 | 887 | 222 | 186 | 1752 | 0.506 | 885 | 935 | 0.7 | 1.0 | 4.189 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 99 | 25 | 1298 | 520 | 0.190 | 98 | 14 | 0.1 | 0.2 | 8.629 | A |
| 2 | 1309 | 327 | 152 | 2169 | 0.604 | 1307 | 1244 | 1.0 | 1.5 | 4.228 | A |
| 3 | 342 | 85 | 1031 | 1588 | 0.215 | 341 | 428 | 0.2 | 0.3 | 2.888 | A |
| 4 | 1086 | 271 | 228 | 1726 | 0.629 | 1083 | 1144 | 1.0 | 1.7 | 5.627 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 99 | 25 | 1300 | 519 | 0.190 | 99 | 14 | 0.2 | 0.2 | 8.669 | A |
| 2 | 1309 | 327 | 152 | 2169 | 0.604 | 1309 | 1247 | 1.5 | 1.5 | 4.251 | A |
| 3 | 342 | 85 | 1033 | 1586 | 0.215 | 342 | 429 | 0.3 | 0.3 | 2.891 | A |
| 4 | 1086 | 271 | 228 | 1726 | 0.629 | 1086 | 1146 | 1.7 | 1.7 | 5.675 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 81 | 20 | 1065 | 631 | 0.128 | 81 | 11 | 0.2 | 0.1 | 6.630 | A |
| 2 | 1069 | 267 | 125 | 2189 | 0.488 | 1071 | 1021 | 1.5 | 1.0 | 3.277 | A |
| 3 | 279 | 70 | 845 | 1731 | 0.161 | 279 | 351 | 0.3 | 0.2 | 2.480 | A |
| 4 | 887 | 222 | 187 | 1752 | 0.506 | 889 | 938 | 1.7 | 1.0 | 4.228 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 67 | 17 | 891 | 713 | 0.095 | 68 | 9 | 0.1 | 0.1 | 5.641 | A |
| 2 | 895 | 224 | 104 | 2204 | 0.406 | 896 | 854 | 1.0 | 0.7 | 2.795 | A |
| 3 | 234 | 58 | 707 | 1837 | 0.127 | 234 | 293 | 0.2 | 0.1 | 2.247 | A |
| 4 | 742 | 186 | 156 | 1770 | 0.419 | 744 | 785 | 1.0 | 0.7 | 3.547 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 | 0.69 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 | 0.72 | 0.56 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 | 0.96 | 0.06 | 0.78 | 1.78 | 2.39 | | | N/A | N/A |
| 3 | 0.19 | 0.00 | 0.00 | 0.19 | 0.19 | | | N/A | N/A |
| 4 | 1.03 | 0.07 | 0.82 | 1.90 | 2.64 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.23 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 | 1.53 | 0.03 | 0.26 | 1.53 | 1.53 | | | N/A | N/A |
| 3 | 0.27 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 4 | 1.68 | 0.03 | 0.27 | 1.68 | 1.68 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.24 | 0.03 | 0.28 | 0.50 | 0.91 | | | N/A | N/A |
| 2 | 1.54 | 0.03 | 0.27 | 1.54 | 1.54 | | | N/A | N/A |
| 3 | 0.27 | 0.03 | 0.28 | 0.55 | 1.02 | | | N/A | N/A |
| 4 | 1.70 | 0.03 | 0.27 | 1.70 | 1.70 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 | 0.98 | 0.50 | 1.02 | 1.22 | 1.22 | | | N/A | N/A |
| 3 | 0.19 | 0.00 | 0.00 | 0.19 | 0.19 | | | N/A | N/A |
| 4 | 1.04 | 0.18 | 1.04 | 1.48 | 1.80 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 | 0.70 | 0.09 | 0.81 | 1.40 | 1.47 | | | N/A | N/A |
| 3 | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 | 0.73 | 0.07 | 0.72 | 1.37 | 1.37 | | | N/A | N/A |

2024 Base + Dev DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.52 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D14 | 2024 Base + Dev DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 60 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1483 | 100.000 |
| 3 | | ONE HOUR | ✓ | 300 | 100.000 |
| 4 | | ONE HOUR | ✓ | 1053 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|---|----|-----|-----|------|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 24 | 22 | 14 |
| | 2 | 43 | 0 | 276 | 1164 |
| | 3 | 39 | 155 | 0 | 106 |
| | 4 | 21 | 951 | 81 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | | |
|------|---|----|---|---|----|--|
| | | 1 | 2 | 3 | 4 | |
| From | 1 | 0 | 4 | 5 | 27 | |
| | 2 | 4 | 0 | 3 | 4 | |
| | 3 | 9 | 0 | 0 | 1 | |
| | 4 | 5 | 5 | 4 | 0 | |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.13 | 8.76 | 0.2 | 0.5 | A | 55 | 83 |
| 2 | 0.75 | 6.75 | 3.0 | 6.4 | A | 1361 | 2041 |
| 3 | 0.25 | 3.59 | 0.3 | 1.3 | A | 275 | 413 |
| 4 | 0.68 | 6.92 | 2.2 | 3.8 | A | 966 | 1449 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 45 | 11 | 890 | 714 | 0.064 | 45 | 77 | 0.0 | 0.1 | 5.887 | A |
| 2 | 1117 | 279 | 88 | 2217 | 0.504 | 1112 | 847 | 0.0 | 1.0 | 3.373 | A |
| 3 | 226 | 56 | 916 | 1676 | 0.135 | 225 | 284 | 0.0 | 0.2 | 2.510 | A |
| 4 | 792 | 198 | 178 | 1757 | 0.451 | 789 | 963 | 0.0 | 0.9 | 3.902 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 54 | 14 | 1065 | 630 | 0.086 | 54 | 92 | 0.1 | 0.1 | 6.831 | A |
| 2 | 1333 | 333 | 105 | 2204 | 0.605 | 1331 | 1015 | 1.0 | 1.6 | 4.273 | A |
| 3 | 270 | 67 | 1096 | 1538 | 0.175 | 269 | 340 | 0.2 | 0.2 | 2.874 | A |
| 4 | 946 | 237 | 213 | 1736 | 0.545 | 945 | 1153 | 0.9 | 1.2 | 4.780 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 66 | 17 | 1303 | 517 | 0.128 | 66 | 113 | 0.1 | 0.2 | 8.720 | A |
| 2 | 1633 | 408 | 128 | 2186 | 0.747 | 1627 | 1241 | 1.6 | 3.0 | 6.618 | A |
| 3 | 330 | 83 | 1340 | 1350 | 0.245 | 330 | 416 | 0.2 | 0.3 | 3.571 | A |
| 4 | 1159 | 290 | 260 | 1707 | 0.679 | 1155 | 1409 | 1.2 | 2.2 | 6.823 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 66 | 17 | 1307 | 516 | 0.129 | 66 | 113 | 0.2 | 0.2 | 8.763 | A |
| 2 | 1633 | 408 | 129 | 2186 | 0.747 | 1633 | 1244 | 3.0 | 3.0 | 6.748 | A |
| 3 | 330 | 83 | 1344 | 1347 | 0.245 | 330 | 417 | 0.3 | 0.3 | 3.586 | A |
| 4 | 1159 | 290 | 261 | 1706 | 0.679 | 1159 | 1414 | 2.2 | 2.2 | 6.916 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 54 | 14 | 1071 | 628 | 0.086 | 54 | 92 | 0.2 | 0.1 | 6.870 | A |
| 2 | 1333 | 333 | 106 | 2203 | 0.605 | 1339 | 1020 | 3.0 | 1.6 | 4.351 | A |
| 3 | 270 | 67 | 1102 | 1533 | 0.176 | 270 | 342 | 0.3 | 0.2 | 2.889 | A |
| 4 | 946 | 237 | 213 | 1735 | 0.545 | 950 | 1159 | 2.2 | 1.3 | 4.846 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 45 | 11 | 895 | 711 | 0.064 | 45 | 77 | 0.1 | 0.1 | 5.918 | A |
| 2 | 1117 | 279 | 88 | 2216 | 0.504 | 1119 | 853 | 1.6 | 1.1 | 3.411 | A |
| 3 | 226 | 56 | 921 | 1672 | 0.135 | 226 | 286 | 0.2 | 0.2 | 2.520 | A |
| 4 | 792 | 198 | 179 | 1756 | 0.451 | 794 | 968 | 1.3 | 0.9 | 3.943 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 | 1.05 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 | 0.86 | 0.58 | 1.05 | 1.47 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 | 1.57 | 0.05 | 0.49 | 4.04 | 6.43 | | | N/A | N/A |
| 3 | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 | 1.25 | 0.06 | 0.80 | 2.71 | 3.83 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.16 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 | 2.98 | 0.03 | 0.29 | 2.98 | 5.73 | | | N/A | N/A |
| 3 | 0.33 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 | 2.18 | 0.03 | 0.28 | 2.18 | 2.25 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.16 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 | 3.02 | 0.03 | 0.28 | 3.02 | 3.02 | | | N/A | N/A |
| 3 | 0.33 | 0.03 | 0.32 | 1.07 | 1.32 | | | N/A | N/A |
| 4 | 2.20 | 0.03 | 0.28 | 2.20 | 2.20 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 | 1.61 | 0.09 | 1.15 | 3.33 | 4.56 | | | N/A | N/A |
| 3 | 0.22 | 0.00 | 0.00 | 0.22 | 0.22 | | | N/A | N/A |
| 4 | 1.28 | 0.11 | 1.12 | 2.09 | 2.85 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 | 1.06 | 0.05 | 0.50 | 2.43 | 3.65 | | | N/A | N/A |
| 3 | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 | 0.87 | 0.06 | 0.63 | 1.66 | 2.16 | | | N/A | N/A |

2024 Base + Dev DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|-----------------------------|--|
| Warning | Geometry | Arm 4 - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.93 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D15 | 2024 Base + Dev DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1 | | ONE HOUR | ✓ | 90 | 100.000 |
| 2 | | ONE HOUR | ✓ | 1212 | 100.000 |
| 3 | | ONE HOUR | ✓ | 321 | 100.000 |
| 4 | | ONE HOUR | ✓ | 1001 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|---|----|-----|-----|-----|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 26 | 30 | 34 |
| | 2 | 4 | 0 | 292 | 915 |
| | 3 | 4 | 210 | 0 | 107 |
| | 4 | 4 | 922 | 74 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---|----|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0 | 4 | 0 | 0 |
| | 2 | 0 | 0 | 1 | 2 |
| | 3 | 0 | 0 | 0 | 0 |
| | 4 | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|-----|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 | 0.20 | 8.96 | 0.2 | 1.0 | A | 83 | 124 |
| 2 | 0.62 | 4.38 | 1.6 | 2.6 | A | 1112 | 1668 |
| 3 | 0.22 | 2.95 | 0.3 | 1.2 | A | 294 | 442 |
| 4 | 0.64 | 5.88 | 1.8 | 2.8 | A | 918 | 1377 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 68 | 17 | 905 | 707 | 0.096 | 67 | 9 | 0.0 | 0.1 | 5.692 | A |
| 2 | 912 | 228 | 104 | 2205 | 0.414 | 909 | 868 | 0.0 | 0.7 | 2.814 | A |
| 3 | 242 | 60 | 716 | 1831 | 0.132 | 241 | 297 | 0.0 | 0.2 | 2.265 | A |
| 4 | 753 | 188 | 164 | 1765 | 0.427 | 750 | 793 | 0.0 | 0.7 | 3.570 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 81 | 20 | 1083 | 622 | 0.130 | 81 | 11 | 0.1 | 0.1 | 6.726 | A |
| 2 | 1089 | 272 | 124 | 2190 | 0.497 | 1088 | 1039 | 0.7 | 1.0 | 3.313 | A |
| 3 | 289 | 72 | 856 | 1722 | 0.168 | 288 | 356 | 0.2 | 0.2 | 2.510 | A |
| 4 | 900 | 225 | 196 | 1746 | 0.515 | 898 | 949 | 0.7 | 1.1 | 4.281 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 99 | 25 | 1325 | 507 | 0.195 | 99 | 14 | 0.1 | 0.2 | 8.909 | A |
| 2 | 1334 | 333 | 152 | 2169 | 0.615 | 1332 | 1272 | 1.0 | 1.6 | 4.351 | A |
| 3 | 353 | 88 | 1048 | 1575 | 0.224 | 353 | 435 | 0.2 | 0.3 | 2.947 | A |
| 4 | 1102 | 275 | 240 | 1719 | 0.641 | 1099 | 1161 | 1.1 | 1.8 | 5.832 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 99 | 25 | 1328 | 506 | 0.196 | 99 | 14 | 0.2 | 0.2 | 8.956 | A |
| 2 | 1334 | 333 | 152 | 2169 | 0.615 | 1334 | 1275 | 1.6 | 1.6 | 4.376 | A |
| 3 | 353 | 88 | 1050 | 1573 | 0.225 | 353 | 436 | 0.3 | 0.3 | 2.950 | A |
| 4 | 1102 | 275 | 240 | 1719 | 0.641 | 1102 | 1163 | 1.8 | 1.8 | 5.884 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 81 | 20 | 1087 | 620 | 0.130 | 81 | 11 | 0.2 | 0.2 | 6.767 | A |
| 2 | 1089 | 272 | 125 | 2189 | 0.498 | 1092 | 1044 | 1.6 | 1.0 | 3.335 | A |
| 3 | 289 | 72 | 859 | 1720 | 0.168 | 289 | 357 | 0.3 | 0.2 | 2.515 | A |
| 4 | 900 | 225 | 196 | 1746 | 0.515 | 902 | 952 | 1.8 | 1.1 | 4.323 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|-----|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 | 68 | 17 | 909 | 704 | 0.096 | 68 | 9 | 0.2 | 0.1 | 5.725 | A |
| 2 | 912 | 228 | 104 | 2204 | 0.414 | 913 | 873 | 1.0 | 0.7 | 2.833 | A |
| 3 | 242 | 60 | 719 | 1828 | 0.132 | 242 | 299 | 0.2 | 0.2 | 2.269 | A |
| 4 | 753 | 188 | 164 | 1765 | 0.427 | 755 | 796 | 1.1 | 0.8 | 3.600 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 | 0.71 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 | 0.75 | 0.56 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 | 1.00 | 0.06 | 0.76 | 1.89 | 2.65 | | | N/A | N/A |
| 3 | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 4 | 1.06 | 0.06 | 0.80 | 2.00 | 2.84 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.24 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 | 1.60 | 0.03 | 0.26 | 1.60 | 1.60 | | | N/A | N/A |
| 3 | 0.29 | 0.03 | 0.25 | 0.45 | 0.48 | | | N/A | N/A |
| 4 | 1.77 | 0.03 | 0.27 | 1.77 | 1.77 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.24 | 0.03 | 0.28 | 0.52 | 1.02 | | | N/A | N/A |
| 2 | 1.61 | 0.03 | 0.27 | 1.61 | 1.61 | | | N/A | N/A |
| 3 | 0.29 | 0.03 | 0.29 | 0.81 | 1.16 | | | N/A | N/A |
| 4 | 1.79 | 0.03 | 0.27 | 1.79 | 1.79 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 | 1.01 | 0.40 | 1.04 | 1.52 | 1.53 | | | N/A | N/A |
| 3 | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 4 | 1.08 | 0.16 | 1.05 | 1.62 | 1.90 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|-----|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 | 0.72 | 0.08 | 0.81 | 1.41 | 1.49 | | | N/A | N/A |
| 3 | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 | 0.76 | 0.06 | 0.71 | 1.51 | 1.57 | | | N/A | N/A |

| |
|---|
| <h1>Junctions 9</h1> |
| <h2>ARCADY 9 - Roundabout Module</h2> |
| Version: 9.5.0.6896 © Copyright TRL Limited, 2018 |
| For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |

Filename: NGL-Longfield Ave Oct 19.j9

Path: \\Pg-brs-dc01\data\Bristol Projects\Bristol - Live Projects\BRS.4901 - BRS.5000\BRS.4989 - SUSTAINABLE LAND PLC - LAND TO THE NORTH OF GOSPORT ROAD, FAREHAM\Transport\7. Junction Modelling\c. ARCADY\Oct 19\Aff

Report generation date: 15/10/2019 16:54:25

-
- »2019 Base DS1, AM
 - »2019 Base DS1, PM
 - »2024 Base DS1, AM
 - »2024 Base DS1, PM
 - »2024 Base + Dev DS1, AM
 - »2024 Base + Dev DS1, PM
 - »2019 Base DS2, AM
 - »2019 Base DS2, PM
 - »2024 Base DS2, AM
 - »2024 Base DS2, PM
 - »2024 Base + Dev DS2, AM
 - »2024 Base + Dev DS2, PM

Summary of junction performance

| | AM | | | | | PM | | | | |
|----------------------------|-------------|-----------|------|-----|--------------|-------------|-----------|------|-----|--------------|
| | Queue (PCU) | Delay (s) | RFC | LOS | Junction LOS | Queue (PCU) | Delay (s) | RFC | LOS | Junction LOS |
| 2019 Base DS1 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 9.61 | 0.13 | A | A | 0.4 | 17.75 | 0.31 | C | A |
| 2 - Newgate Lane (South) | 2.9 | 6.61 | 0.74 | A | | 1.4 | 4.08 | 0.58 | A | |
| 3 - Longfield Avenue | 0.7 | 4.26 | 0.42 | A | | 0.9 | 4.17 | 0.49 | A | |
| 4 - Newgate Lane (North) | 1.9 | 6.98 | 0.65 | A | | 2.9 | 9.95 | 0.75 | A | |
| 2024 Base DS1 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 12.67 | 0.17 | B | A | 0.9 | 35.64 | 0.49 | E | B |
| 2 - Newgate Lane (South) | 3.6 | 7.80 | 0.78 | A | | 1.7 | 4.48 | 0.62 | A | |
| 3 - Longfield Avenue | 0.9 | 4.95 | 0.49 | A | | 1.2 | 4.93 | 0.56 | A | |
| 4 - Newgate Lane (North) | 3.2 | 10.35 | 0.76 | B | | 5.9 | 18.68 | 0.86 | C | |
| 2024 Base + Dev DS1 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 13.04 | 0.18 | B | A | 1.0 | 39.86 | 0.52 | E | B |
| 2 - Newgate Lane (South) | 3.8 | 8.09 | 0.79 | A | | 1.7 | 4.60 | 0.63 | A | |
| 3 - Longfield Avenue | 1.0 | 5.06 | 0.49 | A | | 1.3 | 5.08 | 0.57 | A | |
| 4 - Newgate Lane (North) | 3.4 | 10.82 | 0.77 | B | | 6.5 | 20.58 | 0.88 | C | |
| 2019 Base DS2 | | | | | | | | | | |
| 1 - Davis Way | 0.1 | 7.15 | 0.10 | A | A | 0.2 | 7.18 | 0.15 | A | A |
| 2 - Newgate Lane (South) | 2.4 | 5.72 | 0.70 | A | | 1.3 | 3.90 | 0.57 | A | |
| 3 - Longfield Avenue | 0.3 | 3.28 | 0.21 | A | | 0.2 | 2.72 | 0.19 | A | |
| 4 - Newgate Lane (North) | 1.4 | 5.11 | 0.57 | A | | 1.2 | 4.55 | 0.54 | A | |
| 2024 Base DS2 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 8.56 | 0.13 | A | A | 0.2 | 8.67 | 0.19 | A | A |
| 2 - Newgate Lane (South) | 2.9 | 6.56 | 0.74 | A | | 1.5 | 4.25 | 0.60 | A | |
| 3 - Longfield Avenue | 0.3 | 3.54 | 0.24 | A | | 0.3 | 2.89 | 0.22 | A | |
| 4 - Newgate Lane (North) | 2.1 | 6.66 | 0.67 | A | | 1.7 | 5.68 | 0.63 | A | |
| 2024 Base + Dev DS2 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 8.74 | 0.13 | A | A | 0.2 | 8.91 | 0.19 | A | A |
| 2 - Newgate Lane (South) | 3.0 | 6.71 | 0.75 | A | | 1.6 | 4.36 | 0.61 | A | |
| 3 - Longfield Avenue | 0.3 | 3.58 | 0.24 | A | | 0.3 | 2.94 | 0.22 | A | |
| 4 - Newgate Lane (North) | 2.2 | 6.88 | 0.68 | A | | 1.8 | 5.85 | 0.64 | A | |

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

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

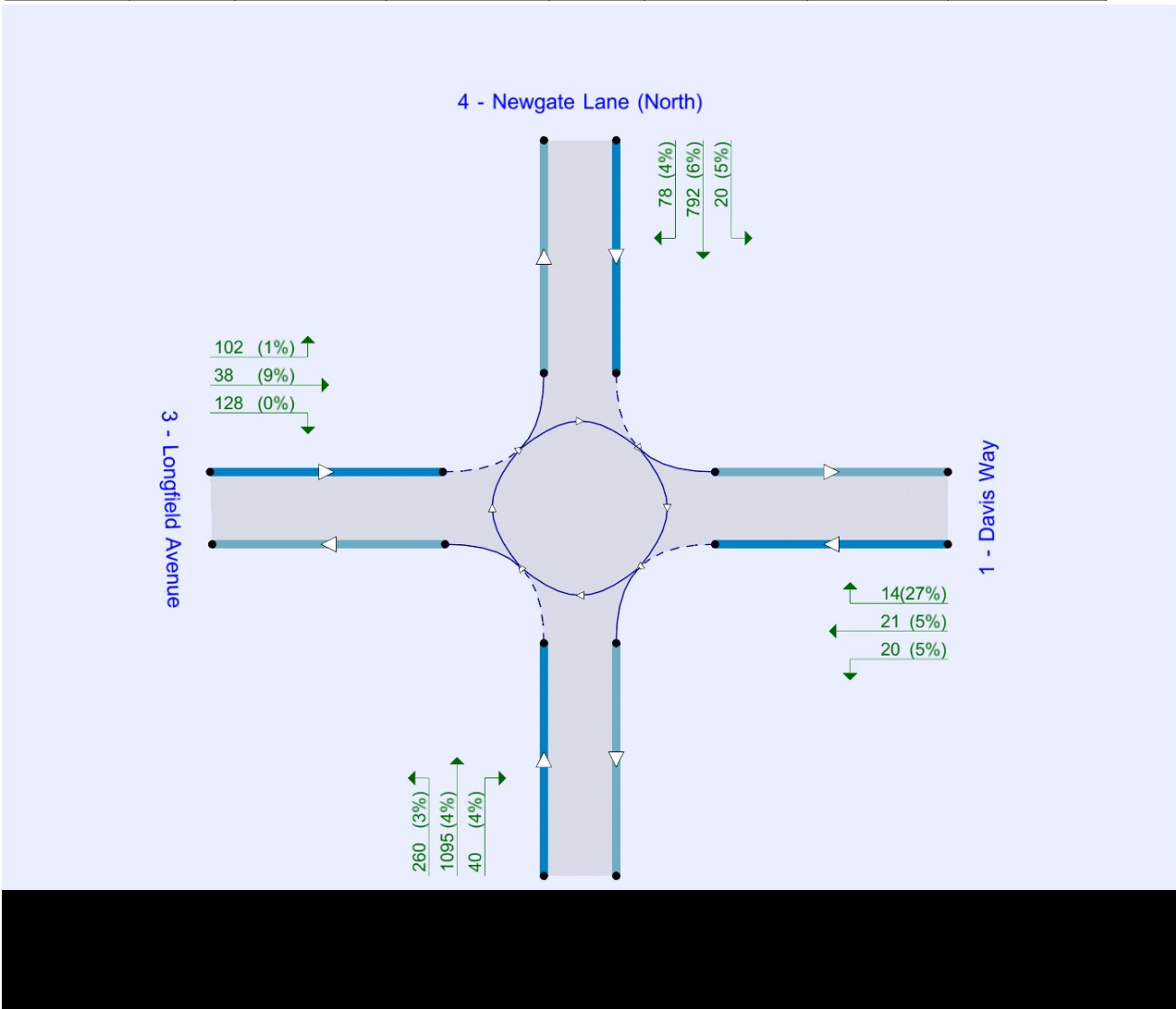
File summary

File Description

| | |
|-------------|--|
| Title | Longfield Avenue Roundabout |
| Location | |
| Site number | |
| Date | 08/10/2018 |
| Version | V3 |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | BRS.4989 |
| Enumerator | PEGASUSGROUP\Matthew Haywood |
| Description | Rev 3 - Updated for total of 190 dwellings |

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2019 Base DS1 | AM | without Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D2 | 2019 Base DS1 | PM | without Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D5 | 2024 Base DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D6 | 2024 Base DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D7 | 2024 Base + Dev DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D8 | 2024 Base + Dev DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D10 | 2019 Base DS2 | AM | with Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D11 | 2019 Base DS2 | PM | with Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D12 | 2024 Base DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D13 | 2024 Base DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D14 | 2024 Base + Dev DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D15 | 2024 Base + Dev DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

Analysis Set Details

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

2019 Base DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.34 | A |

Junction Network Options

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

Arms

Arms

| Arm | Name | Description |
|-----|----------------------|-------------|
| 1 | Davis Way | |
| 2 | Newgate Lane (South) | |
| 3 | Longfield Avenue | |
| 4 | Newgate Lane (North) | |

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 - Davis Way | 3.50 | 4.90 | 6.7 | 10.0 | 46.0 | 55.0 | |
| 2 - Newgate Lane (South) | 7.30 | 7.35 | 0.0 | 40.0 | 46.0 | 28.0 | |
| 3 - Longfield Avenue | 3.65 | 11.40 | 24.8 | 34.0 | 46.0 | 23.0 | |
| 4 - Newgate Lane (North) | 3.15 | 9.40 | 41.6 | 11.0 | 46.0 | 66.0 | |

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

| Arm | Final slope | Final intercept (PCU/hr) |
|--------------------------|-------------|--------------------------|
| 1 - Davis Way | 0.475 | 1136 |
| 2 - Newgate Lane (South) | 0.747 | 2282 |
| 3 - Longfield Avenue | 0.770 | 2381 |
| 4 - Newgate Lane (North) | 0.608 | 1865 |

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2019 Base DS1 | AM | without Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 55 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1461 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 564 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 917 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 20 | 21 | 14 |
| | 2 - Newgate Lane (South) | 52 | 0 | 402 | 1007 |
| | 3 - Longfield Avenue | 38 | 372 | 0 | 154 |
| | 4 - Newgate Lane (North) | 20 | 800 | 97 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 6 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.13 | 9.61 | 0.2 | 0.5 | A | 50 | 76 |
| 2 - Newgate Lane (South) | 0.74 | 6.61 | 2.9 | 6.2 | A | 1341 | 2011 |
| 3 - Longfield Avenue | 0.42 | 4.26 | 0.7 | 3.1 | A | 518 | 776 |
| 4 - Newgate Lane (North) | 0.65 | 6.98 | 1.9 | 2.9 | A | 841 | 1262 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 952 | 684 | 0.061 | 41 | 83 | 0.0 | 0.1 | 6.153 | A |
| 2 - Newgate Lane (South) | 1100 | 275 | 99 | 2208 | 0.498 | 1096 | 894 | 0.0 | 1.0 | 3.347 | A |
| 3 - Longfield Avenue | 425 | 106 | 805 | 1762 | 0.241 | 423 | 390 | 0.0 | 0.3 | 2.706 | A |
| 4 - Newgate Lane (North) | 690 | 173 | 347 | 1654 | 0.417 | 687 | 881 | 0.0 | 0.8 | 3.936 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 1139 | 595 | 0.083 | 49 | 99 | 0.1 | 0.1 | 7.251 | A |
| 2 - Newgate Lane (South) | 1313 | 328 | 118 | 2194 | 0.599 | 1311 | 1070 | 1.0 | 1.5 | 4.227 | A |
| 3 - Longfield Avenue | 507 | 127 | 963 | 1640 | 0.309 | 507 | 467 | 0.3 | 0.4 | 3.196 | A |
| 4 - Newgate Lane (North) | 824 | 206 | 415 | 1613 | 0.511 | 823 | 1055 | 0.8 | 1.1 | 4.824 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1393 | 475 | 0.128 | 60 | 121 | 0.1 | 0.2 | 9.556 | A |
| 2 - Newgate Lane (South) | 1609 | 402 | 145 | 2174 | 0.740 | 1603 | 1309 | 1.5 | 2.9 | 6.488 | A |
| 3 - Longfield Avenue | 621 | 155 | 1177 | 1475 | 0.421 | 620 | 571 | 0.4 | 0.7 | 4.235 | A |
| 4 - Newgate Lane (North) | 1010 | 252 | 508 | 1556 | 0.649 | 1006 | 1290 | 1.1 | 1.9 | 6.897 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1397 | 473 | 0.128 | 61 | 121 | 0.2 | 0.2 | 9.606 | A |
| 2 - Newgate Lane (South) | 1609 | 402 | 145 | 2174 | 0.740 | 1608 | 1312 | 2.9 | 2.9 | 6.608 | A |
| 3 - Longfield Avenue | 621 | 155 | 1181 | 1472 | 0.422 | 621 | 572 | 0.7 | 0.7 | 4.259 | A |
| 4 - Newgate Lane (North) | 1010 | 252 | 509 | 1556 | 0.649 | 1010 | 1294 | 1.9 | 1.9 | 6.984 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 1145 | 593 | 0.083 | 50 | 99 | 0.2 | 0.1 | 7.295 | A |
| 2 - Newgate Lane (South) | 1313 | 328 | 119 | 2193 | 0.599 | 1319 | 1075 | 2.9 | 1.6 | 4.302 | A |
| 3 - Longfield Avenue | 507 | 127 | 969 | 1636 | 0.310 | 508 | 469 | 0.7 | 0.5 | 3.217 | A |
| 4 - Newgate Lane (North) | 824 | 206 | 416 | 1612 | 0.511 | 828 | 1060 | 1.9 | 1.1 | 4.887 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 957 | 682 | 0.061 | 42 | 83 | 0.1 | 0.1 | 6.188 | A |
| 2 - Newgate Lane (South) | 1100 | 275 | 100 | 2208 | 0.498 | 1102 | 899 | 1.6 | 1.0 | 3.386 | A |
| 3 - Longfield Avenue | 425 | 106 | 809 | 1758 | 0.241 | 425 | 392 | 0.5 | 0.3 | 2.722 | A |
| 4 - Newgate Lane (North) | 690 | 173 | 348 | 1653 | 0.418 | 692 | 886 | 1.1 | 0.8 | 3.976 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.02 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.00 | 0.00 | 0.32 | 0.32 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.75 | 0.58 | 1.06 | 1.48 | 1.54 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.53 | 0.05 | 0.49 | 3.92 | 6.15 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.45 | 0.00 | 0.00 | 0.45 | 0.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.10 | 0.07 | 0.86 | 2.04 | 2.87 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.29 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.88 | 0.03 | 0.29 | 2.88 | 4.98 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.73 | 0.03 | 0.26 | 0.73 | 0.73 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.92 | 0.03 | 0.28 | 1.92 | 1.92 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.28 | 0.50 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.91 | 0.03 | 0.28 | 2.91 | 2.91 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.73 | 0.03 | 0.29 | 1.11 | 3.07 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.94 | 0.03 | 0.28 | 1.94 | 1.94 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.57 | 0.09 | 1.16 | 3.11 | 4.24 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.45 | 0.00 | 0.00 | 0.45 | 0.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.12 | 0.12 | 1.06 | 1.77 | 2.07 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.04 | 0.05 | 0.51 | 2.30 | 3.43 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.00 | 0.00 | 0.32 | 0.32 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.77 | 0.06 | 0.63 | 1.16 | 1.76 | | | N/A | N/A |

2019 Base DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.43 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2019 Base DS1 | PM | without Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 84 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1145 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 747 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 970 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 22 | 29 | 33 |
| | 2 - Newgate Lane (South) | 4 | 0 | 356 | 785 |
| | 3 - Longfield Avenue | 4 | 638 | 0 | 105 |
| | 4 - Newgate Lane (North) | 4 | 875 | 91 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.31 | 17.75 | 0.4 | 1.5 | C | 77 | 116 |
| 2 - Newgate Lane (South) | 0.58 | 4.08 | 1.4 | 2.0 | A | 1051 | 1576 |
| 3 - Longfield Avenue | 0.49 | 4.17 | 0.9 | 1.9 | A | 685 | 1028 |
| 4 - Newgate Lane (North) | 0.75 | 9.95 | 2.9 | 9.7 | A | 890 | 1335 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 1203 | 565 | 0.112 | 63 | 9 | 0.0 | 0.1 | 7.244 | A |
| 2 - Newgate Lane (South) | 862 | 216 | 114 | 2197 | 0.392 | 859 | 1151 | 0.0 | 0.7 | 2.728 | A |
| 3 - Longfield Avenue | 562 | 141 | 617 | 1907 | 0.295 | 561 | 357 | 0.0 | 0.4 | 2.671 | A |
| 4 - Newgate Lane (North) | 730 | 183 | 485 | 1570 | 0.465 | 727 | 693 | 0.0 | 0.9 | 4.296 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 1439 | 453 | 0.167 | 75 | 11 | 0.1 | 0.2 | 9.639 | A |
| 2 - Newgate Lane (South) | 1029 | 257 | 137 | 2180 | 0.472 | 1028 | 1378 | 0.7 | 0.9 | 3.170 | A |
| 3 - Longfield Avenue | 672 | 168 | 738 | 1813 | 0.370 | 671 | 427 | 0.4 | 0.6 | 3.150 | A |
| 4 - Newgate Lane (North) | 872 | 218 | 580 | 1512 | 0.577 | 870 | 829 | 0.9 | 1.4 | 5.646 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1759 | 301 | 0.307 | 92 | 13 | 0.2 | 0.4 | 17.330 | C |
| 2 - Newgate Lane (South) | 1261 | 315 | 167 | 2157 | 0.584 | 1259 | 1683 | 0.9 | 1.4 | 4.057 | A |
| 3 - Longfield Avenue | 822 | 206 | 903 | 1686 | 0.488 | 821 | 523 | 0.6 | 0.9 | 4.155 | A |
| 4 - Newgate Lane (North) | 1068 | 267 | 710 | 1433 | 0.745 | 1062 | 1014 | 1.4 | 2.8 | 9.675 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1766 | 298 | 0.311 | 92 | 13 | 0.4 | 0.4 | 17.749 | C |
| 2 - Newgate Lane (South) | 1261 | 315 | 168 | 2157 | 0.585 | 1261 | 1690 | 1.4 | 1.4 | 4.078 | A |
| 3 - Longfield Avenue | 822 | 206 | 905 | 1685 | 0.488 | 822 | 524 | 0.9 | 0.9 | 4.174 | A |
| 4 - Newgate Lane (North) | 1068 | 267 | 711 | 1433 | 0.745 | 1068 | 1016 | 2.8 | 2.9 | 9.951 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 1449 | 448 | 0.169 | 76 | 11 | 0.4 | 0.2 | 9.832 | A |
| 2 - Newgate Lane (South) | 1029 | 257 | 139 | 2179 | 0.472 | 1031 | 1387 | 1.4 | 0.9 | 3.190 | A |
| 3 - Longfield Avenue | 672 | 168 | 741 | 1811 | 0.371 | 673 | 429 | 0.9 | 0.6 | 3.168 | A |
| 4 - Newgate Lane (North) | 872 | 218 | 582 | 1511 | 0.577 | 878 | 832 | 2.9 | 1.4 | 5.796 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 1210 | 562 | 0.113 | 64 | 9 | 0.2 | 0.1 | 7.323 | A |
| 2 - Newgate Lane (South) | 862 | 216 | 116 | 2196 | 0.393 | 863 | 1158 | 0.9 | 0.7 | 2.745 | A |
| 3 - Longfield Avenue | 562 | 141 | 620 | 1904 | 0.295 | 563 | 359 | 0.6 | 0.4 | 2.686 | A |
| 4 - Newgate Lane (North) | 730 | 183 | 487 | 1569 | 0.465 | 732 | 696 | 1.4 | 0.9 | 4.359 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.65 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.42 | 0.00 | 0.00 | 0.42 | 0.42 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.87 | 0.56 | 1.01 | 1.41 | 1.47 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.90 | 0.07 | 0.80 | 1.56 | 1.96 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.59 | 0.07 | 0.74 | 1.35 | 1.42 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.36 | 0.05 | 0.62 | 3.23 | 4.83 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.44 | 0.03 | 0.26 | 0.47 | 0.50 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.41 | 0.03 | 0.26 | 1.41 | 1.41 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.94 | 0.03 | 0.25 | 0.94 | 0.94 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.84 | 0.03 | 0.29 | 2.84 | 9.73 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.45 | 0.03 | 0.34 | 1.39 | 1.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.42 | 0.03 | 0.27 | 1.42 | 1.42 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.95 | 0.03 | 0.27 | 0.95 | 1.95 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.90 | 0.03 | 0.28 | 2.90 | 3.79 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.92 | 0.52 | 1.01 | 1.44 | 1.49 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.59 | 0.55 | 1.00 | 1.40 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.40 | 0.07 | 0.90 | 3.02 | 4.34 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.66 | 0.09 | 0.82 | 1.38 | 1.46 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.42 | 0.00 | 0.00 | 0.42 | 0.42 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.89 | 0.04 | 0.41 | 2.03 | 3.35 | | | N/A | N/A |

2024 Base DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 8.16 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2024 Base DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 59 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1537 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 630 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1043 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 23 | 22 | 14 |
| | 2 - Newgate Lane (South) | 55 | 0 | 423 | 1059 |
| | 3 - Longfield Avenue | 39 | 431 | 0 | 159 |
| | 4 - Newgate Lane (North) | 21 | 922 | 100 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 6 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.17 | 12.67 | 0.2 | 0.5 | B | 54 | 82 |
| 2 - Newgate Lane (South) | 0.78 | 7.80 | 3.6 | 10.7 | A | 1411 | 2116 |
| 3 - Longfield Avenue | 0.49 | 4.95 | 0.9 | 2.7 | A | 578 | 867 |
| 4 - Newgate Lane (North) | 0.76 | 10.35 | 3.2 | 11.9 | B | 957 | 1435 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1089 | 619 | 0.072 | 44 | 86 | 0.0 | 0.1 | 6.860 | A |
| 2 - Newgate Lane (South) | 1157 | 289 | 102 | 2206 | 0.525 | 1153 | 1031 | 0.0 | 1.1 | 3.533 | A |
| 3 - Longfield Avenue | 474 | 119 | 846 | 1730 | 0.274 | 473 | 409 | 0.0 | 0.4 | 2.878 | A |
| 4 - Newgate Lane (North) | 785 | 196 | 394 | 1625 | 0.483 | 781 | 925 | 0.0 | 1.0 | 4.475 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 53 | 13 | 1304 | 517 | 0.103 | 53 | 103 | 0.1 | 0.1 | 8.498 | A |
| 2 - Newgate Lane (South) | 1382 | 345 | 122 | 2191 | 0.631 | 1379 | 1235 | 1.1 | 1.7 | 4.590 | A |
| 3 - Longfield Avenue | 566 | 142 | 1013 | 1602 | 0.353 | 565 | 489 | 0.4 | 0.5 | 3.495 | A |
| 4 - Newgate Lane (North) | 937 | 234 | 472 | 1578 | 0.594 | 935 | 1107 | 1.0 | 1.5 | 5.881 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 65 | 16 | 1593 | 380 | 0.172 | 65 | 126 | 0.1 | 0.2 | 12.502 | B |
| 2 - Newgate Lane (South) | 1692 | 423 | 149 | 2171 | 0.780 | 1685 | 1508 | 1.7 | 3.5 | 7.584 | A |
| 3 - Longfield Avenue | 693 | 173 | 1237 | 1429 | 0.485 | 692 | 597 | 0.5 | 0.9 | 4.907 | A |
| 4 - Newgate Lane (North) | 1148 | 287 | 577 | 1514 | 0.758 | 1141 | 1352 | 1.5 | 3.2 | 10.003 | B |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 65 | 16 | 1600 | 376 | 0.173 | 65 | 126 | 0.2 | 0.2 | 12.669 | B |
| 2 - Newgate Lane (South) | 1692 | 423 | 150 | 2170 | 0.780 | 1692 | 1515 | 3.5 | 3.6 | 7.805 | A |
| 3 - Longfield Avenue | 693 | 173 | 1242 | 1425 | 0.487 | 693 | 600 | 0.9 | 0.9 | 4.952 | A |
| 4 - Newgate Lane (North) | 1148 | 287 | 578 | 1513 | 0.758 | 1148 | 1357 | 3.2 | 3.2 | 10.352 | B |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 53 | 13 | 1314 | 512 | 0.104 | 54 | 104 | 0.2 | 0.1 | 8.607 | A |
| 2 - Newgate Lane (South) | 1382 | 345 | 124 | 2190 | 0.631 | 1389 | 1244 | 3.6 | 1.8 | 4.706 | A |
| 3 - Longfield Avenue | 566 | 142 | 1020 | 1596 | 0.355 | 568 | 493 | 0.9 | 0.6 | 3.530 | A |
| 4 - Newgate Lane (North) | 937 | 234 | 474 | 1577 | 0.594 | 944 | 1114 | 3.2 | 1.6 | 6.055 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1097 | 615 | 0.072 | 45 | 86 | 0.1 | 0.1 | 6.915 | A |
| 2 - Newgate Lane (South) | 1157 | 289 | 103 | 2205 | 0.525 | 1160 | 1039 | 1.8 | 1.2 | 3.583 | A |
| 3 - Longfield Avenue | 474 | 119 | 852 | 1726 | 0.275 | 475 | 411 | 0.6 | 0.4 | 2.899 | A |
| 4 - Newgate Lane (North) | 785 | 196 | 396 | 1624 | 0.483 | 787 | 930 | 1.6 | 1.0 | 4.548 | A |

Queue Variation Results for each time segment
07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.08 | 0.00 | 0.00 | 0.08 | 0.08 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.14 | 0.57 | 1.04 | 1.45 | 1.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.38 | 0.00 | 0.00 | 0.38 | 0.38 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.98 | 0.58 | 1.05 | 1.48 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.75 | 0.05 | 0.47 | 4.65 | 7.59 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.55 | 0.06 | 0.66 | 1.34 | 1.43 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.52 | 0.06 | 0.63 | 3.73 | 5.59 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.22 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.54 | 0.03 | 0.30 | 3.54 | 10.73 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.94 | 0.03 | 0.26 | 0.94 | 0.94 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.16 | 0.03 | 0.31 | 3.16 | 11.86 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.23 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.61 | 0.03 | 0.28 | 3.61 | 3.61 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.95 | 0.03 | 0.28 | 0.95 | 2.72 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.23 | 0.03 | 0.29 | 3.23 | 4.62 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.80 | 0.07 | 1.05 | 4.14 | 5.95 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.56 | 0.55 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.57 | 0.07 | 0.91 | 3.63 | 5.17 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.16 | 0.04 | 0.44 | 2.87 | 4.62 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.38 | 0.00 | 0.00 | 0.38 | 0.38 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.00 | 0.04 | 0.42 | 2.41 | 3.96 | | | N/A | N/A |

2024 Base DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 10.23 | B |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2024 Base DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 89 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1214 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 830 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1081 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 25 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 377 | 832 |
| | 3 - Longfield Avenue | 4 | 717 | 0 | 109 |
| | 4 - Newgate Lane (North) | 4 | 982 | 94 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.49 | 35.64 | 0.9 | 4.3 | E | 81 | 122 |
| 2 - Newgate Lane (South) | 0.62 | 4.48 | 1.7 | 2.7 | A | 1114 | 1671 |
| 3 - Longfield Avenue | 0.56 | 4.93 | 1.2 | 1.5 | A | 761 | 1142 |
| 4 - Newgate Lane (North) | 0.86 | 18.68 | 5.9 | 30.3 | C | 992 | 1487 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1344 | 498 | 0.134 | 66 | 9 | 0.0 | 0.2 | 8.424 | A |
| 2 - Newgate Lane (South) | 914 | 228 | 118 | 2194 | 0.417 | 911 | 1292 | 0.0 | 0.7 | 2.842 | A |
| 3 - Longfield Avenue | 625 | 156 | 653 | 1879 | 0.332 | 623 | 376 | 0.0 | 0.5 | 2.857 | A |
| 4 - Newgate Lane (North) | 814 | 203 | 544 | 1534 | 0.530 | 809 | 732 | 0.0 | 1.1 | 4.982 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1608 | 372 | 0.214 | 79 | 11 | 0.2 | 0.3 | 12.407 | B |
| 2 - Newgate Lane (South) | 1091 | 273 | 142 | 2176 | 0.501 | 1090 | 1546 | 0.7 | 1.0 | 3.360 | A |
| 3 - Longfield Avenue | 746 | 186 | 782 | 1780 | 0.419 | 745 | 450 | 0.5 | 0.7 | 3.475 | A |
| 4 - Newgate Lane (North) | 971 | 243 | 651 | 1469 | 0.661 | 968 | 875 | 1.1 | 1.9 | 7.211 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 24 | 1958 | 206 | 0.474 | 95 | 14 | 0.3 | 0.9 | 32.257 | D |
| 2 - Newgate Lane (South) | 1337 | 334 | 171 | 2154 | 0.620 | 1334 | 1882 | 1.0 | 1.6 | 4.440 | A |
| 3 - Longfield Avenue | 913 | 228 | 956 | 1646 | 0.555 | 911 | 549 | 0.7 | 1.2 | 4.890 | A |
| 4 - Newgate Lane (North) | 1190 | 297 | 797 | 1381 | 0.862 | 1175 | 1071 | 1.9 | 5.6 | 16.640 | C |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 24 | 1973 | 199 | 0.491 | 97 | 14 | 0.9 | 0.9 | 35.644 | E |
| 2 - Newgate Lane (South) | 1337 | 334 | 174 | 2152 | 0.621 | 1336 | 1897 | 1.6 | 1.7 | 4.477 | A |
| 3 - Longfield Avenue | 913 | 228 | 958 | 1644 | 0.556 | 913 | 552 | 1.2 | 1.2 | 4.929 | A |
| 4 - Newgate Lane (North) | 1190 | 297 | 798 | 1380 | 0.862 | 1188 | 1073 | 5.6 | 5.9 | 18.681 | C |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1629 | 362 | 0.220 | 82 | 11 | 0.9 | 0.3 | 13.122 | B |
| 2 - Newgate Lane (South) | 1091 | 273 | 146 | 2174 | 0.502 | 1094 | 1566 | 1.7 | 1.0 | 3.392 | A |
| 3 - Longfield Avenue | 746 | 186 | 785 | 1777 | 0.420 | 748 | 454 | 1.2 | 0.7 | 3.507 | A |
| 4 - Newgate Lane (North) | 971 | 243 | 654 | 1468 | 0.662 | 987 | 879 | 5.9 | 2.0 | 7.795 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1354 | 493 | 0.136 | 67 | 9 | 0.3 | 0.2 | 8.568 | A |
| 2 - Newgate Lane (South) | 914 | 228 | 120 | 2193 | 0.417 | 915 | 1302 | 1.0 | 0.7 | 2.863 | A |
| 3 - Longfield Avenue | 625 | 156 | 656 | 1876 | 0.333 | 626 | 379 | 0.7 | 0.5 | 2.880 | A |
| 4 - Newgate Lane (North) | 814 | 203 | 547 | 1533 | 0.531 | 817 | 735 | 2.0 | 1.2 | 5.105 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.72 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.50 | 0.00 | 0.00 | 0.50 | 0.50 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.13 | 0.56 | 1.04 | 1.15 | 1.15 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.27 | 0.00 | 0.00 | 0.27 | 0.27 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.01 | 0.06 | 0.76 | 1.93 | 2.74 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.72 | 0.07 | 0.76 | 1.41 | 1.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.93 | 0.05 | 0.48 | 5.15 | 8.35 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.85 | 0.03 | 0.28 | 0.85 | 1.86 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.64 | 0.03 | 0.26 | 1.64 | 1.64 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.23 | 0.03 | 0.26 | 1.23 | 1.23 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 5.55 | 0.04 | 0.37 | 13.22 | 30.29 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.93 | 0.04 | 0.36 | 2.24 | 4.25 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.65 | 0.03 | 0.27 | 1.65 | 1.65 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.24 | 0.03 | 0.27 | 1.24 | 1.24 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 5.90 | 0.03 | 0.31 | 6.20 | 27.11 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.29 | 0.03 | 0.27 | 0.49 | 0.71 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.03 | 0.36 | 1.04 | 1.18 | 1.62 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.73 | 0.32 | 0.96 | 1.39 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.02 | 0.05 | 0.45 | 5.50 | 9.18 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.73 | 0.08 | 0.80 | 1.42 | 1.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.50 | 0.05 | 0.46 | 1.28 | 1.39 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.16 | 0.03 | 0.33 | 2.48 | 5.83 | | | N/A | N/A |

2024 Base + Dev DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 8.47 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D7 | 2024 Base + Dev DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 60 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1553 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 635 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1054 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 23 | 22 | 14 |
| | 2 - Newgate Lane (South) | 55 | 0 | 427 | 1070 |
| | 3 - Longfield Avenue | 39 | 437 | 0 | 159 |
| | 4 - Newgate Lane (North) | 21 | 933 | 100 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 5 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.18 | 13.04 | 0.2 | 0.5 | B | 55 | 82 |
| 2 - Newgate Lane (South) | 0.79 | 8.09 | 3.8 | 12.2 | A | 1425 | 2137 |
| 3 - Longfield Avenue | 0.49 | 5.06 | 1.0 | 2.7 | A | 583 | 874 |
| 4 - Newgate Lane (North) | 0.77 | 10.82 | 3.4 | 13.4 | B | 967 | 1450 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1102 | 613 | 0.073 | 44 | 86 | 0.0 | 0.1 | 6.927 | A |
| 2 - Newgate Lane (South) | 1169 | 292 | 102 | 2206 | 0.530 | 1164 | 1044 | 0.0 | 1.2 | 3.568 | A |
| 3 - Longfield Avenue | 478 | 120 | 855 | 1723 | 0.277 | 477 | 412 | 0.0 | 0.4 | 2.902 | A |
| 4 - Newgate Lane (North) | 793 | 198 | 399 | 1623 | 0.489 | 789 | 933 | 0.0 | 1.0 | 4.530 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 53 | 13 | 1319 | 510 | 0.105 | 53 | 103 | 0.1 | 0.1 | 8.629 | A |
| 2 - Newgate Lane (South) | 1396 | 349 | 122 | 2191 | 0.637 | 1393 | 1250 | 1.2 | 1.8 | 4.666 | A |
| 3 - Longfield Avenue | 571 | 143 | 1023 | 1594 | 0.358 | 570 | 493 | 0.4 | 0.6 | 3.538 | A |
| 4 - Newgate Lane (North) | 947 | 237 | 477 | 1575 | 0.601 | 945 | 1116 | 1.0 | 1.6 | 5.999 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 16 | 1610 | 372 | 0.176 | 65 | 126 | 0.1 | 0.2 | 12.849 | B |
| 2 - Newgate Lane (South) | 1710 | 427 | 149 | 2171 | 0.788 | 1702 | 1526 | 1.8 | 3.7 | 7.839 | A |
| 3 - Longfield Avenue | 699 | 175 | 1249 | 1420 | 0.493 | 698 | 602 | 0.6 | 1.0 | 5.008 | A |
| 4 - Newgate Lane (North) | 1160 | 290 | 583 | 1510 | 0.768 | 1153 | 1364 | 1.6 | 3.3 | 10.415 | B |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 16 | 1618 | 368 | 0.178 | 66 | 127 | 0.2 | 0.2 | 13.037 | B |
| 2 - Newgate Lane (South) | 1710 | 427 | 150 | 2170 | 0.788 | 1709 | 1533 | 3.7 | 3.8 | 8.088 | A |
| 3 - Longfield Avenue | 699 | 175 | 1255 | 1415 | 0.494 | 699 | 605 | 1.0 | 1.0 | 5.059 | A |
| 4 - Newgate Lane (North) | 1160 | 290 | 585 | 1509 | 0.769 | 1160 | 1369 | 3.3 | 3.4 | 10.819 | B |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 53 | 13 | 1329 | 505 | 0.106 | 54 | 104 | 0.2 | 0.1 | 8.749 | A |
| 2 - Newgate Lane (South) | 1396 | 349 | 124 | 2190 | 0.637 | 1404 | 1260 | 3.8 | 1.8 | 4.793 | A |
| 3 - Longfield Avenue | 571 | 143 | 1030 | 1588 | 0.360 | 573 | 497 | 1.0 | 0.6 | 3.575 | A |
| 4 - Newgate Lane (North) | 947 | 237 | 479 | 1574 | 0.602 | 954 | 1124 | 3.4 | 1.6 | 6.195 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1109 | 609 | 0.074 | 45 | 87 | 0.1 | 0.1 | 6.985 | A |
| 2 - Newgate Lane (South) | 1169 | 292 | 103 | 2205 | 0.530 | 1172 | 1051 | 1.8 | 1.2 | 3.620 | A |
| 3 - Longfield Avenue | 478 | 120 | 860 | 1719 | 0.278 | 479 | 415 | 0.6 | 0.4 | 2.924 | A |
| 4 - Newgate Lane (North) | 793 | 198 | 401 | 1621 | 0.489 | 796 | 938 | 1.6 | 1.0 | 4.606 | A |

Queue Variation Results for each time segment
07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.16 | 0.57 | 1.04 | 1.45 | 1.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.38 | 0.00 | 0.00 | 0.38 | 0.38 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.00 | 0.58 | 1.05 | 1.48 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.80 | 0.05 | 0.46 | 4.79 | 7.88 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.56 | 0.06 | 0.69 | 1.35 | 1.43 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.56 | 0.05 | 0.61 | 3.89 | 5.89 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.23 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.70 | 0.03 | 0.30 | 3.70 | 12.17 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.97 | 0.03 | 0.26 | 0.97 | 0.97 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.33 | 0.03 | 0.31 | 3.33 | 13.40 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.23 | 0.03 | 0.29 | 0.52 | 0.55 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.77 | 0.03 | 0.28 | 3.77 | 3.77 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.98 | 0.03 | 0.28 | 0.98 | 2.66 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.41 | 0.03 | 0.29 | 3.41 | 5.58 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.85 | 0.07 | 1.02 | 4.39 | 6.29 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.57 | 0.55 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.62 | 0.06 | 0.86 | 3.85 | 5.59 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.18 | 0.04 | 0.43 | 2.95 | 4.87 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.39 | 0.03 | 0.27 | 0.48 | 0.70 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.02 | 0.04 | 0.41 | 2.52 | 4.18 | | | N/A | N/A |

2024 Base + Dev DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 11.06 | B |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D8 | 2024 Base + Dev DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 89 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1233 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 839 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1093 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 25 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 384 | 846 |
| | 3 - Longfield Avenue | 4 | 726 | 0 | 109 |
| | 4 - Newgate Lane (North) | 4 | 994 | 94 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.52 | 39.86 | 1.0 | 4.8 | E | 82 | 123 |
| 2 - Newgate Lane (South) | 0.63 | 4.60 | 1.7 | 2.9 | A | 1132 | 1698 |
| 3 - Longfield Avenue | 0.57 | 5.08 | 1.3 | 1.5 | A | 769 | 1154 |
| 4 - Newgate Lane (North) | 0.88 | 20.58 | 6.5 | 33.1 | C | 1003 | 1504 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1360 | 491 | 0.137 | 66 | 9 | 0.0 | 0.2 | 8.574 | A |
| 2 - Newgate Lane (South) | 929 | 232 | 118 | 2194 | 0.423 | 926 | 1308 | 0.0 | 0.7 | 2.874 | A |
| 3 - Longfield Avenue | 631 | 158 | 663 | 1871 | 0.337 | 629 | 381 | 0.0 | 0.5 | 2.894 | A |
| 4 - Newgate Lane (North) | 823 | 206 | 551 | 1530 | 0.538 | 818 | 742 | 0.0 | 1.2 | 5.072 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1627 | 364 | 0.220 | 80 | 11 | 0.2 | 0.3 | 12.802 | B |
| 2 - Newgate Lane (South) | 1109 | 277 | 142 | 2176 | 0.509 | 1108 | 1565 | 0.7 | 1.0 | 3.414 | A |
| 3 - Longfield Avenue | 754 | 188 | 794 | 1770 | 0.426 | 753 | 456 | 0.5 | 0.7 | 3.534 | A |
| 4 - Newgate Lane (North) | 982 | 246 | 659 | 1464 | 0.671 | 979 | 887 | 1.2 | 2.0 | 7.436 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 25 | 1979 | 196 | 0.500 | 95 | 14 | 0.3 | 0.9 | 35.317 | E |
| 2 - Newgate Lane (South) | 1358 | 340 | 171 | 2155 | 0.630 | 1355 | 1904 | 1.0 | 1.7 | 4.554 | A |
| 3 - Longfield Avenue | 923 | 231 | 971 | 1634 | 0.565 | 921 | 556 | 0.7 | 1.3 | 5.032 | A |
| 4 - Newgate Lane (North) | 1203 | 301 | 806 | 1375 | 0.875 | 1187 | 1085 | 2.0 | 6.1 | 17.957 | C |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 25 | 1996 | 188 | 0.521 | 98 | 14 | 0.9 | 1.0 | 39.859 | E |
| 2 - Newgate Lane (South) | 1358 | 340 | 174 | 2152 | 0.631 | 1358 | 1920 | 1.7 | 1.7 | 4.597 | A |
| 3 - Longfield Avenue | 923 | 231 | 973 | 1632 | 0.566 | 923 | 559 | 1.3 | 1.3 | 5.076 | A |
| 4 - Newgate Lane (North) | 1203 | 301 | 808 | 1374 | 0.876 | 1201 | 1088 | 6.1 | 6.5 | 20.585 | C |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1651 | 352 | 0.227 | 83 | 11 | 1.0 | 0.3 | 13.663 | B |
| 2 - Newgate Lane (South) | 1109 | 277 | 146 | 2173 | 0.510 | 1111 | 1588 | 1.7 | 1.1 | 3.447 | A |
| 3 - Longfield Avenue | 754 | 188 | 798 | 1767 | 0.427 | 756 | 460 | 1.3 | 0.7 | 3.566 | A |
| 4 - Newgate Lane (North) | 982 | 246 | 662 | 1463 | 0.672 | 1000 | 892 | 6.5 | 2.1 | 8.141 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1370 | 485 | 0.138 | 68 | 10 | 0.3 | 0.2 | 8.730 | A |
| 2 - Newgate Lane (South) | 929 | 232 | 120 | 2193 | 0.424 | 930 | 1318 | 1.1 | 0.7 | 2.894 | A |
| 3 - Longfield Avenue | 631 | 158 | 667 | 1868 | 0.338 | 632 | 383 | 0.7 | 0.5 | 2.916 | A |
| 4 - Newgate Lane (North) | 823 | 206 | 554 | 1528 | 0.538 | 826 | 745 | 2.1 | 1.2 | 5.204 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.74 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.51 | 0.51 | 1.00 | 1.40 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.16 | 0.56 | 1.03 | 1.16 | 1.53 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.28 | 0.00 | 0.00 | 0.28 | 0.28 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.05 | 0.06 | 0.74 | 2.03 | 2.92 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.74 | 0.07 | 0.76 | 1.22 | 1.22 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.01 | 0.05 | 0.47 | 5.42 | 8.81 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.94 | 0.03 | 0.28 | 0.94 | 2.67 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.71 | 0.03 | 0.26 | 1.71 | 1.71 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.28 | 0.03 | 0.26 | 1.28 | 1.28 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 6.09 | 0.04 | 0.40 | 15.68 | 33.11 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 1.04 | 0.04 | 0.36 | 2.58 | 4.81 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.72 | 0.03 | 0.27 | 1.72 | 1.72 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.29 | 0.03 | 0.27 | 1.29 | 1.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 6.54 | 0.03 | 0.32 | 9.00 | 32.25 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.30 | 0.03 | 0.28 | 0.59 | 1.05 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.06 | 0.30 | 1.06 | 1.39 | 1.73 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.75 | 0.29 | 0.95 | 1.39 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.12 | 0.04 | 0.44 | 5.78 | 9.87 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.26 | 0.47 | 0.50 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.75 | 0.08 | 0.79 | 1.10 | 1.10 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.51 | 0.05 | 0.48 | 1.29 | 1.40 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.19 | 0.03 | 0.32 | 2.41 | 6.06 | | | N/A | N/A |

2019 Base DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 5.29 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|-------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D10 | 2019 Base DS2 | AM | with Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 55 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1395 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 268 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 890 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 20 | 21 | 14 |
| | 2 - Newgate Lane (South) | 40 | 0 | 260 | 1095 |
| | 3 - Longfield Avenue | 38 | 128 | 0 | 102 |
| | 4 - Newgate Lane (North) | 20 | 792 | 78 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 6 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.10 | 7.15 | 0.1 | 0.5 | A | 50 | 76 |
| 2 - Newgate Lane (South) | 0.70 | 5.72 | 2.4 | 5.0 | A | 1280 | 1920 |
| 3 - Longfield Avenue | 0.21 | 3.28 | 0.3 | 0.9 | A | 246 | 369 |
| 4 - Newgate Lane (North) | 0.57 | 5.11 | 1.4 | 1.7 | A | 817 | 1226 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 749 | 781 | 0.053 | 41 | 74 | 0.0 | 0.1 | 5.354 | A |
| 2 - Newgate Lane (South) | 1050 | 262 | 85 | 2219 | 0.473 | 1046 | 705 | 0.0 | 0.9 | 3.180 | A |
| 3 - Longfield Avenue | 202 | 50 | 862 | 1718 | 0.118 | 201 | 269 | 0.0 | 0.1 | 2.406 | A |
| 4 - Newgate Lane (North) | 670 | 168 | 155 | 1771 | 0.379 | 668 | 908 | 0.0 | 0.6 | 3.454 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 897 | 710 | 0.070 | 49 | 88 | 0.1 | 0.1 | 5.989 | A |
| 2 - Newgate Lane (South) | 1254 | 313 | 102 | 2206 | 0.568 | 1252 | 844 | 0.9 | 1.4 | 3.914 | A |
| 3 - Longfield Avenue | 241 | 60 | 1031 | 1588 | 0.152 | 241 | 322 | 0.1 | 0.2 | 2.710 | A |
| 4 - Newgate Lane (North) | 800 | 200 | 185 | 1752 | 0.457 | 799 | 1087 | 0.6 | 0.9 | 4.001 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1097 | 615 | 0.098 | 60 | 108 | 0.1 | 0.1 | 7.136 | A |
| 2 - Newgate Lane (South) | 1535 | 384 | 124 | 2189 | 0.701 | 1531 | 1033 | 1.4 | 2.4 | 5.651 | A |
| 3 - Longfield Avenue | 295 | 74 | 1261 | 1410 | 0.209 | 295 | 394 | 0.2 | 0.3 | 3.272 | A |
| 4 - Newgate Lane (North) | 980 | 245 | 227 | 1727 | 0.568 | 978 | 1330 | 0.9 | 1.4 | 5.084 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1099 | 614 | 0.099 | 61 | 108 | 0.1 | 0.1 | 7.151 | A |
| 2 - Newgate Lane (South) | 1535 | 384 | 125 | 2189 | 0.701 | 1535 | 1035 | 2.4 | 2.4 | 5.722 | A |
| 3 - Longfield Avenue | 295 | 74 | 1265 | 1408 | 0.210 | 295 | 395 | 0.3 | 0.3 | 3.279 | A |
| 4 - Newgate Lane (North) | 980 | 245 | 227 | 1727 | 0.568 | 980 | 1333 | 1.4 | 1.4 | 5.112 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 900 | 709 | 0.070 | 50 | 88 | 0.1 | 0.1 | 6.005 | A |
| 2 - Newgate Lane (South) | 1254 | 313 | 102 | 2206 | 0.568 | 1258 | 847 | 2.4 | 1.4 | 3.963 | A |
| 3 - Longfield Avenue | 241 | 60 | 1036 | 1584 | 0.152 | 241 | 324 | 0.3 | 0.2 | 2.718 | A |
| 4 - Newgate Lane (North) | 800 | 200 | 186 | 1752 | 0.457 | 802 | 1092 | 1.4 | 0.9 | 4.027 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 753 | 779 | 0.053 | 41 | 74 | 0.1 | 0.1 | 5.373 | A |
| 2 - Newgate Lane (South) | 1050 | 262 | 85 | 2219 | 0.473 | 1052 | 709 | 1.4 | 0.9 | 3.214 | A |
| 3 - Longfield Avenue | 202 | 50 | 866 | 1715 | 0.118 | 202 | 271 | 0.2 | 0.1 | 2.414 | A |
| 4 - Newgate Lane (North) | 670 | 168 | 155 | 1771 | 0.379 | 671 | 913 | 0.9 | 0.7 | 3.478 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.06 | 0.00 | 0.00 | 0.06 | 0.06 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.93 | 0.57 | 1.04 | 1.46 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.64 | 0.58 | 1.06 | 1.48 | 1.54 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.08 | 0.03 | 0.28 | 0.50 | 0.53 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.35 | 0.05 | 0.53 | 3.26 | 4.96 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.18 | 0.00 | 0.00 | 0.18 | 0.18 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.88 | 0.09 | 0.89 | 1.18 | 1.71 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.03 | 0.29 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.39 | 0.03 | 0.28 | 2.39 | 2.39 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.37 | 0.03 | 0.27 | 1.37 | 1.37 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.03 | 0.28 | 0.50 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.42 | 0.03 | 0.27 | 2.42 | 2.42 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.28 | 0.50 | 0.92 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.38 | 0.03 | 0.28 | 1.38 | 1.38 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.08 | 0.00 | 0.00 | 0.08 | 0.08 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.38 | 0.12 | 1.19 | 2.39 | 3.02 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.18 | 0.00 | 0.00 | 0.18 | 0.18 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.90 | 0.36 | 1.03 | 1.49 | 1.55 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.06 | 0.00 | 0.00 | 0.06 | 0.06 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.94 | 0.06 | 0.70 | 1.81 | 2.48 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.14 | 0.00 | 0.00 | 0.14 | 0.14 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.65 | 0.07 | 0.77 | 1.43 | 1.51 | | | N/A | N/A |

2019 Base DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.11 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|-------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D11 | 2019 Base DS2 | PM | with Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 84 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1121 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 279 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 859 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 22 | 29 | 33 |
| | 2 - Newgate Lane (South) | 4 | 0 | 269 | 848 |
| | 3 - Longfield Avenue | 4 | 172 | 0 | 104 |
| | 4 - Newgate Lane (North) | 4 | 783 | 72 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.15 | 7.18 | 0.2 | 0.5 | A | 77 | 116 |
| 2 - Newgate Lane (South) | 0.57 | 3.90 | 1.3 | 1.8 | A | 1029 | 1543 |
| 3 - Longfield Avenue | 0.19 | 2.72 | 0.2 | 0.5 | A | 256 | 384 |
| 4 - Newgate Lane (North) | 0.54 | 4.55 | 1.2 | 1.5 | A | 788 | 1182 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 770 | 771 | 0.082 | 63 | 9 | 0.0 | 0.1 | 5.146 | A |
| 2 - Newgate Lane (South) | 844 | 211 | 100 | 2207 | 0.382 | 842 | 733 | 0.0 | 0.6 | 2.672 | A |
| 3 - Longfield Avenue | 210 | 53 | 665 | 1870 | 0.112 | 210 | 277 | 0.0 | 0.1 | 2.168 | A |
| 4 - Newgate Lane (North) | 647 | 162 | 135 | 1783 | 0.363 | 644 | 739 | 0.0 | 0.6 | 3.188 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 922 | 698 | 0.108 | 75 | 11 | 0.1 | 0.1 | 5.845 | A |
| 2 - Newgate Lane (South) | 1008 | 252 | 120 | 2193 | 0.460 | 1007 | 877 | 0.6 | 0.9 | 3.080 | A |
| 3 - Longfield Avenue | 251 | 63 | 795 | 1769 | 0.142 | 251 | 332 | 0.1 | 0.2 | 2.370 | A |
| 4 - Newgate Lane (North) | 772 | 193 | 161 | 1767 | 0.437 | 771 | 885 | 0.6 | 0.8 | 3.650 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1128 | 600 | 0.154 | 92 | 13 | 0.1 | 0.2 | 7.167 | A |
| 2 - Newgate Lane (South) | 1235 | 309 | 147 | 2173 | 0.568 | 1233 | 1074 | 0.9 | 1.3 | 3.881 | A |
| 3 - Longfield Avenue | 307 | 77 | 973 | 1632 | 0.188 | 307 | 406 | 0.2 | 0.2 | 2.716 | A |
| 4 - Newgate Lane (North) | 946 | 236 | 197 | 1745 | 0.542 | 944 | 1083 | 0.8 | 1.2 | 4.534 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1130 | 600 | 0.154 | 92 | 13 | 0.2 | 0.2 | 7.184 | A |
| 2 - Newgate Lane (South) | 1235 | 309 | 147 | 2172 | 0.568 | 1235 | 1075 | 1.3 | 1.3 | 3.897 | A |
| 3 - Longfield Avenue | 307 | 77 | 975 | 1631 | 0.188 | 307 | 407 | 0.2 | 0.2 | 2.719 | A |
| 4 - Newgate Lane (North) | 946 | 236 | 198 | 1745 | 0.542 | 946 | 1084 | 1.2 | 1.2 | 4.552 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 925 | 697 | 0.108 | 76 | 11 | 0.2 | 0.1 | 5.864 | A |
| 2 - Newgate Lane (South) | 1008 | 252 | 120 | 2192 | 0.460 | 1010 | 880 | 1.3 | 0.9 | 3.095 | A |
| 3 - Longfield Avenue | 251 | 63 | 798 | 1767 | 0.142 | 251 | 333 | 0.2 | 0.2 | 2.374 | A |
| 4 - Newgate Lane (North) | 772 | 193 | 162 | 1767 | 0.437 | 774 | 887 | 1.2 | 0.8 | 3.671 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 774 | 769 | 0.082 | 63 | 9 | 0.1 | 0.1 | 5.166 | A |
| 2 - Newgate Lane (South) | 844 | 211 | 101 | 2207 | 0.382 | 845 | 736 | 0.9 | 0.6 | 2.687 | A |
| 3 - Longfield Avenue | 210 | 53 | 667 | 1868 | 0.112 | 210 | 278 | 0.2 | 0.1 | 2.171 | A |
| 4 - Newgate Lane (North) | 647 | 162 | 135 | 1783 | 0.363 | 648 | 742 | 0.8 | 0.6 | 3.206 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.63 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.57 | 0.56 | 1.01 | 1.41 | 1.47 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.86 | 0.07 | 0.81 | 1.36 | 1.80 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.78 | 0.09 | 0.83 | 1.19 | 1.19 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.18 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.32 | 0.03 | 0.26 | 1.32 | 1.32 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.23 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.18 | 0.03 | 0.26 | 1.18 | 1.18 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.18 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.33 | 0.03 | 0.27 | 1.33 | 1.33 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.23 | 0.03 | 0.25 | 0.45 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.19 | 0.03 | 0.27 | 1.19 | 1.19 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.87 | 0.54 | 1.01 | 1.42 | 1.48 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.17 | 0.00 | 0.00 | 0.17 | 0.17 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.79 | 0.52 | 0.99 | 1.41 | 1.46 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.63 | 0.09 | 0.82 | 1.38 | 1.45 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.58 | 0.07 | 0.73 | 1.36 | 1.44 | | | N/A | N/A |

2024 Base DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.33 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D12 | 2024 Base DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 60 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1469 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 297 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1035 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 24 | 22 | 14 |
| | 2 - Newgate Lane (South) | 42 | 0 | 274 | 1153 |
| | 3 - Longfield Avenue | 39 | 152 | 0 | 106 |
| | 4 - Newgate Lane (North) | 21 | 934 | 81 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 5 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.13 | 8.56 | 0.2 | 0.5 | A | 55 | 82 |
| 2 - Newgate Lane (South) | 0.74 | 6.56 | 2.9 | 6.2 | A | 1348 | 2021 |
| 3 - Longfield Avenue | 0.24 | 3.54 | 0.3 | 1.3 | A | 272 | 409 |
| 4 - Newgate Lane (North) | 0.67 | 6.66 | 2.1 | 3.5 | A | 950 | 1425 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 875 | 721 | 0.062 | 45 | 77 | 0.0 | 0.1 | 5.825 | A |
| 2 - Newgate Lane (South) | 1106 | 276 | 88 | 2217 | 0.499 | 1102 | 832 | 0.0 | 1.0 | 3.341 | A |
| 3 - Longfield Avenue | 223 | 56 | 907 | 1683 | 0.133 | 223 | 282 | 0.0 | 0.2 | 2.495 | A |
| 4 - Newgate Lane (North) | 779 | 195 | 175 | 1758 | 0.443 | 776 | 955 | 0.0 | 0.8 | 3.847 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 13 | 1047 | 639 | 0.084 | 54 | 92 | 0.1 | 0.1 | 6.732 | A |
| 2 - Newgate Lane (South) | 1320 | 330 | 105 | 2204 | 0.599 | 1318 | 996 | 1.0 | 1.5 | 4.213 | A |
| 3 - Longfield Avenue | 267 | 67 | 1085 | 1546 | 0.173 | 267 | 338 | 0.2 | 0.2 | 2.850 | A |
| 4 - Newgate Lane (North) | 931 | 233 | 210 | 1738 | 0.536 | 929 | 1142 | 0.8 | 1.2 | 4.682 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 16 | 1281 | 528 | 0.125 | 66 | 112 | 0.1 | 0.2 | 8.519 | A |
| 2 - Newgate Lane (South) | 1617 | 404 | 128 | 2186 | 0.740 | 1612 | 1218 | 1.5 | 2.9 | 6.446 | A |
| 3 - Longfield Avenue | 327 | 82 | 1327 | 1360 | 0.240 | 326 | 413 | 0.2 | 0.3 | 3.526 | A |
| 4 - Newgate Lane (North) | 1140 | 285 | 257 | 1709 | 0.667 | 1136 | 1397 | 1.2 | 2.1 | 6.583 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 16 | 1284 | 526 | 0.125 | 66 | 112 | 0.2 | 0.2 | 8.557 | A |
| 2 - Newgate Lane (South) | 1617 | 404 | 129 | 2186 | 0.740 | 1617 | 1221 | 2.9 | 2.9 | 6.565 | A |
| 3 - Longfield Avenue | 327 | 82 | 1331 | 1357 | 0.241 | 327 | 414 | 0.3 | 0.3 | 3.540 | A |
| 4 - Newgate Lane (North) | 1140 | 285 | 257 | 1709 | 0.667 | 1140 | 1401 | 2.1 | 2.1 | 6.661 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 13 | 1052 | 636 | 0.084 | 54 | 92 | 0.2 | 0.1 | 6.766 | A |
| 2 - Newgate Lane (South) | 1320 | 330 | 105 | 2203 | 0.599 | 1326 | 1001 | 2.9 | 1.6 | 4.285 | A |
| 3 - Longfield Avenue | 267 | 67 | 1092 | 1541 | 0.173 | 267 | 340 | 0.3 | 0.2 | 2.865 | A |
| 4 - Newgate Lane (North) | 931 | 233 | 210 | 1737 | 0.536 | 934 | 1149 | 2.1 | 1.2 | 4.743 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 880 | 718 | 0.063 | 45 | 77 | 0.1 | 0.1 | 5.853 | A |
| 2 - Newgate Lane (South) | 1106 | 276 | 88 | 2216 | 0.499 | 1108 | 837 | 1.6 | 1.0 | 3.381 | A |
| 3 - Longfield Avenue | 223 | 56 | 912 | 1679 | 0.133 | 224 | 284 | 0.2 | 0.2 | 2.505 | A |
| 4 - Newgate Lane (North) | 779 | 195 | 176 | 1758 | 0.443 | 781 | 960 | 1.2 | 0.8 | 3.888 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.03 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.83 | 0.58 | 1.05 | 1.47 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.53 | 0.05 | 0.49 | 3.93 | 6.17 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.20 | 0.06 | 0.82 | 2.52 | 3.52 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.87 | 0.03 | 0.29 | 2.87 | 4.89 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.06 | 0.03 | 0.28 | 2.06 | 2.06 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.91 | 0.03 | 0.28 | 2.91 | 2.91 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.03 | 0.32 | 1.03 | 1.29 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.09 | 0.03 | 0.28 | 2.09 | 2.09 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.57 | 0.09 | 1.17 | 3.11 | 4.24 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.23 | 0.12 | 1.11 | 1.97 | 2.57 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.04 | 0.05 | 0.51 | 2.30 | 3.43 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.85 | 0.06 | 0.67 | 1.52 | 2.00 | | | N/A | N/A |

2024 Base DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.79 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D13 | 2024 Base DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 90 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1189 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 310 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 986 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 25 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 285 | 900 |
| | 3 - Longfield Avenue | 4 | 199 | 0 | 107 |
| | 4 - Newgate Lane (North) | 4 | 908 | 74 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.19 | 8.67 | 0.2 | 0.9 | A | 82 | 123 |
| 2 - Newgate Lane (South) | 0.60 | 4.25 | 1.5 | 2.4 | A | 1091 | 1637 |
| 3 - Longfield Avenue | 0.22 | 2.89 | 0.3 | 1.0 | A | 285 | 427 |
| 4 - Newgate Lane (North) | 0.63 | 5.68 | 1.7 | 2.6 | A | 905 | 1357 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 886 | 716 | 0.094 | 67 | 9 | 0.0 | 0.1 | 5.612 | A |
| 2 - Newgate Lane (South) | 895 | 224 | 104 | 2205 | 0.406 | 892 | 849 | 0.0 | 0.7 | 2.778 | A |
| 3 - Longfield Avenue | 234 | 58 | 704 | 1839 | 0.127 | 233 | 292 | 0.0 | 0.1 | 2.241 | A |
| 4 - Newgate Lane (North) | 742 | 186 | 156 | 1770 | 0.419 | 740 | 781 | 0.0 | 0.7 | 3.515 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1060 | 633 | 0.127 | 80 | 11 | 0.1 | 0.1 | 6.593 | A |
| 2 - Newgate Lane (South) | 1069 | 267 | 124 | 2190 | 0.488 | 1068 | 1017 | 0.7 | 1.0 | 3.255 | A |
| 3 - Longfield Avenue | 279 | 70 | 842 | 1733 | 0.161 | 279 | 350 | 0.1 | 0.2 | 2.475 | A |
| 4 - Newgate Lane (North) | 887 | 222 | 186 | 1752 | 0.506 | 885 | 935 | 0.7 | 1.0 | 4.189 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1298 | 520 | 0.190 | 98 | 14 | 0.1 | 0.2 | 8.629 | A |
| 2 - Newgate Lane (South) | 1309 | 327 | 152 | 2169 | 0.604 | 1307 | 1244 | 1.0 | 1.5 | 4.228 | A |
| 3 - Longfield Avenue | 342 | 85 | 1031 | 1588 | 0.215 | 341 | 428 | 0.2 | 0.3 | 2.888 | A |
| 4 - Newgate Lane (North) | 1086 | 271 | 228 | 1726 | 0.629 | 1083 | 1144 | 1.0 | 1.7 | 5.627 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1300 | 519 | 0.190 | 99 | 14 | 0.2 | 0.2 | 8.669 | A |
| 2 - Newgate Lane (South) | 1309 | 327 | 152 | 2169 | 0.604 | 1309 | 1247 | 1.5 | 1.5 | 4.251 | A |
| 3 - Longfield Avenue | 342 | 85 | 1033 | 1586 | 0.215 | 342 | 429 | 0.3 | 0.3 | 2.891 | A |
| 4 - Newgate Lane (North) | 1086 | 271 | 228 | 1726 | 0.629 | 1086 | 1146 | 1.7 | 1.7 | 5.675 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1065 | 631 | 0.128 | 81 | 11 | 0.2 | 0.1 | 6.630 | A |
| 2 - Newgate Lane (South) | 1069 | 267 | 125 | 2189 | 0.488 | 1071 | 1021 | 1.5 | 1.0 | 3.277 | A |
| 3 - Longfield Avenue | 279 | 70 | 845 | 1731 | 0.161 | 279 | 351 | 0.3 | 0.2 | 2.480 | A |
| 4 - Newgate Lane (North) | 887 | 222 | 187 | 1752 | 0.506 | 889 | 938 | 1.7 | 1.0 | 4.228 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 891 | 713 | 0.095 | 68 | 9 | 0.1 | 0.1 | 5.641 | A |
| 2 - Newgate Lane (South) | 895 | 224 | 104 | 2204 | 0.406 | 896 | 854 | 1.0 | 0.7 | 2.795 | A |
| 3 - Longfield Avenue | 234 | 58 | 707 | 1837 | 0.127 | 234 | 293 | 0.2 | 0.1 | 2.247 | A |
| 4 - Newgate Lane (North) | 742 | 186 | 156 | 1770 | 0.419 | 744 | 785 | 1.0 | 0.7 | 3.547 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.69 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.72 | 0.56 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.96 | 0.06 | 0.78 | 1.78 | 2.39 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.19 | 0.00 | 0.00 | 0.19 | 0.19 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.03 | 0.07 | 0.82 | 1.90 | 2.64 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.23 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.53 | 0.03 | 0.26 | 1.53 | 1.53 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.68 | 0.03 | 0.27 | 1.68 | 1.68 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.24 | 0.03 | 0.28 | 0.50 | 0.91 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.54 | 0.03 | 0.27 | 1.54 | 1.54 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.28 | 0.55 | 1.02 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.70 | 0.03 | 0.27 | 1.70 | 1.70 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.98 | 0.50 | 1.02 | 1.22 | 1.22 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.19 | 0.00 | 0.00 | 0.19 | 0.19 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.04 | 0.18 | 1.04 | 1.48 | 1.80 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.70 | 0.09 | 0.81 | 1.40 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.73 | 0.07 | 0.72 | 1.37 | 1.37 | | | N/A | N/A |

2024 Base + Dev DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.49 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D14 | 2024 Base + Dev DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 60 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1480 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 299 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1050 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 24 | 22 | 14 |
| | 2 - Newgate Lane (South) | 42 | 0 | 276 | 1162 |
| | 3 - Longfield Avenue | 39 | 155 | 0 | 106 |
| | 4 - Newgate Lane (North) | 21 | 949 | 81 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 5 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.13 | 8.74 | 0.2 | 0.5 | A | 55 | 83 |
| 2 - Newgate Lane (South) | 0.75 | 6.71 | 3.0 | 6.4 | A | 1358 | 2037 |
| 3 - Longfield Avenue | 0.24 | 3.58 | 0.3 | 1.3 | A | 275 | 412 |
| 4 - Newgate Lane (North) | 0.68 | 6.88 | 2.2 | 3.8 | A | 964 | 1446 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 888 | 715 | 0.063 | 45 | 77 | 0.0 | 0.1 | 5.879 | A |
| 2 - Newgate Lane (South) | 1114 | 279 | 88 | 2217 | 0.503 | 1110 | 845 | 0.0 | 1.0 | 3.366 | A |
| 3 - Longfield Avenue | 225 | 56 | 914 | 1678 | 0.134 | 225 | 284 | 0.0 | 0.2 | 2.508 | A |
| 4 - Newgate Lane (North) | 791 | 198 | 177 | 1757 | 0.450 | 787 | 961 | 0.0 | 0.9 | 3.894 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 14 | 1063 | 631 | 0.086 | 54 | 92 | 0.1 | 0.1 | 6.818 | A |
| 2 - Newgate Lane (South) | 1331 | 333 | 105 | 2204 | 0.604 | 1329 | 1012 | 1.0 | 1.6 | 4.261 | A |
| 3 - Longfield Avenue | 269 | 67 | 1094 | 1539 | 0.175 | 269 | 340 | 0.2 | 0.2 | 2.870 | A |
| 4 - Newgate Lane (North) | 944 | 236 | 212 | 1736 | 0.544 | 943 | 1151 | 0.9 | 1.2 | 4.767 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 17 | 1300 | 519 | 0.128 | 66 | 112 | 0.1 | 0.2 | 8.693 | A |
| 2 - Newgate Lane (South) | 1630 | 407 | 128 | 2186 | 0.745 | 1624 | 1238 | 1.6 | 3.0 | 6.584 | A |
| 3 - Longfield Avenue | 330 | 82 | 1337 | 1352 | 0.244 | 329 | 415 | 0.2 | 0.3 | 3.563 | A |
| 4 - Newgate Lane (North) | 1156 | 289 | 260 | 1707 | 0.677 | 1153 | 1407 | 1.2 | 2.2 | 6.794 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 17 | 1304 | 517 | 0.128 | 66 | 113 | 0.2 | 0.2 | 8.736 | A |
| 2 - Newgate Lane (South) | 1630 | 407 | 129 | 2186 | 0.745 | 1630 | 1241 | 3.0 | 3.0 | 6.713 | A |
| 3 - Longfield Avenue | 330 | 82 | 1342 | 1349 | 0.245 | 330 | 417 | 0.3 | 0.3 | 3.577 | A |
| 4 - Newgate Lane (North) | 1156 | 289 | 260 | 1707 | 0.678 | 1156 | 1411 | 2.2 | 2.2 | 6.882 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 14 | 1069 | 629 | 0.086 | 54 | 92 | 0.2 | 0.1 | 6.856 | A |
| 2 - Newgate Lane (South) | 1331 | 333 | 106 | 2203 | 0.604 | 1336 | 1017 | 3.0 | 1.6 | 4.340 | A |
| 3 - Longfield Avenue | 269 | 67 | 1100 | 1534 | 0.175 | 270 | 342 | 0.3 | 0.2 | 2.883 | A |
| 4 - Newgate Lane (North) | 944 | 236 | 213 | 1736 | 0.544 | 948 | 1157 | 2.2 | 1.3 | 4.834 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 893 | 712 | 0.064 | 45 | 77 | 0.1 | 0.1 | 5.910 | A |
| 2 - Newgate Lane (South) | 1114 | 279 | 88 | 2216 | 0.503 | 1117 | 851 | 1.6 | 1.1 | 3.408 | A |
| 3 - Longfield Avenue | 225 | 56 | 919 | 1674 | 0.135 | 226 | 285 | 0.2 | 0.2 | 2.519 | A |
| 4 - Newgate Lane (North) | 791 | 198 | 178 | 1757 | 0.450 | 792 | 967 | 1.3 | 0.9 | 3.935 | A |

Queue Variation Results for each time segment
07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.04 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.85 | 0.58 | 1.05 | 1.47 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.56 | 0.05 | 0.49 | 4.02 | 6.37 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.24 | 0.06 | 0.80 | 2.68 | 3.79 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.96 | 0.03 | 0.29 | 2.96 | 5.55 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.16 | 0.03 | 0.28 | 2.16 | 2.16 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.00 | 0.03 | 0.28 | 3.00 | 3.00 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.33 | 0.03 | 0.32 | 1.06 | 1.31 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.19 | 0.03 | 0.28 | 2.19 | 2.19 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.60 | 0.09 | 1.16 | 3.29 | 4.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.22 | 0.00 | 0.00 | 0.22 | 0.22 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.27 | 0.11 | 1.12 | 2.08 | 2.81 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.06 | 0.05 | 0.50 | 2.40 | 3.60 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.87 | 0.06 | 0.64 | 1.64 | 2.11 | | | N/A | N/A |

2024 Base + Dev DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.91 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D15 | 2024 Base + Dev DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 90 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1209 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 319 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 998 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 26 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 291 | 913 |
| | 3 - Longfield Avenue | 4 | 208 | 0 | 107 |
| | 4 - Newgate Lane (North) | 4 | 920 | 74 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.19 | 8.91 | 0.2 | 1.0 | A | 82 | 124 |
| 2 - Newgate Lane (South) | 0.61 | 4.36 | 1.6 | 2.6 | A | 1109 | 1664 |
| 3 - Longfield Avenue | 0.22 | 2.94 | 0.3 | 1.1 | A | 293 | 439 |
| 4 - Newgate Lane (North) | 0.64 | 5.85 | 1.8 | 2.8 | A | 916 | 1374 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 68 | 17 | 902 | 708 | 0.096 | 67 | 9 | 0.0 | 0.1 | 5.679 | A |
| 2 - Newgate Lane (South) | 910 | 227 | 104 | 2205 | 0.413 | 907 | 865 | 0.0 | 0.7 | 2.809 | A |
| 3 - Longfield Avenue | 240 | 60 | 714 | 1832 | 0.131 | 240 | 297 | 0.0 | 0.2 | 2.261 | A |
| 4 - Newgate Lane (North) | 752 | 188 | 162 | 1766 | 0.426 | 749 | 791 | 0.0 | 0.7 | 3.561 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1079 | 624 | 0.130 | 81 | 11 | 0.1 | 0.1 | 6.704 | A |
| 2 - Newgate Lane (South) | 1087 | 272 | 124 | 2190 | 0.496 | 1085 | 1036 | 0.7 | 1.0 | 3.306 | A |
| 3 - Longfield Avenue | 287 | 72 | 855 | 1724 | 0.166 | 287 | 355 | 0.2 | 0.2 | 2.505 | A |
| 4 - Newgate Lane (North) | 897 | 224 | 194 | 1747 | 0.514 | 896 | 947 | 0.7 | 1.1 | 4.266 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1320 | 509 | 0.194 | 99 | 14 | 0.1 | 0.2 | 8.862 | A |
| 2 - Newgate Lane (South) | 1331 | 333 | 152 | 2169 | 0.614 | 1328 | 1267 | 1.0 | 1.6 | 4.334 | A |
| 3 - Longfield Avenue | 351 | 88 | 1046 | 1576 | 0.223 | 351 | 434 | 0.2 | 0.3 | 2.938 | A |
| 4 - Newgate Lane (North) | 1099 | 275 | 238 | 1720 | 0.639 | 1096 | 1159 | 1.1 | 1.8 | 5.796 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1323 | 508 | 0.195 | 99 | 14 | 0.2 | 0.2 | 8.908 | A |
| 2 - Newgate Lane (South) | 1331 | 333 | 152 | 2169 | 0.614 | 1331 | 1270 | 1.6 | 1.6 | 4.360 | A |
| 3 - Longfield Avenue | 351 | 88 | 1048 | 1575 | 0.223 | 351 | 435 | 0.3 | 0.3 | 2.941 | A |
| 4 - Newgate Lane (North) | 1099 | 275 | 238 | 1720 | 0.639 | 1099 | 1161 | 1.8 | 1.8 | 5.850 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1084 | 622 | 0.130 | 81 | 11 | 0.2 | 0.2 | 6.741 | A |
| 2 - Newgate Lane (South) | 1087 | 272 | 125 | 2189 | 0.496 | 1089 | 1040 | 1.6 | 1.0 | 3.327 | A |
| 3 - Longfield Avenue | 287 | 72 | 857 | 1721 | 0.167 | 287 | 356 | 0.3 | 0.2 | 2.510 | A |
| 4 - Newgate Lane (North) | 897 | 224 | 195 | 1747 | 0.514 | 900 | 950 | 1.8 | 1.1 | 4.308 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 68 | 17 | 906 | 706 | 0.096 | 68 | 9 | 0.2 | 0.1 | 5.711 | A |
| 2 - Newgate Lane (South) | 910 | 227 | 104 | 2204 | 0.413 | 911 | 870 | 1.0 | 0.7 | 2.826 | A |
| 3 - Longfield Avenue | 240 | 60 | 717 | 1829 | 0.131 | 240 | 298 | 0.2 | 0.2 | 2.265 | A |
| 4 - Newgate Lane (North) | 752 | 188 | 163 | 1766 | 0.426 | 753 | 795 | 1.1 | 0.8 | 3.593 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.71 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.74 | 0.56 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.99 | 0.06 | 0.77 | 1.87 | 2.61 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.06 | 0.06 | 0.81 | 1.98 | 2.81 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.24 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.59 | 0.03 | 0.26 | 1.59 | 1.59 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.29 | 0.03 | 0.25 | 0.45 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.76 | 0.03 | 0.27 | 1.76 | 1.76 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.24 | 0.03 | 0.28 | 0.50 | 1.01 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.60 | 0.03 | 0.27 | 1.60 | 1.60 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.29 | 0.03 | 0.29 | 0.78 | 1.14 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.77 | 0.03 | 0.27 | 1.77 | 1.77 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.01 | 0.41 | 1.03 | 1.50 | 1.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.08 | 0.16 | 1.05 | 1.60 | 1.88 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.72 | 0.08 | 0.81 | 1.41 | 1.49 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.75 | 0.06 | 0.71 | 1.50 | 1.54 | | | N/A | N/A |

| |
|---|
| <h1>Junctions 9</h1> |
| <h2>ARCADY 9 - Roundabout Module</h2> |
| Version: 9.5.0.6896 © Copyright TRL Limited, 2018 |
| For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |

Filename: NGL-Longfield Ave Oct 19.j9

Path: \\Pg-brs-dc01\data\Bristol Projects\Bristol - Live Projects\BRS.4901 - BRS.5000\BRS.4989 - SUSTAINABLE LAND PLC - LAND TO THE NORTH OF GOSPORT ROAD, FAREHAM\Transport\7. Junction Modelling\c. ARCADY\Oct 19\TP

Report generation date: 17/10/2019 11:59:14

-
- »2019 Base DS1, AM
 - »2019 Base DS1, PM
 - »2024 Base DS1, AM
 - »2024 Base DS1, PM
 - »2024 Base + Dev DS1, AM
 - »2024 Base + Dev DS1, PM
 - »2019 Base DS2, AM
 - »2019 Base DS2, PM
 - »2024 Base DS2, AM
 - »2024 Base DS2, PM
 - »2024 Base + Dev DS2, AM
 - »2024 Base + Dev DS2, PM

Summary of junction performance

| | AM | | | | | PM | | | | |
|----------------------------|-------------|-----------|------|-----|--------------|-------------|-----------|------|-----|--------------|
| | Queue (PCU) | Delay (s) | RFC | LOS | Junction LOS | Queue (PCU) | Delay (s) | RFC | LOS | Junction LOS |
| 2019 Base DS1 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 9.61 | 0.13 | A | A | 0.4 | 17.75 | 0.31 | C | A |
| 2 - Newgate Lane (South) | 2.9 | 6.61 | 0.74 | A | | 1.4 | 4.08 | 0.58 | A | |
| 3 - Longfield Avenue | 0.7 | 4.26 | 0.42 | A | | 0.9 | 4.17 | 0.49 | A | |
| 4 - Newgate Lane (North) | 1.9 | 6.98 | 0.65 | A | | 2.9 | 9.95 | 0.75 | A | |
| 2024 Base DS1 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 12.67 | 0.17 | B | A | 0.9 | 35.64 | 0.49 | E | B |
| 2 - Newgate Lane (South) | 3.6 | 7.80 | 0.78 | A | | 1.7 | 4.48 | 0.62 | A | |
| 3 - Longfield Avenue | 0.9 | 4.95 | 0.49 | A | | 1.2 | 4.93 | 0.56 | A | |
| 4 - Newgate Lane (North) | 3.2 | 10.35 | 0.76 | B | | 5.9 | 18.68 | 0.86 | C | |
| 2024 Base + Dev DS1 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 13.05 | 0.18 | B | A | 1.0 | 40.25 | 0.52 | E | B |
| 2 - Newgate Lane (South) | 3.8 | 8.12 | 0.79 | A | | 1.7 | 4.60 | 0.63 | A | |
| 3 - Longfield Avenue | 1.0 | 5.07 | 0.49 | A | | 1.3 | 5.09 | 0.57 | A | |
| 4 - Newgate Lane (North) | 3.4 | 10.84 | 0.77 | B | | 6.6 | 20.76 | 0.88 | C | |
| 2019 Base DS2 | | | | | | | | | | |
| 1 - Davis Way | 0.1 | 7.15 | 0.10 | A | A | 0.2 | 7.18 | 0.15 | A | A |
| 2 - Newgate Lane (South) | 2.4 | 5.72 | 0.70 | A | | 1.3 | 3.90 | 0.57 | A | |
| 3 - Longfield Avenue | 0.3 | 3.28 | 0.21 | A | | 0.2 | 2.72 | 0.19 | A | |
| 4 - Newgate Lane (North) | 1.4 | 5.11 | 0.57 | A | | 1.2 | 4.55 | 0.54 | A | |
| 2024 Base DS2 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 8.56 | 0.13 | A | A | 0.2 | 8.67 | 0.19 | A | A |
| 2 - Newgate Lane (South) | 2.9 | 6.56 | 0.74 | A | | 1.5 | 4.25 | 0.60 | A | |
| 3 - Longfield Avenue | 0.3 | 3.54 | 0.24 | A | | 0.3 | 2.89 | 0.22 | A | |
| 4 - Newgate Lane (North) | 2.1 | 6.66 | 0.67 | A | | 1.7 | 5.68 | 0.63 | A | |
| 2024 Base + Dev DS2 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 8.74 | 0.13 | A | A | 0.2 | 8.93 | 0.20 | A | A |
| 2 - Newgate Lane (South) | 3.0 | 6.73 | 0.75 | A | | 1.6 | 4.37 | 0.61 | A | |
| 3 - Longfield Avenue | 0.3 | 3.58 | 0.24 | A | | 0.3 | 2.94 | 0.22 | A | |
| 4 - Newgate Lane (North) | 2.2 | 6.89 | 0.68 | A | | 1.8 | 5.87 | 0.64 | A | |

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

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

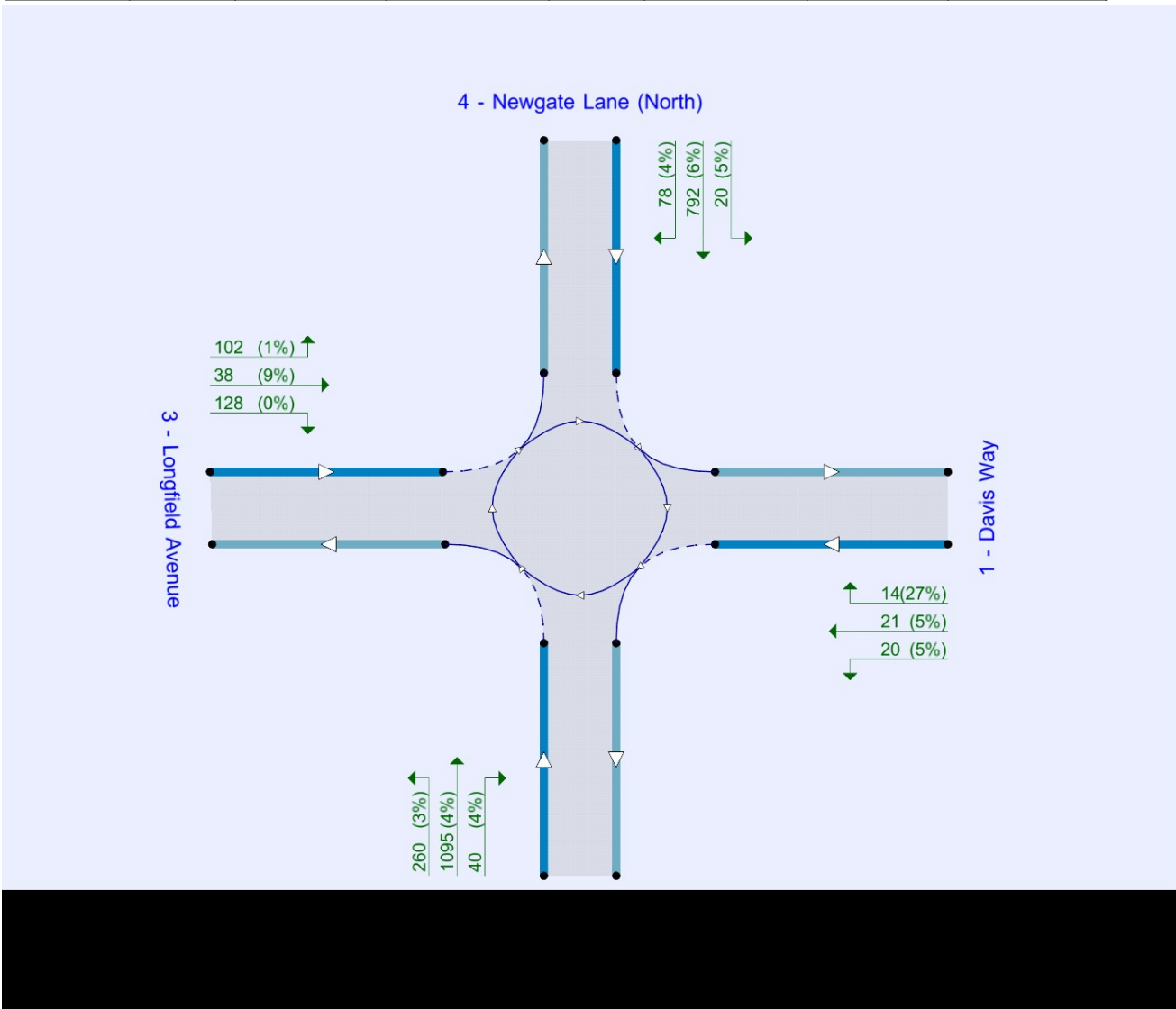
File summary

File Description

| | |
|-------------|--|
| Title | Longfield Avenue Roundabout |
| Location | |
| Site number | |
| Date | 08/10/2018 |
| Version | V3 |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | BRS.4989 |
| Enumerator | PEGASUSGROUP\Matthew Haywood |
| Description | Rev 3 - Updated for total of 190 dwellings |

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2019 Base DS1 | AM | without Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D2 | 2019 Base DS1 | PM | without Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D5 | 2024 Base DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D6 | 2024 Base DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D7 | 2024 Base + Dev DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D8 | 2024 Base + Dev DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D10 | 2019 Base DS2 | AM | with Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D11 | 2019 Base DS2 | PM | with Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D12 | 2024 Base DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D13 | 2024 Base DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D14 | 2024 Base + Dev DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D15 | 2024 Base + Dev DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

Analysis Set Details

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

2019 Base DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.34 | A |

Junction Network Options

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

Arms

Arms

| Arm | Name | Description |
|-----|----------------------|-------------|
| 1 | Davis Way | |
| 2 | Newgate Lane (South) | |
| 3 | Longfield Avenue | |
| 4 | Newgate Lane (North) | |

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 - Davis Way | 3.50 | 4.90 | 6.7 | 10.0 | 46.0 | 55.0 | |
| 2 - Newgate Lane (South) | 7.30 | 7.35 | 0.0 | 40.0 | 46.0 | 28.0 | |
| 3 - Longfield Avenue | 3.65 | 11.40 | 24.8 | 34.0 | 46.0 | 23.0 | |
| 4 - Newgate Lane (North) | 3.15 | 9.40 | 41.6 | 11.0 | 46.0 | 66.0 | |

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

| Arm | Final slope | Final intercept (PCU/hr) |
|--------------------------|-------------|--------------------------|
| 1 - Davis Way | 0.475 | 1136 |
| 2 - Newgate Lane (South) | 0.747 | 2282 |
| 3 - Longfield Avenue | 0.770 | 2381 |
| 4 - Newgate Lane (North) | 0.608 | 1865 |

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2019 Base DS1 | AM | without Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 55 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1461 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 564 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 917 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 20 | 21 | 14 |
| | 2 - Newgate Lane (South) | 52 | 0 | 402 | 1007 |
| | 3 - Longfield Avenue | 38 | 372 | 0 | 154 |
| | 4 - Newgate Lane (North) | 20 | 800 | 97 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 6 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.13 | 9.61 | 0.2 | 0.5 | A | 50 | 76 |
| 2 - Newgate Lane (South) | 0.74 | 6.61 | 2.9 | 6.2 | A | 1341 | 2011 |
| 3 - Longfield Avenue | 0.42 | 4.26 | 0.7 | 3.1 | A | 518 | 776 |
| 4 - Newgate Lane (North) | 0.65 | 6.98 | 1.9 | 2.9 | A | 841 | 1262 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 952 | 684 | 0.061 | 41 | 83 | 0.0 | 0.1 | 6.153 | A |
| 2 - Newgate Lane (South) | 1100 | 275 | 99 | 2208 | 0.498 | 1096 | 894 | 0.0 | 1.0 | 3.347 | A |
| 3 - Longfield Avenue | 425 | 106 | 805 | 1762 | 0.241 | 423 | 390 | 0.0 | 0.3 | 2.706 | A |
| 4 - Newgate Lane (North) | 690 | 173 | 347 | 1654 | 0.417 | 687 | 881 | 0.0 | 0.8 | 3.936 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 1139 | 595 | 0.083 | 49 | 99 | 0.1 | 0.1 | 7.251 | A |
| 2 - Newgate Lane (South) | 1313 | 328 | 118 | 2194 | 0.599 | 1311 | 1070 | 1.0 | 1.5 | 4.227 | A |
| 3 - Longfield Avenue | 507 | 127 | 963 | 1640 | 0.309 | 507 | 467 | 0.3 | 0.4 | 3.196 | A |
| 4 - Newgate Lane (North) | 824 | 206 | 415 | 1613 | 0.511 | 823 | 1055 | 0.8 | 1.1 | 4.824 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1393 | 475 | 0.128 | 60 | 121 | 0.1 | 0.2 | 9.556 | A |
| 2 - Newgate Lane (South) | 1609 | 402 | 145 | 2174 | 0.740 | 1603 | 1309 | 1.5 | 2.9 | 6.488 | A |
| 3 - Longfield Avenue | 621 | 155 | 1177 | 1475 | 0.421 | 620 | 571 | 0.4 | 0.7 | 4.235 | A |
| 4 - Newgate Lane (North) | 1010 | 252 | 508 | 1556 | 0.649 | 1006 | 1290 | 1.1 | 1.9 | 6.897 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1397 | 473 | 0.128 | 61 | 121 | 0.2 | 0.2 | 9.606 | A |
| 2 - Newgate Lane (South) | 1609 | 402 | 145 | 2174 | 0.740 | 1608 | 1312 | 2.9 | 2.9 | 6.608 | A |
| 3 - Longfield Avenue | 621 | 155 | 1181 | 1472 | 0.422 | 621 | 572 | 0.7 | 0.7 | 4.259 | A |
| 4 - Newgate Lane (North) | 1010 | 252 | 509 | 1556 | 0.649 | 1010 | 1294 | 1.9 | 1.9 | 6.984 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 1145 | 593 | 0.083 | 50 | 99 | 0.2 | 0.1 | 7.295 | A |
| 2 - Newgate Lane (South) | 1313 | 328 | 119 | 2193 | 0.599 | 1319 | 1075 | 2.9 | 1.6 | 4.302 | A |
| 3 - Longfield Avenue | 507 | 127 | 969 | 1636 | 0.310 | 508 | 469 | 0.7 | 0.5 | 3.217 | A |
| 4 - Newgate Lane (North) | 824 | 206 | 416 | 1612 | 0.511 | 828 | 1060 | 1.9 | 1.1 | 4.887 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 957 | 682 | 0.061 | 42 | 83 | 0.1 | 0.1 | 6.188 | A |
| 2 - Newgate Lane (South) | 1100 | 275 | 100 | 2208 | 0.498 | 1102 | 899 | 1.6 | 1.0 | 3.386 | A |
| 3 - Longfield Avenue | 425 | 106 | 809 | 1758 | 0.241 | 425 | 392 | 0.5 | 0.3 | 2.722 | A |
| 4 - Newgate Lane (North) | 690 | 173 | 348 | 1653 | 0.418 | 692 | 886 | 1.1 | 0.8 | 3.976 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.02 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.00 | 0.00 | 0.32 | 0.32 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.75 | 0.58 | 1.06 | 1.48 | 1.54 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.53 | 0.05 | 0.49 | 3.92 | 6.15 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.45 | 0.00 | 0.00 | 0.45 | 0.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.10 | 0.07 | 0.86 | 2.04 | 2.87 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.29 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.88 | 0.03 | 0.29 | 2.88 | 4.98 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.73 | 0.03 | 0.26 | 0.73 | 0.73 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.92 | 0.03 | 0.28 | 1.92 | 1.92 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.28 | 0.50 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.91 | 0.03 | 0.28 | 2.91 | 2.91 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.73 | 0.03 | 0.29 | 1.11 | 3.07 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.94 | 0.03 | 0.28 | 1.94 | 1.94 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.57 | 0.09 | 1.16 | 3.11 | 4.24 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.45 | 0.00 | 0.00 | 0.45 | 0.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.12 | 0.12 | 1.06 | 1.77 | 2.07 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.04 | 0.05 | 0.51 | 2.30 | 3.43 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.00 | 0.00 | 0.32 | 0.32 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.77 | 0.06 | 0.63 | 1.16 | 1.76 | | | N/A | N/A |

2019 Base DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.43 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2019 Base DS1 | PM | without Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 84 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1145 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 747 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 970 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 22 | 29 | 33 |
| | 2 - Newgate Lane (South) | 4 | 0 | 356 | 785 |
| | 3 - Longfield Avenue | 4 | 638 | 0 | 105 |
| | 4 - Newgate Lane (North) | 4 | 875 | 91 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.31 | 17.75 | 0.4 | 1.5 | C | 77 | 116 |
| 2 - Newgate Lane (South) | 0.58 | 4.08 | 1.4 | 2.0 | A | 1051 | 1576 |
| 3 - Longfield Avenue | 0.49 | 4.17 | 0.9 | 1.9 | A | 685 | 1028 |
| 4 - Newgate Lane (North) | 0.75 | 9.95 | 2.9 | 9.7 | A | 890 | 1335 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 1203 | 565 | 0.112 | 63 | 9 | 0.0 | 0.1 | 7.244 | A |
| 2 - Newgate Lane (South) | 862 | 216 | 114 | 2197 | 0.392 | 859 | 1151 | 0.0 | 0.7 | 2.728 | A |
| 3 - Longfield Avenue | 562 | 141 | 617 | 1907 | 0.295 | 561 | 357 | 0.0 | 0.4 | 2.671 | A |
| 4 - Newgate Lane (North) | 730 | 183 | 485 | 1570 | 0.465 | 727 | 693 | 0.0 | 0.9 | 4.296 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 1439 | 453 | 0.167 | 75 | 11 | 0.1 | 0.2 | 9.639 | A |
| 2 - Newgate Lane (South) | 1029 | 257 | 137 | 2180 | 0.472 | 1028 | 1378 | 0.7 | 0.9 | 3.170 | A |
| 3 - Longfield Avenue | 672 | 168 | 738 | 1813 | 0.370 | 671 | 427 | 0.4 | 0.6 | 3.150 | A |
| 4 - Newgate Lane (North) | 872 | 218 | 580 | 1512 | 0.577 | 870 | 829 | 0.9 | 1.4 | 5.646 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1759 | 301 | 0.307 | 92 | 13 | 0.2 | 0.4 | 17.330 | C |
| 2 - Newgate Lane (South) | 1261 | 315 | 167 | 2157 | 0.584 | 1259 | 1683 | 0.9 | 1.4 | 4.057 | A |
| 3 - Longfield Avenue | 822 | 206 | 903 | 1686 | 0.488 | 821 | 523 | 0.6 | 0.9 | 4.155 | A |
| 4 - Newgate Lane (North) | 1068 | 267 | 710 | 1433 | 0.745 | 1062 | 1014 | 1.4 | 2.8 | 9.675 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1766 | 298 | 0.311 | 92 | 13 | 0.4 | 0.4 | 17.749 | C |
| 2 - Newgate Lane (South) | 1261 | 315 | 168 | 2157 | 0.585 | 1261 | 1690 | 1.4 | 1.4 | 4.078 | A |
| 3 - Longfield Avenue | 822 | 206 | 905 | 1685 | 0.488 | 822 | 524 | 0.9 | 0.9 | 4.174 | A |
| 4 - Newgate Lane (North) | 1068 | 267 | 711 | 1433 | 0.745 | 1068 | 1016 | 2.8 | 2.9 | 9.951 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 1449 | 448 | 0.169 | 76 | 11 | 0.4 | 0.2 | 9.832 | A |
| 2 - Newgate Lane (South) | 1029 | 257 | 139 | 2179 | 0.472 | 1031 | 1387 | 1.4 | 0.9 | 3.190 | A |
| 3 - Longfield Avenue | 672 | 168 | 741 | 1811 | 0.371 | 673 | 429 | 0.9 | 0.6 | 3.168 | A |
| 4 - Newgate Lane (North) | 872 | 218 | 582 | 1511 | 0.577 | 878 | 832 | 2.9 | 1.4 | 5.796 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 1210 | 562 | 0.113 | 64 | 9 | 0.2 | 0.1 | 7.323 | A |
| 2 - Newgate Lane (South) | 862 | 216 | 116 | 2196 | 0.393 | 863 | 1158 | 0.9 | 0.7 | 2.745 | A |
| 3 - Longfield Avenue | 562 | 141 | 620 | 1904 | 0.295 | 563 | 359 | 0.6 | 0.4 | 2.686 | A |
| 4 - Newgate Lane (North) | 730 | 183 | 487 | 1569 | 0.465 | 732 | 696 | 1.4 | 0.9 | 4.359 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.65 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.42 | 0.00 | 0.00 | 0.42 | 0.42 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.87 | 0.56 | 1.01 | 1.41 | 1.47 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.90 | 0.07 | 0.80 | 1.56 | 1.96 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.59 | 0.07 | 0.74 | 1.35 | 1.42 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.36 | 0.05 | 0.62 | 3.23 | 4.83 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.44 | 0.03 | 0.26 | 0.47 | 0.50 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.41 | 0.03 | 0.26 | 1.41 | 1.41 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.94 | 0.03 | 0.25 | 0.94 | 0.94 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.84 | 0.03 | 0.29 | 2.84 | 9.73 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.45 | 0.03 | 0.34 | 1.39 | 1.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.42 | 0.03 | 0.27 | 1.42 | 1.42 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.95 | 0.03 | 0.27 | 0.95 | 1.95 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.90 | 0.03 | 0.28 | 2.90 | 3.79 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.92 | 0.52 | 1.01 | 1.44 | 1.49 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.59 | 0.55 | 1.00 | 1.40 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.40 | 0.07 | 0.90 | 3.02 | 4.34 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.66 | 0.09 | 0.82 | 1.38 | 1.46 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.42 | 0.00 | 0.00 | 0.42 | 0.42 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.89 | 0.04 | 0.41 | 2.03 | 3.35 | | | N/A | N/A |

2024 Base DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 8.16 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2024 Base DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 59 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1537 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 630 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1043 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 23 | 22 | 14 |
| | 2 - Newgate Lane (South) | 55 | 0 | 423 | 1059 |
| | 3 - Longfield Avenue | 39 | 431 | 0 | 159 |
| | 4 - Newgate Lane (North) | 21 | 922 | 100 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 6 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.17 | 12.67 | 0.2 | 0.5 | B | 54 | 82 |
| 2 - Newgate Lane (South) | 0.78 | 7.80 | 3.6 | 10.7 | A | 1411 | 2116 |
| 3 - Longfield Avenue | 0.49 | 4.95 | 0.9 | 2.7 | A | 578 | 867 |
| 4 - Newgate Lane (North) | 0.76 | 10.35 | 3.2 | 11.9 | B | 957 | 1435 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1089 | 619 | 0.072 | 44 | 86 | 0.0 | 0.1 | 6.860 | A |
| 2 - Newgate Lane (South) | 1157 | 289 | 102 | 2206 | 0.525 | 1153 | 1031 | 0.0 | 1.1 | 3.533 | A |
| 3 - Longfield Avenue | 474 | 119 | 846 | 1730 | 0.274 | 473 | 409 | 0.0 | 0.4 | 2.878 | A |
| 4 - Newgate Lane (North) | 785 | 196 | 394 | 1625 | 0.483 | 781 | 925 | 0.0 | 1.0 | 4.475 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 53 | 13 | 1304 | 517 | 0.103 | 53 | 103 | 0.1 | 0.1 | 8.498 | A |
| 2 - Newgate Lane (South) | 1382 | 345 | 122 | 2191 | 0.631 | 1379 | 1235 | 1.1 | 1.7 | 4.590 | A |
| 3 - Longfield Avenue | 566 | 142 | 1013 | 1602 | 0.353 | 565 | 489 | 0.4 | 0.5 | 3.495 | A |
| 4 - Newgate Lane (North) | 937 | 234 | 472 | 1578 | 0.594 | 935 | 1107 | 1.0 | 1.5 | 5.881 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 65 | 16 | 1593 | 380 | 0.172 | 65 | 126 | 0.1 | 0.2 | 12.502 | B |
| 2 - Newgate Lane (South) | 1692 | 423 | 149 | 2171 | 0.780 | 1685 | 1508 | 1.7 | 3.5 | 7.584 | A |
| 3 - Longfield Avenue | 693 | 173 | 1237 | 1429 | 0.485 | 692 | 597 | 0.5 | 0.9 | 4.907 | A |
| 4 - Newgate Lane (North) | 1148 | 287 | 577 | 1514 | 0.758 | 1141 | 1352 | 1.5 | 3.2 | 10.003 | B |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 65 | 16 | 1600 | 376 | 0.173 | 65 | 126 | 0.2 | 0.2 | 12.669 | B |
| 2 - Newgate Lane (South) | 1692 | 423 | 150 | 2170 | 0.780 | 1692 | 1515 | 3.5 | 3.6 | 7.805 | A |
| 3 - Longfield Avenue | 693 | 173 | 1242 | 1425 | 0.487 | 693 | 600 | 0.9 | 0.9 | 4.952 | A |
| 4 - Newgate Lane (North) | 1148 | 287 | 578 | 1513 | 0.758 | 1148 | 1357 | 3.2 | 3.2 | 10.352 | B |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 53 | 13 | 1314 | 512 | 0.104 | 54 | 104 | 0.2 | 0.1 | 8.607 | A |
| 2 - Newgate Lane (South) | 1382 | 345 | 124 | 2190 | 0.631 | 1389 | 1244 | 3.6 | 1.8 | 4.706 | A |
| 3 - Longfield Avenue | 566 | 142 | 1020 | 1596 | 0.355 | 568 | 493 | 0.9 | 0.6 | 3.530 | A |
| 4 - Newgate Lane (North) | 937 | 234 | 474 | 1577 | 0.594 | 944 | 1114 | 3.2 | 1.6 | 6.055 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1097 | 615 | 0.072 | 45 | 86 | 0.1 | 0.1 | 6.915 | A |
| 2 - Newgate Lane (South) | 1157 | 289 | 103 | 2205 | 0.525 | 1160 | 1039 | 1.8 | 1.2 | 3.583 | A |
| 3 - Longfield Avenue | 474 | 119 | 852 | 1726 | 0.275 | 475 | 411 | 0.6 | 0.4 | 2.899 | A |
| 4 - Newgate Lane (North) | 785 | 196 | 396 | 1624 | 0.483 | 787 | 930 | 1.6 | 1.0 | 4.548 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.08 | 0.00 | 0.00 | 0.08 | 0.08 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.14 | 0.57 | 1.04 | 1.45 | 1.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.38 | 0.00 | 0.00 | 0.38 | 0.38 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.98 | 0.58 | 1.05 | 1.48 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.75 | 0.05 | 0.47 | 4.65 | 7.59 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.55 | 0.06 | 0.66 | 1.34 | 1.43 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.52 | 0.06 | 0.63 | 3.73 | 5.59 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.22 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.54 | 0.03 | 0.30 | 3.54 | 10.73 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.94 | 0.03 | 0.26 | 0.94 | 0.94 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.16 | 0.03 | 0.31 | 3.16 | 11.86 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.23 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.61 | 0.03 | 0.28 | 3.61 | 3.61 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.95 | 0.03 | 0.28 | 0.95 | 2.72 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.23 | 0.03 | 0.29 | 3.23 | 4.62 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.80 | 0.07 | 1.05 | 4.14 | 5.95 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.56 | 0.55 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.57 | 0.07 | 0.91 | 3.63 | 5.17 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.16 | 0.04 | 0.44 | 2.87 | 4.62 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.38 | 0.00 | 0.00 | 0.38 | 0.38 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.00 | 0.04 | 0.42 | 2.41 | 3.96 | | | N/A | N/A |

2024 Base DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 10.23 | B |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2024 Base DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 89 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1214 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 830 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1081 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 25 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 377 | 832 |
| | 3 - Longfield Avenue | 4 | 717 | 0 | 109 |
| | 4 - Newgate Lane (North) | 4 | 982 | 94 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.49 | 35.64 | 0.9 | 4.3 | E | 81 | 122 |
| 2 - Newgate Lane (South) | 0.62 | 4.48 | 1.7 | 2.7 | A | 1114 | 1671 |
| 3 - Longfield Avenue | 0.56 | 4.93 | 1.2 | 1.5 | A | 761 | 1142 |
| 4 - Newgate Lane (North) | 0.86 | 18.68 | 5.9 | 30.3 | C | 992 | 1487 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1344 | 498 | 0.134 | 66 | 9 | 0.0 | 0.2 | 8.424 | A |
| 2 - Newgate Lane (South) | 914 | 228 | 118 | 2194 | 0.417 | 911 | 1292 | 0.0 | 0.7 | 2.842 | A |
| 3 - Longfield Avenue | 625 | 156 | 653 | 1879 | 0.332 | 623 | 376 | 0.0 | 0.5 | 2.857 | A |
| 4 - Newgate Lane (North) | 814 | 203 | 544 | 1534 | 0.530 | 809 | 732 | 0.0 | 1.1 | 4.982 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1608 | 372 | 0.214 | 79 | 11 | 0.2 | 0.3 | 12.407 | B |
| 2 - Newgate Lane (South) | 1091 | 273 | 142 | 2176 | 0.501 | 1090 | 1546 | 0.7 | 1.0 | 3.360 | A |
| 3 - Longfield Avenue | 746 | 186 | 782 | 1780 | 0.419 | 745 | 450 | 0.5 | 0.7 | 3.475 | A |
| 4 - Newgate Lane (North) | 971 | 243 | 651 | 1469 | 0.661 | 968 | 875 | 1.1 | 1.9 | 7.211 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 24 | 1958 | 206 | 0.474 | 95 | 14 | 0.3 | 0.9 | 32.257 | D |
| 2 - Newgate Lane (South) | 1337 | 334 | 171 | 2154 | 0.620 | 1334 | 1882 | 1.0 | 1.6 | 4.440 | A |
| 3 - Longfield Avenue | 913 | 228 | 956 | 1646 | 0.555 | 911 | 549 | 0.7 | 1.2 | 4.890 | A |
| 4 - Newgate Lane (North) | 1190 | 297 | 797 | 1381 | 0.862 | 1175 | 1071 | 1.9 | 5.6 | 16.640 | C |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 24 | 1973 | 199 | 0.491 | 97 | 14 | 0.9 | 0.9 | 35.644 | E |
| 2 - Newgate Lane (South) | 1337 | 334 | 174 | 2152 | 0.621 | 1336 | 1897 | 1.6 | 1.7 | 4.477 | A |
| 3 - Longfield Avenue | 913 | 228 | 958 | 1644 | 0.556 | 913 | 552 | 1.2 | 1.2 | 4.929 | A |
| 4 - Newgate Lane (North) | 1190 | 297 | 798 | 1380 | 0.862 | 1188 | 1073 | 5.6 | 5.9 | 18.681 | C |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1629 | 362 | 0.220 | 82 | 11 | 0.9 | 0.3 | 13.122 | B |
| 2 - Newgate Lane (South) | 1091 | 273 | 146 | 2174 | 0.502 | 1094 | 1566 | 1.7 | 1.0 | 3.392 | A |
| 3 - Longfield Avenue | 746 | 186 | 785 | 1777 | 0.420 | 748 | 454 | 1.2 | 0.7 | 3.507 | A |
| 4 - Newgate Lane (North) | 971 | 243 | 654 | 1468 | 0.662 | 987 | 879 | 5.9 | 2.0 | 7.795 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1354 | 493 | 0.136 | 67 | 9 | 0.3 | 0.2 | 8.568 | A |
| 2 - Newgate Lane (South) | 914 | 228 | 120 | 2193 | 0.417 | 915 | 1302 | 1.0 | 0.7 | 2.863 | A |
| 3 - Longfield Avenue | 625 | 156 | 656 | 1876 | 0.333 | 626 | 379 | 0.7 | 0.5 | 2.880 | A |
| 4 - Newgate Lane (North) | 814 | 203 | 547 | 1533 | 0.531 | 817 | 735 | 2.0 | 1.2 | 5.105 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.72 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.50 | 0.00 | 0.00 | 0.50 | 0.50 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.13 | 0.56 | 1.04 | 1.15 | 1.15 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.27 | 0.00 | 0.00 | 0.27 | 0.27 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.01 | 0.06 | 0.76 | 1.93 | 2.74 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.72 | 0.07 | 0.76 | 1.41 | 1.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.93 | 0.05 | 0.48 | 5.15 | 8.35 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.85 | 0.03 | 0.28 | 0.85 | 1.86 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.64 | 0.03 | 0.26 | 1.64 | 1.64 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.23 | 0.03 | 0.26 | 1.23 | 1.23 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 5.55 | 0.04 | 0.37 | 13.22 | 30.29 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.93 | 0.04 | 0.36 | 2.24 | 4.25 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.65 | 0.03 | 0.27 | 1.65 | 1.65 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.24 | 0.03 | 0.27 | 1.24 | 1.24 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 5.90 | 0.03 | 0.31 | 6.20 | 27.11 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.29 | 0.03 | 0.27 | 0.49 | 0.71 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.03 | 0.36 | 1.04 | 1.18 | 1.62 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.73 | 0.32 | 0.96 | 1.39 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.02 | 0.05 | 0.45 | 5.50 | 9.18 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.73 | 0.08 | 0.80 | 1.42 | 1.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.50 | 0.05 | 0.46 | 1.28 | 1.39 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.16 | 0.03 | 0.33 | 2.48 | 5.83 | | | N/A | N/A |

2024 Base + Dev DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 8.49 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D7 | 2024 Base + Dev DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 60 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1554 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 635 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1054 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 23 | 22 | 14 |
| | 2 - Newgate Lane (South) | 55 | 0 | 428 | 1071 |
| | 3 - Longfield Avenue | 39 | 437 | 0 | 159 |
| | 4 - Newgate Lane (North) | 21 | 933 | 100 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 5 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.18 | 13.05 | 0.2 | 0.5 | B | 55 | 82 |
| 2 - Newgate Lane (South) | 0.79 | 8.12 | 3.8 | 12.3 | A | 1426 | 2140 |
| 3 - Longfield Avenue | 0.49 | 5.07 | 1.0 | 2.7 | A | 583 | 875 |
| 4 - Newgate Lane (North) | 0.77 | 10.84 | 3.4 | 13.5 | B | 967 | 1451 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1102 | 613 | 0.073 | 44 | 86 | 0.0 | 0.1 | 6.930 | A |
| 2 - Newgate Lane (South) | 1170 | 293 | 102 | 2206 | 0.531 | 1166 | 1044 | 0.0 | 1.2 | 3.573 | A |
| 3 - Longfield Avenue | 478 | 120 | 856 | 1723 | 0.278 | 477 | 412 | 0.0 | 0.4 | 2.904 | A |
| 4 - Newgate Lane (North) | 794 | 198 | 399 | 1623 | 0.489 | 790 | 934 | 0.0 | 1.0 | 4.532 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 13 | 1319 | 510 | 0.105 | 53 | 103 | 0.1 | 0.1 | 8.634 | A |
| 2 - Newgate Lane (South) | 1397 | 349 | 122 | 2191 | 0.638 | 1395 | 1250 | 1.2 | 1.8 | 4.676 | A |
| 3 - Longfield Avenue | 571 | 143 | 1024 | 1593 | 0.359 | 571 | 493 | 0.4 | 0.6 | 3.542 | A |
| 4 - Newgate Lane (North) | 948 | 237 | 477 | 1575 | 0.602 | 945 | 1117 | 1.0 | 1.6 | 6.003 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 16 | 1611 | 371 | 0.177 | 65 | 126 | 0.1 | 0.2 | 12.862 | B |
| 2 - Newgate Lane (South) | 1712 | 428 | 149 | 2171 | 0.788 | 1704 | 1527 | 1.8 | 3.7 | 7.869 | A |
| 3 - Longfield Avenue | 700 | 175 | 1251 | 1419 | 0.493 | 698 | 602 | 0.6 | 1.0 | 5.017 | A |
| 4 - Newgate Lane (North) | 1161 | 290 | 584 | 1510 | 0.768 | 1153 | 1365 | 1.6 | 3.3 | 10.432 | B |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 16 | 1619 | 368 | 0.178 | 66 | 127 | 0.2 | 0.2 | 13.051 | B |
| 2 - Newgate Lane (South) | 1712 | 428 | 150 | 2170 | 0.789 | 1711 | 1534 | 3.7 | 3.8 | 8.122 | A |
| 3 - Longfield Avenue | 700 | 175 | 1256 | 1414 | 0.495 | 700 | 605 | 1.0 | 1.0 | 5.068 | A |
| 4 - Newgate Lane (North) | 1161 | 290 | 585 | 1509 | 0.769 | 1160 | 1370 | 3.3 | 3.4 | 10.839 | B |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 13 | 1330 | 505 | 0.106 | 54 | 104 | 0.2 | 0.1 | 8.756 | A |
| 2 - Newgate Lane (South) | 1397 | 349 | 124 | 2190 | 0.638 | 1405 | 1260 | 3.8 | 1.9 | 4.803 | A |
| 3 - Longfield Avenue | 571 | 143 | 1032 | 1587 | 0.360 | 573 | 497 | 1.0 | 0.6 | 3.576 | A |
| 4 - Newgate Lane (North) | 948 | 237 | 479 | 1574 | 0.602 | 955 | 1125 | 3.4 | 1.6 | 6.200 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1110 | 609 | 0.074 | 45 | 87 | 0.1 | 0.1 | 6.991 | A |
| 2 - Newgate Lane (South) | 1170 | 293 | 103 | 2205 | 0.531 | 1173 | 1052 | 1.9 | 1.2 | 3.625 | A |
| 3 - Longfield Avenue | 478 | 120 | 861 | 1719 | 0.278 | 479 | 415 | 0.6 | 0.4 | 2.924 | A |
| 4 - Newgate Lane (North) | 794 | 198 | 401 | 1621 | 0.489 | 796 | 939 | 1.6 | 1.0 | 4.610 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.16 | 0.57 | 1.04 | 1.45 | 1.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.39 | 0.00 | 0.00 | 0.39 | 0.39 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.00 | 0.58 | 1.05 | 1.48 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.80 | 0.05 | 0.46 | 4.81 | 7.92 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.56 | 0.06 | 0.69 | 1.35 | 1.43 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.57 | 0.05 | 0.60 | 3.89 | 5.91 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.23 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.71 | 0.03 | 0.30 | 3.71 | 12.34 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.97 | 0.03 | 0.26 | 0.97 | 0.97 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.33 | 0.03 | 0.31 | 3.33 | 13.46 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.24 | 0.03 | 0.29 | 0.52 | 0.55 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.79 | 0.03 | 0.28 | 3.79 | 3.79 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.98 | 0.03 | 0.28 | 0.98 | 2.65 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.42 | 0.03 | 0.29 | 3.42 | 5.62 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.85 | 0.07 | 1.02 | 4.41 | 6.34 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.57 | 0.55 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.62 | 0.06 | 0.86 | 3.86 | 5.61 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.18 | 0.04 | 0.43 | 2.96 | 4.90 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.39 | 0.03 | 0.27 | 0.48 | 0.72 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.02 | 0.04 | 0.41 | 2.52 | 4.19 | | | N/A | N/A |

2024 Base + Dev DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 11.13 | B |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D8 | 2024 Base + Dev DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 89 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1234 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 839 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1094 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 25 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 384 | 846 |
| | 3 - Longfield Avenue | 4 | 726 | 0 | 109 |
| | 4 - Newgate Lane (North) | 4 | 995 | 94 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.52 | 40.25 | 1.0 | 4.9 | E | 82 | 123 |
| 2 - Newgate Lane (South) | 0.63 | 4.60 | 1.7 | 2.9 | A | 1133 | 1699 |
| 3 - Longfield Avenue | 0.57 | 5.09 | 1.3 | 1.5 | A | 770 | 1155 |
| 4 - Newgate Lane (North) | 0.88 | 20.76 | 6.6 | 33.4 | C | 1004 | 1505 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1361 | 490 | 0.137 | 66 | 9 | 0.0 | 0.2 | 8.586 | A |
| 2 - Newgate Lane (South) | 929 | 232 | 118 | 2194 | 0.424 | 926 | 1309 | 0.0 | 0.7 | 2.876 | A |
| 3 - Longfield Avenue | 632 | 158 | 664 | 1870 | 0.338 | 630 | 381 | 0.0 | 0.5 | 2.896 | A |
| 4 - Newgate Lane (North) | 823 | 206 | 551 | 1530 | 0.538 | 819 | 742 | 0.0 | 1.2 | 5.080 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1628 | 363 | 0.221 | 80 | 11 | 0.2 | 0.3 | 12.836 | B |
| 2 - Newgate Lane (South) | 1110 | 277 | 142 | 2176 | 0.510 | 1109 | 1566 | 0.7 | 1.0 | 3.417 | A |
| 3 - Longfield Avenue | 754 | 189 | 794 | 1770 | 0.426 | 754 | 456 | 0.5 | 0.7 | 3.538 | A |
| 4 - Newgate Lane (North) | 983 | 246 | 660 | 1464 | 0.672 | 980 | 888 | 1.2 | 2.0 | 7.453 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 25 | 1981 | 195 | 0.502 | 95 | 14 | 0.3 | 0.9 | 35.594 | E |
| 2 - Newgate Lane (South) | 1359 | 340 | 171 | 2155 | 0.631 | 1356 | 1906 | 1.0 | 1.7 | 4.560 | A |
| 3 - Longfield Avenue | 924 | 231 | 971 | 1634 | 0.566 | 922 | 556 | 0.7 | 1.3 | 5.042 | A |
| 4 - Newgate Lane (North) | 1204 | 301 | 807 | 1374 | 0.876 | 1188 | 1086 | 2.0 | 6.1 | 18.071 | C |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 25 | 1998 | 187 | 0.523 | 98 | 14 | 0.9 | 1.0 | 40.247 | E |
| 2 - Newgate Lane (South) | 1359 | 340 | 174 | 2152 | 0.631 | 1359 | 1921 | 1.7 | 1.7 | 4.603 | A |
| 3 - Longfield Avenue | 924 | 231 | 974 | 1632 | 0.566 | 924 | 559 | 1.3 | 1.3 | 5.086 | A |
| 4 - Newgate Lane (North) | 1204 | 301 | 809 | 1373 | 0.877 | 1202 | 1089 | 6.1 | 6.6 | 20.756 | C |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1652 | 352 | 0.228 | 83 | 11 | 1.0 | 0.3 | 13.708 | B |
| 2 - Newgate Lane (South) | 1110 | 277 | 146 | 2173 | 0.511 | 1112 | 1589 | 1.7 | 1.1 | 3.452 | A |
| 3 - Longfield Avenue | 754 | 189 | 798 | 1767 | 0.427 | 757 | 460 | 1.3 | 0.8 | 3.570 | A |
| 4 - Newgate Lane (North) | 983 | 246 | 663 | 1462 | 0.672 | 1001 | 892 | 6.6 | 2.1 | 8.173 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1372 | 485 | 0.138 | 68 | 10 | 0.3 | 0.2 | 8.744 | A |
| 2 - Newgate Lane (South) | 929 | 232 | 120 | 2193 | 0.424 | 931 | 1319 | 1.1 | 0.8 | 2.895 | A |
| 3 - Longfield Avenue | 632 | 158 | 667 | 1868 | 0.338 | 633 | 383 | 0.8 | 0.5 | 2.918 | A |
| 4 - Newgate Lane (North) | 823 | 206 | 554 | 1528 | 0.539 | 827 | 746 | 2.1 | 1.2 | 5.210 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.74 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.51 | 0.51 | 1.00 | 1.40 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.16 | 0.56 | 1.07 | 1.16 | 1.55 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.28 | 0.00 | 0.00 | 0.28 | 0.28 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.05 | 0.06 | 0.74 | 2.03 | 2.93 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.74 | 0.07 | 0.76 | 1.24 | 1.24 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.02 | 0.05 | 0.47 | 5.44 | 8.85 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.95 | 0.03 | 0.28 | 0.95 | 2.75 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.71 | 0.03 | 0.26 | 1.71 | 1.71 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.29 | 0.03 | 0.26 | 1.29 | 1.29 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 6.14 | 0.04 | 0.40 | 15.90 | 33.36 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 1.05 | 0.04 | 0.36 | 2.61 | 4.86 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.73 | 0.03 | 0.27 | 1.73 | 1.73 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.30 | 0.03 | 0.27 | 1.30 | 1.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 6.60 | 0.03 | 0.32 | 9.28 | 32.75 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.30 | 0.03 | 0.29 | 0.62 | 1.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.07 | 0.30 | 1.06 | 1.40 | 1.74 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.75 | 0.29 | 0.95 | 1.39 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.13 | 0.04 | 0.44 | 5.80 | 9.92 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.26 | 0.47 | 0.50 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.75 | 0.08 | 0.79 | 1.13 | 1.13 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.51 | 0.05 | 0.48 | 1.29 | 1.40 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.19 | 0.03 | 0.32 | 2.41 | 6.08 | | | N/A | N/A |

2019 Base DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 5.29 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|-------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D10 | 2019 Base DS2 | AM | with Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 55 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1395 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 268 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 890 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 20 | 21 | 14 |
| | 2 - Newgate Lane (South) | 40 | 0 | 260 | 1095 |
| | 3 - Longfield Avenue | 38 | 128 | 0 | 102 |
| | 4 - Newgate Lane (North) | 20 | 792 | 78 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 6 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.10 | 7.15 | 0.1 | 0.5 | A | 50 | 76 |
| 2 - Newgate Lane (South) | 0.70 | 5.72 | 2.4 | 5.0 | A | 1280 | 1920 |
| 3 - Longfield Avenue | 0.21 | 3.28 | 0.3 | 0.9 | A | 246 | 369 |
| 4 - Newgate Lane (North) | 0.57 | 5.11 | 1.4 | 1.7 | A | 817 | 1226 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 749 | 781 | 0.053 | 41 | 74 | 0.0 | 0.1 | 5.354 | A |
| 2 - Newgate Lane (South) | 1050 | 262 | 85 | 2219 | 0.473 | 1046 | 705 | 0.0 | 0.9 | 3.180 | A |
| 3 - Longfield Avenue | 202 | 50 | 862 | 1718 | 0.118 | 201 | 269 | 0.0 | 0.1 | 2.406 | A |
| 4 - Newgate Lane (North) | 670 | 168 | 155 | 1771 | 0.379 | 668 | 908 | 0.0 | 0.6 | 3.454 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 897 | 710 | 0.070 | 49 | 88 | 0.1 | 0.1 | 5.989 | A |
| 2 - Newgate Lane (South) | 1254 | 313 | 102 | 2206 | 0.568 | 1252 | 844 | 0.9 | 1.4 | 3.914 | A |
| 3 - Longfield Avenue | 241 | 60 | 1031 | 1588 | 0.152 | 241 | 322 | 0.1 | 0.2 | 2.710 | A |
| 4 - Newgate Lane (North) | 800 | 200 | 185 | 1752 | 0.457 | 799 | 1087 | 0.6 | 0.9 | 4.001 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1097 | 615 | 0.098 | 60 | 108 | 0.1 | 0.1 | 7.136 | A |
| 2 - Newgate Lane (South) | 1535 | 384 | 124 | 2189 | 0.701 | 1531 | 1033 | 1.4 | 2.4 | 5.651 | A |
| 3 - Longfield Avenue | 295 | 74 | 1261 | 1410 | 0.209 | 295 | 394 | 0.2 | 0.3 | 3.272 | A |
| 4 - Newgate Lane (North) | 980 | 245 | 227 | 1727 | 0.568 | 978 | 1330 | 0.9 | 1.4 | 5.084 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1099 | 614 | 0.099 | 61 | 108 | 0.1 | 0.1 | 7.151 | A |
| 2 - Newgate Lane (South) | 1535 | 384 | 125 | 2189 | 0.701 | 1535 | 1035 | 2.4 | 2.4 | 5.722 | A |
| 3 - Longfield Avenue | 295 | 74 | 1265 | 1408 | 0.210 | 295 | 395 | 0.3 | 0.3 | 3.279 | A |
| 4 - Newgate Lane (North) | 980 | 245 | 227 | 1727 | 0.568 | 980 | 1333 | 1.4 | 1.4 | 5.112 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 900 | 709 | 0.070 | 50 | 88 | 0.1 | 0.1 | 6.005 | A |
| 2 - Newgate Lane (South) | 1254 | 313 | 102 | 2206 | 0.568 | 1258 | 847 | 2.4 | 1.4 | 3.963 | A |
| 3 - Longfield Avenue | 241 | 60 | 1036 | 1584 | 0.152 | 241 | 324 | 0.3 | 0.2 | 2.718 | A |
| 4 - Newgate Lane (North) | 800 | 200 | 186 | 1752 | 0.457 | 802 | 1092 | 1.4 | 0.9 | 4.027 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 753 | 779 | 0.053 | 41 | 74 | 0.1 | 0.1 | 5.373 | A |
| 2 - Newgate Lane (South) | 1050 | 262 | 85 | 2219 | 0.473 | 1052 | 709 | 1.4 | 0.9 | 3.214 | A |
| 3 - Longfield Avenue | 202 | 50 | 866 | 1715 | 0.118 | 202 | 271 | 0.2 | 0.1 | 2.414 | A |
| 4 - Newgate Lane (North) | 670 | 168 | 155 | 1771 | 0.379 | 671 | 913 | 0.9 | 0.7 | 3.478 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.06 | 0.00 | 0.00 | 0.06 | 0.06 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.93 | 0.57 | 1.04 | 1.46 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.64 | 0.58 | 1.06 | 1.48 | 1.54 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.08 | 0.03 | 0.28 | 0.50 | 0.53 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.35 | 0.05 | 0.53 | 3.26 | 4.96 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.18 | 0.00 | 0.00 | 0.18 | 0.18 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.88 | 0.09 | 0.89 | 1.18 | 1.71 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.03 | 0.29 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.39 | 0.03 | 0.28 | 2.39 | 2.39 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.37 | 0.03 | 0.27 | 1.37 | 1.37 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.03 | 0.28 | 0.50 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.42 | 0.03 | 0.27 | 2.42 | 2.42 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.28 | 0.50 | 0.92 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.38 | 0.03 | 0.28 | 1.38 | 1.38 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.08 | 0.00 | 0.00 | 0.08 | 0.08 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.38 | 0.12 | 1.19 | 2.39 | 3.02 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.18 | 0.00 | 0.00 | 0.18 | 0.18 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.90 | 0.36 | 1.03 | 1.49 | 1.55 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.06 | 0.00 | 0.00 | 0.06 | 0.06 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.94 | 0.06 | 0.70 | 1.81 | 2.48 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.14 | 0.00 | 0.00 | 0.14 | 0.14 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.65 | 0.07 | 0.77 | 1.43 | 1.51 | | | N/A | N/A |

2019 Base DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.11 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|-------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D11 | 2019 Base DS2 | PM | with Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 84 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1121 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 279 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 859 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 22 | 29 | 33 |
| | 2 - Newgate Lane (South) | 4 | 0 | 269 | 848 |
| | 3 - Longfield Avenue | 4 | 172 | 0 | 104 |
| | 4 - Newgate Lane (North) | 4 | 783 | 72 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.15 | 7.18 | 0.2 | 0.5 | A | 77 | 116 |
| 2 - Newgate Lane (South) | 0.57 | 3.90 | 1.3 | 1.8 | A | 1029 | 1543 |
| 3 - Longfield Avenue | 0.19 | 2.72 | 0.2 | 0.5 | A | 256 | 384 |
| 4 - Newgate Lane (North) | 0.54 | 4.55 | 1.2 | 1.5 | A | 788 | 1182 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 770 | 771 | 0.082 | 63 | 9 | 0.0 | 0.1 | 5.146 | A |
| 2 - Newgate Lane (South) | 844 | 211 | 100 | 2207 | 0.382 | 842 | 733 | 0.0 | 0.6 | 2.672 | A |
| 3 - Longfield Avenue | 210 | 53 | 665 | 1870 | 0.112 | 210 | 277 | 0.0 | 0.1 | 2.168 | A |
| 4 - Newgate Lane (North) | 647 | 162 | 135 | 1783 | 0.363 | 644 | 739 | 0.0 | 0.6 | 3.188 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 922 | 698 | 0.108 | 75 | 11 | 0.1 | 0.1 | 5.845 | A |
| 2 - Newgate Lane (South) | 1008 | 252 | 120 | 2193 | 0.460 | 1007 | 877 | 0.6 | 0.9 | 3.080 | A |
| 3 - Longfield Avenue | 251 | 63 | 795 | 1769 | 0.142 | 251 | 332 | 0.1 | 0.2 | 2.370 | A |
| 4 - Newgate Lane (North) | 772 | 193 | 161 | 1767 | 0.437 | 771 | 885 | 0.6 | 0.8 | 3.650 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1128 | 600 | 0.154 | 92 | 13 | 0.1 | 0.2 | 7.167 | A |
| 2 - Newgate Lane (South) | 1235 | 309 | 147 | 2173 | 0.568 | 1233 | 1074 | 0.9 | 1.3 | 3.881 | A |
| 3 - Longfield Avenue | 307 | 77 | 973 | 1632 | 0.188 | 307 | 406 | 0.2 | 0.2 | 2.716 | A |
| 4 - Newgate Lane (North) | 946 | 236 | 197 | 1745 | 0.542 | 944 | 1083 | 0.8 | 1.2 | 4.534 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1130 | 600 | 0.154 | 92 | 13 | 0.2 | 0.2 | 7.184 | A |
| 2 - Newgate Lane (South) | 1235 | 309 | 147 | 2172 | 0.568 | 1235 | 1075 | 1.3 | 1.3 | 3.897 | A |
| 3 - Longfield Avenue | 307 | 77 | 975 | 1631 | 0.188 | 307 | 407 | 0.2 | 0.2 | 2.719 | A |
| 4 - Newgate Lane (North) | 946 | 236 | 198 | 1745 | 0.542 | 946 | 1084 | 1.2 | 1.2 | 4.552 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 925 | 697 | 0.108 | 76 | 11 | 0.2 | 0.1 | 5.864 | A |
| 2 - Newgate Lane (South) | 1008 | 252 | 120 | 2192 | 0.460 | 1010 | 880 | 1.3 | 0.9 | 3.095 | A |
| 3 - Longfield Avenue | 251 | 63 | 798 | 1767 | 0.142 | 251 | 333 | 0.2 | 0.2 | 2.374 | A |
| 4 - Newgate Lane (North) | 772 | 193 | 162 | 1767 | 0.437 | 774 | 887 | 1.2 | 0.8 | 3.671 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 774 | 769 | 0.082 | 63 | 9 | 0.1 | 0.1 | 5.166 | A |
| 2 - Newgate Lane (South) | 844 | 211 | 101 | 2207 | 0.382 | 845 | 736 | 0.9 | 0.6 | 2.687 | A |
| 3 - Longfield Avenue | 210 | 53 | 667 | 1868 | 0.112 | 210 | 278 | 0.2 | 0.1 | 2.171 | A |
| 4 - Newgate Lane (North) | 647 | 162 | 135 | 1783 | 0.363 | 648 | 742 | 0.8 | 0.6 | 3.206 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.63 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.57 | 0.56 | 1.01 | 1.41 | 1.47 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.86 | 0.07 | 0.81 | 1.36 | 1.80 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.78 | 0.09 | 0.83 | 1.19 | 1.19 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.18 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.32 | 0.03 | 0.26 | 1.32 | 1.32 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.23 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.18 | 0.03 | 0.26 | 1.18 | 1.18 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.18 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.33 | 0.03 | 0.27 | 1.33 | 1.33 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.23 | 0.03 | 0.25 | 0.45 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.19 | 0.03 | 0.27 | 1.19 | 1.19 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.87 | 0.54 | 1.01 | 1.42 | 1.48 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.17 | 0.00 | 0.00 | 0.17 | 0.17 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.79 | 0.52 | 0.99 | 1.41 | 1.46 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.63 | 0.09 | 0.82 | 1.38 | 1.45 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.58 | 0.07 | 0.73 | 1.36 | 1.44 | | | N/A | N/A |

2024 Base DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.33 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D12 | 2024 Base DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 60 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1469 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 297 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1035 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 24 | 22 | 14 |
| | 2 - Newgate Lane (South) | 42 | 0 | 274 | 1153 |
| | 3 - Longfield Avenue | 39 | 152 | 0 | 106 |
| | 4 - Newgate Lane (North) | 21 | 934 | 81 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 5 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.13 | 8.56 | 0.2 | 0.5 | A | 55 | 82 |
| 2 - Newgate Lane (South) | 0.74 | 6.56 | 2.9 | 6.2 | A | 1348 | 2021 |
| 3 - Longfield Avenue | 0.24 | 3.54 | 0.3 | 1.3 | A | 272 | 409 |
| 4 - Newgate Lane (North) | 0.67 | 6.66 | 2.1 | 3.5 | A | 950 | 1425 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 875 | 721 | 0.062 | 45 | 77 | 0.0 | 0.1 | 5.825 | A |
| 2 - Newgate Lane (South) | 1106 | 276 | 88 | 2217 | 0.499 | 1102 | 832 | 0.0 | 1.0 | 3.341 | A |
| 3 - Longfield Avenue | 223 | 56 | 907 | 1683 | 0.133 | 223 | 282 | 0.0 | 0.2 | 2.495 | A |
| 4 - Newgate Lane (North) | 779 | 195 | 175 | 1758 | 0.443 | 776 | 955 | 0.0 | 0.8 | 3.847 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 13 | 1047 | 639 | 0.084 | 54 | 92 | 0.1 | 0.1 | 6.732 | A |
| 2 - Newgate Lane (South) | 1320 | 330 | 105 | 2204 | 0.599 | 1318 | 996 | 1.0 | 1.5 | 4.213 | A |
| 3 - Longfield Avenue | 267 | 67 | 1085 | 1546 | 0.173 | 267 | 338 | 0.2 | 0.2 | 2.850 | A |
| 4 - Newgate Lane (North) | 931 | 233 | 210 | 1738 | 0.536 | 929 | 1142 | 0.8 | 1.2 | 4.682 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 16 | 1281 | 528 | 0.125 | 66 | 112 | 0.1 | 0.2 | 8.519 | A |
| 2 - Newgate Lane (South) | 1617 | 404 | 128 | 2186 | 0.740 | 1612 | 1218 | 1.5 | 2.9 | 6.446 | A |
| 3 - Longfield Avenue | 327 | 82 | 1327 | 1360 | 0.240 | 326 | 413 | 0.2 | 0.3 | 3.526 | A |
| 4 - Newgate Lane (North) | 1140 | 285 | 257 | 1709 | 0.667 | 1136 | 1397 | 1.2 | 2.1 | 6.583 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 16 | 1284 | 526 | 0.125 | 66 | 112 | 0.2 | 0.2 | 8.557 | A |
| 2 - Newgate Lane (South) | 1617 | 404 | 129 | 2186 | 0.740 | 1617 | 1221 | 2.9 | 2.9 | 6.565 | A |
| 3 - Longfield Avenue | 327 | 82 | 1331 | 1357 | 0.241 | 327 | 414 | 0.3 | 0.3 | 3.540 | A |
| 4 - Newgate Lane (North) | 1140 | 285 | 257 | 1709 | 0.667 | 1140 | 1401 | 2.1 | 2.1 | 6.661 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 13 | 1052 | 636 | 0.084 | 54 | 92 | 0.2 | 0.1 | 6.766 | A |
| 2 - Newgate Lane (South) | 1320 | 330 | 105 | 2203 | 0.599 | 1326 | 1001 | 2.9 | 1.6 | 4.285 | A |
| 3 - Longfield Avenue | 267 | 67 | 1092 | 1541 | 0.173 | 267 | 340 | 0.3 | 0.2 | 2.865 | A |
| 4 - Newgate Lane (North) | 931 | 233 | 210 | 1737 | 0.536 | 934 | 1149 | 2.1 | 1.2 | 4.743 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 880 | 718 | 0.063 | 45 | 77 | 0.1 | 0.1 | 5.853 | A |
| 2 - Newgate Lane (South) | 1106 | 276 | 88 | 2216 | 0.499 | 1108 | 837 | 1.6 | 1.0 | 3.381 | A |
| 3 - Longfield Avenue | 223 | 56 | 912 | 1679 | 0.133 | 224 | 284 | 0.2 | 0.2 | 2.505 | A |
| 4 - Newgate Lane (North) | 779 | 195 | 176 | 1758 | 0.443 | 781 | 960 | 1.2 | 0.8 | 3.888 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.03 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.83 | 0.58 | 1.05 | 1.47 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.53 | 0.05 | 0.49 | 3.93 | 6.17 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.20 | 0.06 | 0.82 | 2.52 | 3.52 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.87 | 0.03 | 0.29 | 2.87 | 4.89 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.06 | 0.03 | 0.28 | 2.06 | 2.06 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.91 | 0.03 | 0.28 | 2.91 | 2.91 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.03 | 0.32 | 1.03 | 1.29 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.09 | 0.03 | 0.28 | 2.09 | 2.09 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.57 | 0.09 | 1.17 | 3.11 | 4.24 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.23 | 0.12 | 1.11 | 1.97 | 2.57 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.04 | 0.05 | 0.51 | 2.30 | 3.43 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.85 | 0.06 | 0.67 | 1.52 | 2.00 | | | N/A | N/A |

2024 Base DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.79 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D13 | 2024 Base DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 90 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1189 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 310 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 986 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 25 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 285 | 900 |
| | 3 - Longfield Avenue | 4 | 199 | 0 | 107 |
| | 4 - Newgate Lane (North) | 4 | 908 | 74 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.19 | 8.67 | 0.2 | 0.9 | A | 82 | 123 |
| 2 - Newgate Lane (South) | 0.60 | 4.25 | 1.5 | 2.4 | A | 1091 | 1637 |
| 3 - Longfield Avenue | 0.22 | 2.89 | 0.3 | 1.0 | A | 285 | 427 |
| 4 - Newgate Lane (North) | 0.63 | 5.68 | 1.7 | 2.6 | A | 905 | 1357 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 886 | 716 | 0.094 | 67 | 9 | 0.0 | 0.1 | 5.612 | A |
| 2 - Newgate Lane (South) | 895 | 224 | 104 | 2205 | 0.406 | 892 | 849 | 0.0 | 0.7 | 2.778 | A |
| 3 - Longfield Avenue | 234 | 58 | 704 | 1839 | 0.127 | 233 | 292 | 0.0 | 0.1 | 2.241 | A |
| 4 - Newgate Lane (North) | 742 | 186 | 156 | 1770 | 0.419 | 740 | 781 | 0.0 | 0.7 | 3.515 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1060 | 633 | 0.127 | 80 | 11 | 0.1 | 0.1 | 6.593 | A |
| 2 - Newgate Lane (South) | 1069 | 267 | 124 | 2190 | 0.488 | 1068 | 1017 | 0.7 | 1.0 | 3.255 | A |
| 3 - Longfield Avenue | 279 | 70 | 842 | 1733 | 0.161 | 279 | 350 | 0.1 | 0.2 | 2.475 | A |
| 4 - Newgate Lane (North) | 887 | 222 | 186 | 1752 | 0.506 | 885 | 935 | 0.7 | 1.0 | 4.189 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1298 | 520 | 0.190 | 98 | 14 | 0.1 | 0.2 | 8.629 | A |
| 2 - Newgate Lane (South) | 1309 | 327 | 152 | 2169 | 0.604 | 1307 | 1244 | 1.0 | 1.5 | 4.228 | A |
| 3 - Longfield Avenue | 342 | 85 | 1031 | 1588 | 0.215 | 341 | 428 | 0.2 | 0.3 | 2.888 | A |
| 4 - Newgate Lane (North) | 1086 | 271 | 228 | 1726 | 0.629 | 1083 | 1144 | 1.0 | 1.7 | 5.627 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1300 | 519 | 0.190 | 99 | 14 | 0.2 | 0.2 | 8.669 | A |
| 2 - Newgate Lane (South) | 1309 | 327 | 152 | 2169 | 0.604 | 1309 | 1247 | 1.5 | 1.5 | 4.251 | A |
| 3 - Longfield Avenue | 342 | 85 | 1033 | 1586 | 0.215 | 342 | 429 | 0.3 | 0.3 | 2.891 | A |
| 4 - Newgate Lane (North) | 1086 | 271 | 228 | 1726 | 0.629 | 1086 | 1146 | 1.7 | 1.7 | 5.675 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1065 | 631 | 0.128 | 81 | 11 | 0.2 | 0.1 | 6.630 | A |
| 2 - Newgate Lane (South) | 1069 | 267 | 125 | 2189 | 0.488 | 1071 | 1021 | 1.5 | 1.0 | 3.277 | A |
| 3 - Longfield Avenue | 279 | 70 | 845 | 1731 | 0.161 | 279 | 351 | 0.3 | 0.2 | 2.480 | A |
| 4 - Newgate Lane (North) | 887 | 222 | 187 | 1752 | 0.506 | 889 | 938 | 1.7 | 1.0 | 4.228 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 891 | 713 | 0.095 | 68 | 9 | 0.1 | 0.1 | 5.641 | A |
| 2 - Newgate Lane (South) | 895 | 224 | 104 | 2204 | 0.406 | 896 | 854 | 1.0 | 0.7 | 2.795 | A |
| 3 - Longfield Avenue | 234 | 58 | 707 | 1837 | 0.127 | 234 | 293 | 0.2 | 0.1 | 2.247 | A |
| 4 - Newgate Lane (North) | 742 | 186 | 156 | 1770 | 0.419 | 744 | 785 | 1.0 | 0.7 | 3.547 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.69 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.72 | 0.56 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.96 | 0.06 | 0.78 | 1.78 | 2.39 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.19 | 0.00 | 0.00 | 0.19 | 0.19 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.03 | 0.07 | 0.82 | 1.90 | 2.64 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.23 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.53 | 0.03 | 0.26 | 1.53 | 1.53 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.68 | 0.03 | 0.27 | 1.68 | 1.68 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.24 | 0.03 | 0.28 | 0.50 | 0.91 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.54 | 0.03 | 0.27 | 1.54 | 1.54 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.28 | 0.55 | 1.02 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.70 | 0.03 | 0.27 | 1.70 | 1.70 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.98 | 0.50 | 1.02 | 1.22 | 1.22 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.19 | 0.00 | 0.00 | 0.19 | 0.19 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.04 | 0.18 | 1.04 | 1.48 | 1.80 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.70 | 0.09 | 0.81 | 1.40 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.73 | 0.07 | 0.72 | 1.37 | 1.37 | | | N/A | N/A |

2024 Base + Dev DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.50 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D14 | 2024 Base + Dev DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 60 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1482 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 300 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1051 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 24 | 22 | 14 |
| | 2 - Newgate Lane (South) | 42 | 0 | 276 | 1163 |
| | 3 - Longfield Avenue | 39 | 155 | 0 | 106 |
| | 4 - Newgate Lane (North) | 21 | 949 | 81 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 5 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.13 | 8.74 | 0.2 | 0.5 | A | 55 | 83 |
| 2 - Newgate Lane (South) | 0.75 | 6.73 | 3.0 | 6.4 | A | 1359 | 2039 |
| 3 - Longfield Avenue | 0.24 | 3.58 | 0.3 | 1.3 | A | 275 | 412 |
| 4 - Newgate Lane (North) | 0.68 | 6.89 | 2.2 | 3.8 | A | 964 | 1446 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 888 | 714 | 0.063 | 45 | 77 | 0.0 | 0.1 | 5.881 | A |
| 2 - Newgate Lane (South) | 1115 | 279 | 88 | 2217 | 0.503 | 1111 | 846 | 0.0 | 1.0 | 3.369 | A |
| 3 - Longfield Avenue | 226 | 56 | 915 | 1677 | 0.134 | 225 | 284 | 0.0 | 0.2 | 2.509 | A |
| 4 - Newgate Lane (North) | 791 | 198 | 178 | 1757 | 0.450 | 788 | 962 | 0.0 | 0.9 | 3.896 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 14 | 1064 | 631 | 0.086 | 54 | 92 | 0.1 | 0.1 | 6.821 | A |
| 2 - Newgate Lane (South) | 1332 | 333 | 105 | 2204 | 0.604 | 1330 | 1013 | 1.0 | 1.6 | 4.266 | A |
| 3 - Longfield Avenue | 269 | 67 | 1095 | 1539 | 0.175 | 269 | 340 | 0.2 | 0.2 | 2.871 | A |
| 4 - Newgate Lane (North) | 945 | 236 | 212 | 1736 | 0.544 | 943 | 1151 | 0.9 | 1.2 | 4.770 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 17 | 1301 | 518 | 0.128 | 66 | 112 | 0.1 | 0.2 | 8.700 | A |
| 2 - Newgate Lane (South) | 1631 | 408 | 128 | 2186 | 0.746 | 1626 | 1239 | 1.6 | 3.0 | 6.601 | A |
| 3 - Longfield Avenue | 330 | 82 | 1338 | 1351 | 0.244 | 329 | 415 | 0.2 | 0.3 | 3.566 | A |
| 4 - Newgate Lane (North) | 1157 | 289 | 260 | 1707 | 0.678 | 1153 | 1408 | 1.2 | 2.2 | 6.798 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 17 | 1305 | 517 | 0.128 | 66 | 113 | 0.2 | 0.2 | 8.743 | A |
| 2 - Newgate Lane (South) | 1631 | 408 | 129 | 2186 | 0.746 | 1631 | 1242 | 3.0 | 3.0 | 6.731 | A |
| 3 - Longfield Avenue | 330 | 82 | 1343 | 1348 | 0.245 | 330 | 417 | 0.3 | 0.3 | 3.581 | A |
| 4 - Newgate Lane (North) | 1157 | 289 | 260 | 1707 | 0.678 | 1157 | 1412 | 2.2 | 2.2 | 6.890 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 14 | 1069 | 629 | 0.086 | 54 | 92 | 0.2 | 0.1 | 6.860 | A |
| 2 - Newgate Lane (South) | 1332 | 333 | 106 | 2203 | 0.604 | 1337 | 1018 | 3.0 | 1.6 | 4.346 | A |
| 3 - Longfield Avenue | 269 | 67 | 1101 | 1534 | 0.176 | 270 | 342 | 0.3 | 0.2 | 2.887 | A |
| 4 - Newgate Lane (North) | 945 | 236 | 213 | 1735 | 0.544 | 948 | 1158 | 2.2 | 1.3 | 4.838 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 894 | 712 | 0.064 | 45 | 77 | 0.1 | 0.1 | 5.912 | A |
| 2 - Newgate Lane (South) | 1115 | 279 | 88 | 2216 | 0.503 | 1118 | 851 | 1.6 | 1.1 | 3.411 | A |
| 3 - Longfield Avenue | 226 | 56 | 920 | 1673 | 0.135 | 226 | 286 | 0.2 | 0.2 | 2.519 | A |
| 4 - Newgate Lane (North) | 791 | 198 | 178 | 1757 | 0.450 | 793 | 968 | 1.3 | 0.9 | 3.937 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.04 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.86 | 0.58 | 1.05 | 1.47 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.57 | 0.05 | 0.49 | 4.03 | 6.40 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.24 | 0.06 | 0.80 | 2.69 | 3.80 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.97 | 0.03 | 0.29 | 2.97 | 5.63 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.33 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.17 | 0.03 | 0.28 | 2.17 | 2.17 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.01 | 0.03 | 0.28 | 3.01 | 3.01 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.33 | 0.03 | 0.32 | 1.06 | 1.31 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.19 | 0.03 | 0.28 | 2.19 | 2.19 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.61 | 0.09 | 1.16 | 3.31 | 4.53 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.22 | 0.00 | 0.00 | 0.22 | 0.22 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.27 | 0.11 | 1.12 | 2.08 | 2.82 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.06 | 0.05 | 0.50 | 2.41 | 3.63 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.87 | 0.06 | 0.64 | 1.65 | 2.12 | | | N/A | N/A |

2024 Base + Dev DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.92 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D15 | 2024 Base + Dev DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 90 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1210 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 320 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 999 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 26 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 291 | 914 |
| | 3 - Longfield Avenue | 4 | 209 | 0 | 107 |
| | 4 - Newgate Lane (North) | 4 | 921 | 74 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.20 | 8.93 | 0.2 | 1.0 | A | 82 | 124 |
| 2 - Newgate Lane (South) | 0.61 | 4.37 | 1.6 | 2.6 | A | 1110 | 1665 |
| 3 - Longfield Avenue | 0.22 | 2.94 | 0.3 | 1.1 | A | 294 | 440 |
| 4 - Newgate Lane (North) | 0.64 | 5.87 | 1.8 | 2.8 | A | 917 | 1375 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 68 | 17 | 903 | 707 | 0.096 | 67 | 9 | 0.0 | 0.1 | 5.684 | A |
| 2 - Newgate Lane (South) | 911 | 228 | 104 | 2205 | 0.413 | 908 | 867 | 0.0 | 0.7 | 2.811 | A |
| 3 - Longfield Avenue | 241 | 60 | 715 | 1831 | 0.132 | 240 | 297 | 0.0 | 0.2 | 2.263 | A |
| 4 - Newgate Lane (North) | 752 | 188 | 163 | 1766 | 0.426 | 749 | 792 | 0.0 | 0.7 | 3.564 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1081 | 623 | 0.130 | 81 | 11 | 0.1 | 0.1 | 6.713 | A |
| 2 - Newgate Lane (South) | 1087 | 272 | 124 | 2190 | 0.497 | 1086 | 1037 | 0.7 | 1.0 | 3.308 | A |
| 3 - Longfield Avenue | 288 | 72 | 855 | 1723 | 0.167 | 287 | 355 | 0.2 | 0.2 | 2.507 | A |
| 4 - Newgate Lane (North) | 898 | 225 | 195 | 1746 | 0.514 | 897 | 947 | 0.7 | 1.1 | 4.272 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1322 | 508 | 0.195 | 99 | 14 | 0.1 | 0.2 | 8.882 | A |
| 2 - Newgate Lane (South) | 1332 | 333 | 152 | 2169 | 0.614 | 1329 | 1269 | 1.0 | 1.6 | 4.340 | A |
| 3 - Longfield Avenue | 352 | 88 | 1046 | 1576 | 0.224 | 352 | 435 | 0.2 | 0.3 | 2.941 | A |
| 4 - Newgate Lane (North) | 1100 | 275 | 239 | 1720 | 0.640 | 1097 | 1160 | 1.1 | 1.8 | 5.811 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1325 | 507 | 0.195 | 99 | 14 | 0.2 | 0.2 | 8.928 | A |
| 2 - Newgate Lane (South) | 1332 | 333 | 152 | 2169 | 0.614 | 1332 | 1272 | 1.6 | 1.6 | 4.365 | A |
| 3 - Longfield Avenue | 352 | 88 | 1048 | 1574 | 0.224 | 352 | 436 | 0.3 | 0.3 | 2.945 | A |
| 4 - Newgate Lane (North) | 1100 | 275 | 239 | 1720 | 0.640 | 1100 | 1162 | 1.8 | 1.8 | 5.865 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1085 | 621 | 0.130 | 81 | 11 | 0.2 | 0.2 | 6.753 | A |
| 2 - Newgate Lane (South) | 1087 | 272 | 125 | 2189 | 0.497 | 1090 | 1042 | 1.6 | 1.0 | 3.332 | A |
| 3 - Longfield Avenue | 288 | 72 | 858 | 1721 | 0.167 | 288 | 357 | 0.3 | 0.2 | 2.514 | A |
| 4 - Newgate Lane (North) | 898 | 225 | 195 | 1746 | 0.514 | 901 | 951 | 1.8 | 1.1 | 4.315 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 68 | 17 | 908 | 705 | 0.096 | 68 | 9 | 0.2 | 0.1 | 5.717 | A |
| 2 - Newgate Lane (South) | 911 | 228 | 104 | 2204 | 0.413 | 912 | 871 | 1.0 | 0.7 | 2.830 | A |
| 3 - Longfield Avenue | 241 | 60 | 718 | 1829 | 0.132 | 241 | 298 | 0.2 | 0.2 | 2.269 | A |
| 4 - Newgate Lane (North) | 752 | 188 | 164 | 1766 | 0.426 | 754 | 795 | 1.1 | 0.8 | 3.594 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.71 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.74 | 0.56 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.99 | 0.06 | 0.76 | 1.88 | 2.63 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.06 | 0.06 | 0.80 | 1.99 | 2.82 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.24 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.59 | 0.03 | 0.26 | 1.59 | 1.59 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.29 | 0.03 | 0.25 | 0.45 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.76 | 0.03 | 0.27 | 1.76 | 1.76 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.24 | 0.03 | 0.28 | 0.51 | 1.01 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.61 | 0.03 | 0.27 | 1.61 | 1.61 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.29 | 0.03 | 0.29 | 0.79 | 1.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.78 | 0.03 | 0.27 | 1.78 | 1.78 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.01 | 0.40 | 1.03 | 1.50 | 1.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.08 | 0.16 | 1.05 | 1.61 | 1.89 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.72 | 0.08 | 0.81 | 1.41 | 1.49 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.75 | 0.06 | 0.71 | 1.51 | 1.56 | | | N/A | N/A |

| |
|---|
| <h1>Junctions 9</h1> |
| <h2>ARCADY 9 - Roundabout Module</h2> |
| Version: 9.5.0.6896 © Copyright TRL Limited, 2018 |
| For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |

Filename: NGL-Longfield Ave Oct 19.j9

Path: \\Pg-brs-dc01\data\Bristol Projects\Bristol - Live Projects\BRS.4901 - BRS.5000\BRS.4989 - SUSTAINABLE LAND PLC - LAND TO THE NORTH OF GOSPORT ROAD, FAREHAM\Transport\7. Junction Modelling\c. ARCADY\Oct 19\AffTP

Report generation date: 17/10/2019 11:53:31

-
- »2019 Base DS1, AM
 - »2019 Base DS1, PM
 - »2024 Base DS1, AM
 - »2024 Base DS1, PM
 - »2024 Base + Dev DS1, AM
 - »2024 Base + Dev DS1, PM
 - »2019 Base DS2, AM
 - »2019 Base DS2, PM
 - »2024 Base DS2, AM
 - »2024 Base DS2, PM
 - »2024 Base + Dev DS2, AM
 - »2024 Base + Dev DS2, PM

Summary of junction performance

| | AM | | | | | PM | | | | |
|----------------------------|-------------|-----------|------|-----|--------------|-------------|-----------|------|-----|--------------|
| | Queue (PCU) | Delay (s) | RFC | LOS | Junction LOS | Queue (PCU) | Delay (s) | RFC | LOS | Junction LOS |
| 2019 Base DS1 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 9.61 | 0.13 | A | A | 0.4 | 17.75 | 0.31 | C | A |
| 2 - Newgate Lane (South) | 2.9 | 6.61 | 0.74 | A | | 1.4 | 4.08 | 0.58 | A | |
| 3 - Longfield Avenue | 0.7 | 4.26 | 0.42 | A | | 0.9 | 4.17 | 0.49 | A | |
| 4 - Newgate Lane (North) | 1.9 | 6.98 | 0.65 | A | | 2.9 | 9.95 | 0.75 | A | |
| 2024 Base DS1 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 12.67 | 0.17 | B | A | 0.9 | 35.64 | 0.49 | E | B |
| 2 - Newgate Lane (South) | 3.6 | 7.80 | 0.78 | A | | 1.7 | 4.48 | 0.62 | A | |
| 3 - Longfield Avenue | 0.9 | 4.95 | 0.49 | A | | 1.2 | 4.93 | 0.56 | A | |
| 4 - Newgate Lane (North) | 3.2 | 10.35 | 0.76 | B | | 5.9 | 18.68 | 0.86 | C | |
| 2024 Base + Dev DS1 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 13.00 | 0.18 | B | A | 1.0 | 39.40 | 0.52 | E | B |
| 2 - Newgate Lane (South) | 3.8 | 8.06 | 0.79 | A | | 1.7 | 4.58 | 0.63 | A | |
| 3 - Longfield Avenue | 1.0 | 5.05 | 0.49 | A | | 1.3 | 5.06 | 0.56 | A | |
| 4 - Newgate Lane (North) | 3.4 | 10.77 | 0.77 | B | | 6.5 | 20.38 | 0.87 | C | |
| 2019 Base DS2 | | | | | | | | | | |
| 1 - Davis Way | 0.1 | 7.15 | 0.10 | A | A | 0.2 | 7.18 | 0.15 | A | A |
| 2 - Newgate Lane (South) | 2.4 | 5.72 | 0.70 | A | | 1.3 | 3.90 | 0.57 | A | |
| 3 - Longfield Avenue | 0.3 | 3.28 | 0.21 | A | | 0.2 | 2.72 | 0.19 | A | |
| 4 - Newgate Lane (North) | 1.4 | 5.11 | 0.57 | A | | 1.2 | 4.55 | 0.54 | A | |
| 2024 Base DS2 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 8.56 | 0.13 | A | A | 0.2 | 8.67 | 0.19 | A | A |
| 2 - Newgate Lane (South) | 2.9 | 6.56 | 0.74 | A | | 1.5 | 4.25 | 0.60 | A | |
| 3 - Longfield Avenue | 0.3 | 3.54 | 0.24 | A | | 0.3 | 2.89 | 0.22 | A | |
| 4 - Newgate Lane (North) | 2.1 | 6.66 | 0.67 | A | | 1.7 | 5.68 | 0.63 | A | |
| 2024 Base + Dev DS2 | | | | | | | | | | |
| 1 - Davis Way | 0.2 | 8.72 | 0.13 | A | A | 0.2 | 8.88 | 0.19 | A | A |
| 2 - Newgate Lane (South) | 3.0 | 6.70 | 0.74 | A | | 1.6 | 4.35 | 0.61 | A | |
| 3 - Longfield Avenue | 0.3 | 3.57 | 0.24 | A | | 0.3 | 2.94 | 0.22 | A | |
| 4 - Newgate Lane (North) | 2.2 | 6.86 | 0.68 | A | | 1.8 | 5.83 | 0.64 | A | |

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

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

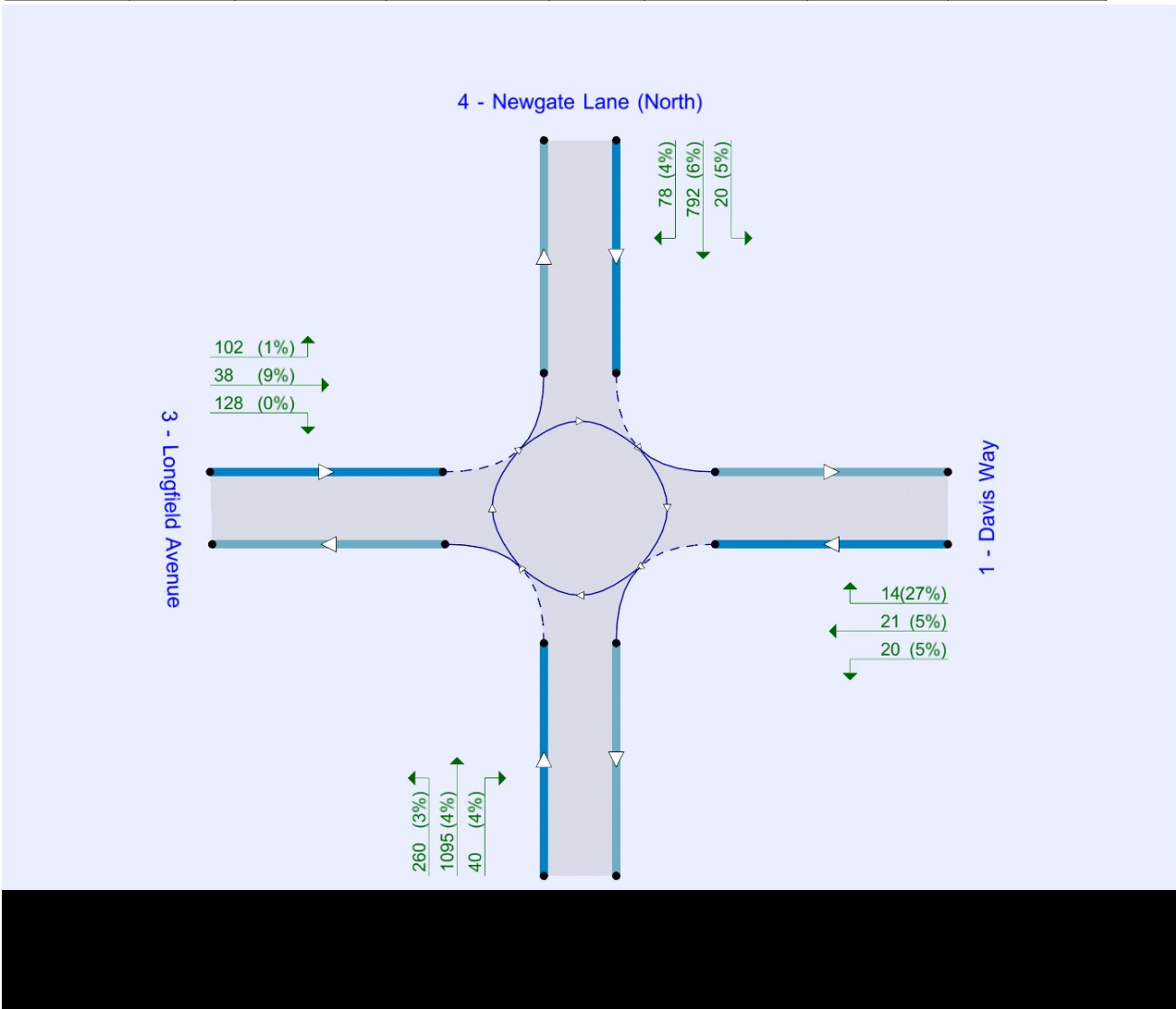
File summary

File Description

| | |
|-------------|--|
| Title | Longfield Avenue Roundabout |
| Location | |
| Site number | |
| Date | 08/10/2018 |
| Version | V3 |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | BRS.4989 |
| Enumerator | PEGASUSGROUP\Matthew Haywood |
| Description | Rev 3 - Updated for total of 190 dwellings |

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2019 Base DS1 | AM | without Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D2 | 2019 Base DS1 | PM | without Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D5 | 2024 Base DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D6 | 2024 Base DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D7 | 2024 Base + Dev DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D8 | 2024 Base + Dev DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D10 | 2019 Base DS2 | AM | with Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D11 | 2019 Base DS2 | PM | with Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D12 | 2024 Base DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D13 | 2024 Base DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |
| D14 | 2024 Base + Dev DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D15 | 2024 Base + Dev DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

Analysis Set Details

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

2019 Base DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.34 | A |

Junction Network Options

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

Arms

Arms

| Arm | Name | Description |
|-----|----------------------|-------------|
| 1 | Davis Way | |
| 2 | Newgate Lane (South) | |
| 3 | Longfield Avenue | |
| 4 | Newgate Lane (North) | |

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 - Davis Way | 3.50 | 4.90 | 6.7 | 10.0 | 46.0 | 55.0 | |
| 2 - Newgate Lane (South) | 7.30 | 7.35 | 0.0 | 40.0 | 46.0 | 28.0 | |
| 3 - Longfield Avenue | 3.65 | 11.40 | 24.8 | 34.0 | 46.0 | 23.0 | |
| 4 - Newgate Lane (North) | 3.15 | 9.40 | 41.6 | 11.0 | 46.0 | 66.0 | |

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

| Arm | Final slope | Final intercept (PCU/hr) |
|--------------------------|-------------|--------------------------|
| 1 - Davis Way | 0.475 | 1136 |
| 2 - Newgate Lane (South) | 0.747 | 2282 |
| 3 - Longfield Avenue | 0.770 | 2381 |
| 4 - Newgate Lane (North) | 0.608 | 1865 |

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2019 Base DS1 | AM | without Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 55 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1461 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 564 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 917 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 20 | 21 | 14 |
| | 2 - Newgate Lane (South) | 52 | 0 | 402 | 1007 |
| | 3 - Longfield Avenue | 38 | 372 | 0 | 154 |
| | 4 - Newgate Lane (North) | 20 | 800 | 97 | 0 |
| | | | | | |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 6 | 4 | 0 |
| | | | | | |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.13 | 9.61 | 0.2 | 0.5 | A | 50 | 76 |
| 2 - Newgate Lane (South) | 0.74 | 6.61 | 2.9 | 6.2 | A | 1341 | 2011 |
| 3 - Longfield Avenue | 0.42 | 4.26 | 0.7 | 3.1 | A | 518 | 776 |
| 4 - Newgate Lane (North) | 0.65 | 6.98 | 1.9 | 2.9 | A | 841 | 1262 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 952 | 684 | 0.061 | 41 | 83 | 0.0 | 0.1 | 6.153 | A |
| 2 - Newgate Lane (South) | 1100 | 275 | 99 | 2208 | 0.498 | 1096 | 894 | 0.0 | 1.0 | 3.347 | A |
| 3 - Longfield Avenue | 425 | 106 | 805 | 1762 | 0.241 | 423 | 390 | 0.0 | 0.3 | 2.706 | A |
| 4 - Newgate Lane (North) | 690 | 173 | 347 | 1654 | 0.417 | 687 | 881 | 0.0 | 0.8 | 3.936 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 1139 | 595 | 0.083 | 49 | 99 | 0.1 | 0.1 | 7.251 | A |
| 2 - Newgate Lane (South) | 1313 | 328 | 118 | 2194 | 0.599 | 1311 | 1070 | 1.0 | 1.5 | 4.227 | A |
| 3 - Longfield Avenue | 507 | 127 | 963 | 1640 | 0.309 | 507 | 467 | 0.3 | 0.4 | 3.196 | A |
| 4 - Newgate Lane (North) | 824 | 206 | 415 | 1613 | 0.511 | 823 | 1055 | 0.8 | 1.1 | 4.824 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1393 | 475 | 0.128 | 60 | 121 | 0.1 | 0.2 | 9.556 | A |
| 2 - Newgate Lane (South) | 1609 | 402 | 145 | 2174 | 0.740 | 1603 | 1309 | 1.5 | 2.9 | 6.488 | A |
| 3 - Longfield Avenue | 621 | 155 | 1177 | 1475 | 0.421 | 620 | 571 | 0.4 | 0.7 | 4.235 | A |
| 4 - Newgate Lane (North) | 1010 | 252 | 508 | 1556 | 0.649 | 1006 | 1290 | 1.1 | 1.9 | 6.897 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1397 | 473 | 0.128 | 61 | 121 | 0.2 | 0.2 | 9.606 | A |
| 2 - Newgate Lane (South) | 1609 | 402 | 145 | 2174 | 0.740 | 1608 | 1312 | 2.9 | 2.9 | 6.608 | A |
| 3 - Longfield Avenue | 621 | 155 | 1181 | 1472 | 0.422 | 621 | 572 | 0.7 | 0.7 | 4.259 | A |
| 4 - Newgate Lane (North) | 1010 | 252 | 509 | 1556 | 0.649 | 1010 | 1294 | 1.9 | 1.9 | 6.984 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 1145 | 593 | 0.083 | 50 | 99 | 0.2 | 0.1 | 7.295 | A |
| 2 - Newgate Lane (South) | 1313 | 328 | 119 | 2193 | 0.599 | 1319 | 1075 | 2.9 | 1.6 | 4.302 | A |
| 3 - Longfield Avenue | 507 | 127 | 969 | 1636 | 0.310 | 508 | 469 | 0.7 | 0.5 | 3.217 | A |
| 4 - Newgate Lane (North) | 824 | 206 | 416 | 1612 | 0.511 | 828 | 1060 | 1.9 | 1.1 | 4.887 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 957 | 682 | 0.061 | 42 | 83 | 0.1 | 0.1 | 6.188 | A |
| 2 - Newgate Lane (South) | 1100 | 275 | 100 | 2208 | 0.498 | 1102 | 899 | 1.6 | 1.0 | 3.386 | A |
| 3 - Longfield Avenue | 425 | 106 | 809 | 1758 | 0.241 | 425 | 392 | 0.5 | 0.3 | 2.722 | A |
| 4 - Newgate Lane (North) | 690 | 173 | 348 | 1653 | 0.418 | 692 | 886 | 1.1 | 0.8 | 3.976 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.02 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.00 | 0.00 | 0.32 | 0.32 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.75 | 0.58 | 1.06 | 1.48 | 1.54 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.53 | 0.05 | 0.49 | 3.92 | 6.15 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.45 | 0.00 | 0.00 | 0.45 | 0.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.10 | 0.07 | 0.86 | 2.04 | 2.87 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.29 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.88 | 0.03 | 0.29 | 2.88 | 4.98 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.73 | 0.03 | 0.26 | 0.73 | 0.73 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.92 | 0.03 | 0.28 | 1.92 | 1.92 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.28 | 0.50 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.91 | 0.03 | 0.28 | 2.91 | 2.91 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.73 | 0.03 | 0.29 | 1.11 | 3.07 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.94 | 0.03 | 0.28 | 1.94 | 1.94 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.57 | 0.09 | 1.16 | 3.11 | 4.24 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.45 | 0.00 | 0.00 | 0.45 | 0.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.12 | 0.12 | 1.06 | 1.77 | 2.07 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.04 | 0.05 | 0.51 | 2.30 | 3.43 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.00 | 0.00 | 0.32 | 0.32 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.77 | 0.06 | 0.63 | 1.16 | 1.76 | | | N/A | N/A |

2019 Base DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.43 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2019 Base DS1 | PM | without Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 84 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1145 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 747 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 970 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 22 | 29 | 33 |
| | 2 - Newgate Lane (South) | 4 | 0 | 356 | 785 |
| | 3 - Longfield Avenue | 4 | 638 | 0 | 105 |
| | 4 - Newgate Lane (North) | 4 | 875 | 91 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.31 | 17.75 | 0.4 | 1.5 | C | 77 | 116 |
| 2 - Newgate Lane (South) | 0.58 | 4.08 | 1.4 | 2.0 | A | 1051 | 1576 |
| 3 - Longfield Avenue | 0.49 | 4.17 | 0.9 | 1.9 | A | 685 | 1028 |
| 4 - Newgate Lane (North) | 0.75 | 9.95 | 2.9 | 9.7 | A | 890 | 1335 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 1203 | 565 | 0.112 | 63 | 9 | 0.0 | 0.1 | 7.244 | A |
| 2 - Newgate Lane (South) | 862 | 216 | 114 | 2197 | 0.392 | 859 | 1151 | 0.0 | 0.7 | 2.728 | A |
| 3 - Longfield Avenue | 562 | 141 | 617 | 1907 | 0.295 | 561 | 357 | 0.0 | 0.4 | 2.671 | A |
| 4 - Newgate Lane (North) | 730 | 183 | 485 | 1570 | 0.465 | 727 | 693 | 0.0 | 0.9 | 4.296 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 1439 | 453 | 0.167 | 75 | 11 | 0.1 | 0.2 | 9.639 | A |
| 2 - Newgate Lane (South) | 1029 | 257 | 137 | 2180 | 0.472 | 1028 | 1378 | 0.7 | 0.9 | 3.170 | A |
| 3 - Longfield Avenue | 672 | 168 | 738 | 1813 | 0.370 | 671 | 427 | 0.4 | 0.6 | 3.150 | A |
| 4 - Newgate Lane (North) | 872 | 218 | 580 | 1512 | 0.577 | 870 | 829 | 0.9 | 1.4 | 5.646 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1759 | 301 | 0.307 | 92 | 13 | 0.2 | 0.4 | 17.330 | C |
| 2 - Newgate Lane (South) | 1261 | 315 | 167 | 2157 | 0.584 | 1259 | 1683 | 0.9 | 1.4 | 4.057 | A |
| 3 - Longfield Avenue | 822 | 206 | 903 | 1686 | 0.488 | 821 | 523 | 0.6 | 0.9 | 4.155 | A |
| 4 - Newgate Lane (North) | 1068 | 267 | 710 | 1433 | 0.745 | 1062 | 1014 | 1.4 | 2.8 | 9.675 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1766 | 298 | 0.311 | 92 | 13 | 0.4 | 0.4 | 17.749 | C |
| 2 - Newgate Lane (South) | 1261 | 315 | 168 | 2157 | 0.585 | 1261 | 1690 | 1.4 | 1.4 | 4.078 | A |
| 3 - Longfield Avenue | 822 | 206 | 905 | 1685 | 0.488 | 822 | 524 | 0.9 | 0.9 | 4.174 | A |
| 4 - Newgate Lane (North) | 1068 | 267 | 711 | 1433 | 0.745 | 1068 | 1016 | 2.8 | 2.9 | 9.951 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 1449 | 448 | 0.169 | 76 | 11 | 0.4 | 0.2 | 9.832 | A |
| 2 - Newgate Lane (South) | 1029 | 257 | 139 | 2179 | 0.472 | 1031 | 1387 | 1.4 | 0.9 | 3.190 | A |
| 3 - Longfield Avenue | 672 | 168 | 741 | 1811 | 0.371 | 673 | 429 | 0.9 | 0.6 | 3.168 | A |
| 4 - Newgate Lane (North) | 872 | 218 | 582 | 1511 | 0.577 | 878 | 832 | 2.9 | 1.4 | 5.796 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 1210 | 562 | 0.113 | 64 | 9 | 0.2 | 0.1 | 7.323 | A |
| 2 - Newgate Lane (South) | 862 | 216 | 116 | 2196 | 0.393 | 863 | 1158 | 0.9 | 0.7 | 2.745 | A |
| 3 - Longfield Avenue | 562 | 141 | 620 | 1904 | 0.295 | 563 | 359 | 0.6 | 0.4 | 2.686 | A |
| 4 - Newgate Lane (North) | 730 | 183 | 487 | 1569 | 0.465 | 732 | 696 | 1.4 | 0.9 | 4.359 | A |

Queue Variation Results for each time segment
16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.65 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.42 | 0.00 | 0.00 | 0.42 | 0.42 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.87 | 0.56 | 1.01 | 1.41 | 1.47 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.90 | 0.07 | 0.80 | 1.56 | 1.96 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.59 | 0.07 | 0.74 | 1.35 | 1.42 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.36 | 0.05 | 0.62 | 3.23 | 4.83 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.44 | 0.03 | 0.26 | 0.47 | 0.50 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.41 | 0.03 | 0.26 | 1.41 | 1.41 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.94 | 0.03 | 0.25 | 0.94 | 0.94 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.84 | 0.03 | 0.29 | 2.84 | 9.73 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.45 | 0.03 | 0.34 | 1.39 | 1.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.42 | 0.03 | 0.27 | 1.42 | 1.42 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.95 | 0.03 | 0.27 | 0.95 | 1.95 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.90 | 0.03 | 0.28 | 2.90 | 3.79 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.92 | 0.52 | 1.01 | 1.44 | 1.49 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.59 | 0.55 | 1.00 | 1.40 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.40 | 0.07 | 0.90 | 3.02 | 4.34 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.66 | 0.09 | 0.82 | 1.38 | 1.46 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.42 | 0.00 | 0.00 | 0.42 | 0.42 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.89 | 0.04 | 0.41 | 2.03 | 3.35 | | | N/A | N/A |

2024 Base DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 8.16 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2024 Base DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 59 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1537 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 630 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1043 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 23 | 22 | 14 |
| | 2 - Newgate Lane (South) | 55 | 0 | 423 | 1059 |
| | 3 - Longfield Avenue | 39 | 431 | 0 | 159 |
| | 4 - Newgate Lane (North) | 21 | 922 | 100 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 6 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.17 | 12.67 | 0.2 | 0.5 | B | 54 | 82 |
| 2 - Newgate Lane (South) | 0.78 | 7.80 | 3.6 | 10.7 | A | 1411 | 2116 |
| 3 - Longfield Avenue | 0.49 | 4.95 | 0.9 | 2.7 | A | 578 | 867 |
| 4 - Newgate Lane (North) | 0.76 | 10.35 | 3.2 | 11.9 | B | 957 | 1435 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1089 | 619 | 0.072 | 44 | 86 | 0.0 | 0.1 | 6.860 | A |
| 2 - Newgate Lane (South) | 1157 | 289 | 102 | 2206 | 0.525 | 1153 | 1031 | 0.0 | 1.1 | 3.533 | A |
| 3 - Longfield Avenue | 474 | 119 | 846 | 1730 | 0.274 | 473 | 409 | 0.0 | 0.4 | 2.878 | A |
| 4 - Newgate Lane (North) | 785 | 196 | 394 | 1625 | 0.483 | 781 | 925 | 0.0 | 1.0 | 4.475 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 53 | 13 | 1304 | 517 | 0.103 | 53 | 103 | 0.1 | 0.1 | 8.498 | A |
| 2 - Newgate Lane (South) | 1382 | 345 | 122 | 2191 | 0.631 | 1379 | 1235 | 1.1 | 1.7 | 4.590 | A |
| 3 - Longfield Avenue | 566 | 142 | 1013 | 1602 | 0.353 | 565 | 489 | 0.4 | 0.5 | 3.495 | A |
| 4 - Newgate Lane (North) | 937 | 234 | 472 | 1578 | 0.594 | 935 | 1107 | 1.0 | 1.5 | 5.881 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 65 | 16 | 1593 | 380 | 0.172 | 65 | 126 | 0.1 | 0.2 | 12.502 | B |
| 2 - Newgate Lane (South) | 1692 | 423 | 149 | 2171 | 0.780 | 1685 | 1508 | 1.7 | 3.5 | 7.584 | A |
| 3 - Longfield Avenue | 693 | 173 | 1237 | 1429 | 0.485 | 692 | 597 | 0.5 | 0.9 | 4.907 | A |
| 4 - Newgate Lane (North) | 1148 | 287 | 577 | 1514 | 0.758 | 1141 | 1352 | 1.5 | 3.2 | 10.003 | B |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 65 | 16 | 1600 | 376 | 0.173 | 65 | 126 | 0.2 | 0.2 | 12.669 | B |
| 2 - Newgate Lane (South) | 1692 | 423 | 150 | 2170 | 0.780 | 1692 | 1515 | 3.5 | 3.6 | 7.805 | A |
| 3 - Longfield Avenue | 693 | 173 | 1242 | 1425 | 0.487 | 693 | 600 | 0.9 | 0.9 | 4.952 | A |
| 4 - Newgate Lane (North) | 1148 | 287 | 578 | 1513 | 0.758 | 1148 | 1357 | 3.2 | 3.2 | 10.352 | B |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 53 | 13 | 1314 | 512 | 0.104 | 54 | 104 | 0.2 | 0.1 | 8.607 | A |
| 2 - Newgate Lane (South) | 1382 | 345 | 124 | 2190 | 0.631 | 1389 | 1244 | 3.6 | 1.8 | 4.706 | A |
| 3 - Longfield Avenue | 566 | 142 | 1020 | 1596 | 0.355 | 568 | 493 | 0.9 | 0.6 | 3.530 | A |
| 4 - Newgate Lane (North) | 937 | 234 | 474 | 1577 | 0.594 | 944 | 1114 | 3.2 | 1.6 | 6.055 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1097 | 615 | 0.072 | 45 | 86 | 0.1 | 0.1 | 6.915 | A |
| 2 - Newgate Lane (South) | 1157 | 289 | 103 | 2205 | 0.525 | 1160 | 1039 | 1.8 | 1.2 | 3.583 | A |
| 3 - Longfield Avenue | 474 | 119 | 852 | 1726 | 0.275 | 475 | 411 | 0.6 | 0.4 | 2.899 | A |
| 4 - Newgate Lane (North) | 785 | 196 | 396 | 1624 | 0.483 | 787 | 930 | 1.6 | 1.0 | 4.548 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.08 | 0.00 | 0.00 | 0.08 | 0.08 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.14 | 0.57 | 1.04 | 1.45 | 1.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.38 | 0.00 | 0.00 | 0.38 | 0.38 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.98 | 0.58 | 1.05 | 1.48 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.75 | 0.05 | 0.47 | 4.65 | 7.59 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.55 | 0.06 | 0.66 | 1.34 | 1.43 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.52 | 0.06 | 0.63 | 3.73 | 5.59 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.22 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.54 | 0.03 | 0.30 | 3.54 | 10.73 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.94 | 0.03 | 0.26 | 0.94 | 0.94 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.16 | 0.03 | 0.31 | 3.16 | 11.86 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.23 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.61 | 0.03 | 0.28 | 3.61 | 3.61 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.95 | 0.03 | 0.28 | 0.95 | 2.72 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.23 | 0.03 | 0.29 | 3.23 | 4.62 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.80 | 0.07 | 1.05 | 4.14 | 5.95 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.56 | 0.55 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.57 | 0.07 | 0.91 | 3.63 | 5.17 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.16 | 0.04 | 0.44 | 2.87 | 4.62 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.38 | 0.00 | 0.00 | 0.38 | 0.38 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.00 | 0.04 | 0.42 | 2.41 | 3.96 | | | N/A | N/A |

2024 Base DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 10.23 | B |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2024 Base DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 89 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1214 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 830 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1081 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 25 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 377 | 832 |
| | 3 - Longfield Avenue | 4 | 717 | 0 | 109 |
| | 4 - Newgate Lane (North) | 4 | 982 | 94 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.49 | 35.64 | 0.9 | 4.3 | E | 81 | 122 |
| 2 - Newgate Lane (South) | 0.62 | 4.48 | 1.7 | 2.7 | A | 1114 | 1671 |
| 3 - Longfield Avenue | 0.56 | 4.93 | 1.2 | 1.5 | A | 761 | 1142 |
| 4 - Newgate Lane (North) | 0.86 | 18.68 | 5.9 | 30.3 | C | 992 | 1487 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1344 | 498 | 0.134 | 66 | 9 | 0.0 | 0.2 | 8.424 | A |
| 2 - Newgate Lane (South) | 914 | 228 | 118 | 2194 | 0.417 | 911 | 1292 | 0.0 | 0.7 | 2.842 | A |
| 3 - Longfield Avenue | 625 | 156 | 653 | 1879 | 0.332 | 623 | 376 | 0.0 | 0.5 | 2.857 | A |
| 4 - Newgate Lane (North) | 814 | 203 | 544 | 1534 | 0.530 | 809 | 732 | 0.0 | 1.1 | 4.982 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1608 | 372 | 0.214 | 79 | 11 | 0.2 | 0.3 | 12.407 | B |
| 2 - Newgate Lane (South) | 1091 | 273 | 142 | 2176 | 0.501 | 1090 | 1546 | 0.7 | 1.0 | 3.360 | A |
| 3 - Longfield Avenue | 746 | 186 | 782 | 1780 | 0.419 | 745 | 450 | 0.5 | 0.7 | 3.475 | A |
| 4 - Newgate Lane (North) | 971 | 243 | 651 | 1469 | 0.661 | 968 | 875 | 1.1 | 1.9 | 7.211 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 24 | 1958 | 206 | 0.474 | 95 | 14 | 0.3 | 0.9 | 32.257 | D |
| 2 - Newgate Lane (South) | 1337 | 334 | 171 | 2154 | 0.620 | 1334 | 1882 | 1.0 | 1.6 | 4.440 | A |
| 3 - Longfield Avenue | 913 | 228 | 956 | 1646 | 0.555 | 911 | 549 | 0.7 | 1.2 | 4.890 | A |
| 4 - Newgate Lane (North) | 1190 | 297 | 797 | 1381 | 0.862 | 1175 | 1071 | 1.9 | 5.6 | 16.640 | C |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 24 | 1973 | 199 | 0.491 | 97 | 14 | 0.9 | 0.9 | 35.644 | E |
| 2 - Newgate Lane (South) | 1337 | 334 | 174 | 2152 | 0.621 | 1336 | 1897 | 1.6 | 1.7 | 4.477 | A |
| 3 - Longfield Avenue | 913 | 228 | 958 | 1644 | 0.556 | 913 | 552 | 1.2 | 1.2 | 4.929 | A |
| 4 - Newgate Lane (North) | 1190 | 297 | 798 | 1380 | 0.862 | 1188 | 1073 | 5.6 | 5.9 | 18.681 | C |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1629 | 362 | 0.220 | 82 | 11 | 0.9 | 0.3 | 13.122 | B |
| 2 - Newgate Lane (South) | 1091 | 273 | 146 | 2174 | 0.502 | 1094 | 1566 | 1.7 | 1.0 | 3.392 | A |
| 3 - Longfield Avenue | 746 | 186 | 785 | 1777 | 0.420 | 748 | 454 | 1.2 | 0.7 | 3.507 | A |
| 4 - Newgate Lane (North) | 971 | 243 | 654 | 1468 | 0.662 | 987 | 879 | 5.9 | 2.0 | 7.795 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1354 | 493 | 0.136 | 67 | 9 | 0.3 | 0.2 | 8.568 | A |
| 2 - Newgate Lane (South) | 914 | 228 | 120 | 2193 | 0.417 | 915 | 1302 | 1.0 | 0.7 | 2.863 | A |
| 3 - Longfield Avenue | 625 | 156 | 656 | 1876 | 0.333 | 626 | 379 | 0.7 | 0.5 | 2.880 | A |
| 4 - Newgate Lane (North) | 814 | 203 | 547 | 1533 | 0.531 | 817 | 735 | 2.0 | 1.2 | 5.105 | A |

Queue Variation Results for each time segment
16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.72 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.50 | 0.00 | 0.00 | 0.50 | 0.50 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.13 | 0.56 | 1.04 | 1.15 | 1.15 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.27 | 0.00 | 0.00 | 0.27 | 0.27 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.01 | 0.06 | 0.76 | 1.93 | 2.74 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.72 | 0.07 | 0.76 | 1.41 | 1.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.93 | 0.05 | 0.48 | 5.15 | 8.35 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.85 | 0.03 | 0.28 | 0.85 | 1.86 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.64 | 0.03 | 0.26 | 1.64 | 1.64 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.23 | 0.03 | 0.26 | 1.23 | 1.23 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 5.55 | 0.04 | 0.37 | 13.22 | 30.29 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.93 | 0.04 | 0.36 | 2.24 | 4.25 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.65 | 0.03 | 0.27 | 1.65 | 1.65 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.24 | 0.03 | 0.27 | 1.24 | 1.24 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 5.90 | 0.03 | 0.31 | 6.20 | 27.11 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.29 | 0.03 | 0.27 | 0.49 | 0.71 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.03 | 0.36 | 1.04 | 1.18 | 1.62 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.73 | 0.32 | 0.96 | 1.39 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.02 | 0.05 | 0.45 | 5.50 | 9.18 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.73 | 0.08 | 0.80 | 1.42 | 1.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.50 | 0.05 | 0.46 | 1.28 | 1.39 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.16 | 0.03 | 0.33 | 2.48 | 5.83 | | | N/A | N/A |

2024 Base + Dev DS1, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 8.43 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D7 | 2024 Base + Dev DS1 | AM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 59 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1551 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 635 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1052 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 23 | 22 | 14 |
| | 2 - Newgate Lane (South) | 55 | 0 | 427 | 1069 |
| | 3 - Longfield Avenue | 39 | 436 | 0 | 159 |
| | 4 - Newgate Lane (North) | 21 | 931 | 100 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 6 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.18 | 13.00 | 0.2 | 0.5 | B | 55 | 82 |
| 2 - Newgate Lane (South) | 0.79 | 8.06 | 3.8 | 12.0 | A | 1423 | 2135 |
| 3 - Longfield Avenue | 0.49 | 5.05 | 1.0 | 2.7 | A | 582 | 873 |
| 4 - Newgate Lane (North) | 0.77 | 10.77 | 3.4 | 13.2 | B | 966 | 1449 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1100 | 614 | 0.073 | 44 | 86 | 0.0 | 0.1 | 6.919 | A |
| 2 - Newgate Lane (South) | 1168 | 292 | 102 | 2206 | 0.529 | 1163 | 1042 | 0.0 | 1.2 | 3.565 | A |
| 3 - Longfield Avenue | 478 | 119 | 854 | 1724 | 0.277 | 476 | 411 | 0.0 | 0.4 | 2.899 | A |
| 4 - Newgate Lane (North) | 792 | 198 | 398 | 1623 | 0.488 | 788 | 932 | 0.0 | 1.0 | 4.523 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 53 | 13 | 1317 | 511 | 0.105 | 53 | 103 | 0.1 | 0.1 | 8.614 | A |
| 2 - Newgate Lane (South) | 1394 | 349 | 122 | 2191 | 0.636 | 1392 | 1248 | 1.2 | 1.8 | 4.659 | A |
| 3 - Longfield Avenue | 570 | 143 | 1022 | 1595 | 0.358 | 570 | 492 | 0.4 | 0.6 | 3.533 | A |
| 4 - Newgate Lane (North) | 946 | 237 | 476 | 1575 | 0.601 | 944 | 1115 | 1.0 | 1.6 | 5.985 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 65 | 16 | 1608 | 372 | 0.176 | 65 | 126 | 0.1 | 0.2 | 12.809 | B |
| 2 - Newgate Lane (South) | 1708 | 427 | 149 | 2171 | 0.787 | 1700 | 1524 | 1.8 | 3.7 | 7.813 | A |
| 3 - Longfield Avenue | 699 | 175 | 1248 | 1421 | 0.492 | 697 | 601 | 0.6 | 1.0 | 4.997 | A |
| 4 - Newgate Lane (North) | 1159 | 290 | 583 | 1511 | 0.767 | 1152 | 1362 | 1.6 | 3.3 | 10.367 | B |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 65 | 16 | 1616 | 369 | 0.178 | 65 | 127 | 0.2 | 0.2 | 12.995 | B |
| 2 - Newgate Lane (South) | 1708 | 427 | 150 | 2170 | 0.787 | 1708 | 1531 | 3.7 | 3.8 | 8.059 | A |
| 3 - Longfield Avenue | 699 | 175 | 1254 | 1416 | 0.493 | 699 | 604 | 1.0 | 1.0 | 5.048 | A |
| 4 - Newgate Lane (North) | 1159 | 290 | 584 | 1510 | 0.767 | 1158 | 1368 | 3.3 | 3.4 | 10.767 | B |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 53 | 13 | 1328 | 506 | 0.106 | 54 | 104 | 0.2 | 0.1 | 8.734 | A |
| 2 - Newgate Lane (South) | 1394 | 349 | 124 | 2190 | 0.637 | 1402 | 1258 | 3.8 | 1.8 | 4.784 | A |
| 3 - Longfield Avenue | 570 | 143 | 1029 | 1589 | 0.359 | 572 | 496 | 1.0 | 0.6 | 3.568 | A |
| 4 - Newgate Lane (North) | 946 | 237 | 479 | 1574 | 0.601 | 953 | 1123 | 3.4 | 1.6 | 6.179 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 1108 | 610 | 0.073 | 45 | 87 | 0.1 | 0.1 | 6.977 | A |
| 2 - Newgate Lane (South) | 1168 | 292 | 103 | 2205 | 0.530 | 1170 | 1050 | 1.8 | 1.2 | 3.616 | A |
| 3 - Longfield Avenue | 478 | 119 | 859 | 1720 | 0.278 | 478 | 414 | 0.6 | 0.4 | 2.919 | A |
| 4 - Newgate Lane (North) | 792 | 198 | 400 | 1622 | 0.489 | 795 | 938 | 1.6 | 1.0 | 4.599 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.16 | 0.57 | 1.04 | 1.45 | 1.50 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.38 | 0.00 | 0.00 | 0.38 | 0.38 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.00 | 0.58 | 1.05 | 1.48 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.79 | 0.05 | 0.46 | 4.78 | 7.86 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.56 | 0.06 | 0.68 | 1.34 | 1.43 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.56 | 0.05 | 0.61 | 3.87 | 5.86 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.23 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.68 | 0.03 | 0.30 | 3.68 | 12.03 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.96 | 0.03 | 0.26 | 0.96 | 0.96 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.31 | 0.03 | 0.31 | 3.31 | 13.23 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.23 | 0.03 | 0.29 | 0.52 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 3.75 | 0.03 | 0.28 | 3.75 | 3.75 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.97 | 0.03 | 0.28 | 0.97 | 2.66 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 3.39 | 0.03 | 0.29 | 3.39 | 5.45 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.84 | 0.07 | 1.02 | 4.37 | 6.25 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.57 | 0.55 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.61 | 0.06 | 0.87 | 3.82 | 5.54 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.18 | 0.04 | 0.43 | 2.94 | 4.84 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.39 | 0.03 | 0.27 | 0.48 | 0.66 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.02 | 0.04 | 0.41 | 2.51 | 4.16 | | | N/A | N/A |

2024 Base + Dev DS1, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 10.97 | B |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------------|------------------|---------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D8 | 2024 Base + Dev DS1 | PM | w/ Daedalus, w/out Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 89 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1231 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 838 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1092 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 25 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 383 | 844 |
| | 3 - Longfield Avenue | 4 | 725 | 0 | 109 |
| | 4 - Newgate Lane (North) | 4 | 993 | 94 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.52 | 39.40 | 1.0 | 4.8 | E | 82 | 123 |
| 2 - Newgate Lane (South) | 0.63 | 4.58 | 1.7 | 2.9 | A | 1130 | 1695 |
| 3 - Longfield Avenue | 0.56 | 5.06 | 1.3 | 1.5 | A | 769 | 1153 |
| 4 - Newgate Lane (North) | 0.87 | 20.38 | 6.5 | 32.8 | C | 1002 | 1502 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1358 | 491 | 0.136 | 66 | 9 | 0.0 | 0.2 | 8.559 | A |
| 2 - Newgate Lane (South) | 927 | 232 | 118 | 2194 | 0.423 | 924 | 1306 | 0.0 | 0.7 | 2.871 | A |
| 3 - Longfield Avenue | 631 | 158 | 662 | 1872 | 0.337 | 629 | 380 | 0.0 | 0.5 | 2.891 | A |
| 4 - Newgate Lane (North) | 822 | 205 | 550 | 1530 | 0.537 | 817 | 741 | 0.0 | 1.2 | 5.063 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1625 | 364 | 0.220 | 80 | 11 | 0.2 | 0.3 | 12.762 | B |
| 2 - Newgate Lane (South) | 1107 | 277 | 142 | 2176 | 0.509 | 1106 | 1563 | 0.7 | 1.0 | 3.409 | A |
| 3 - Longfield Avenue | 753 | 188 | 793 | 1771 | 0.425 | 752 | 455 | 0.5 | 0.7 | 3.528 | A |
| 4 - Newgate Lane (North) | 981 | 245 | 658 | 1465 | 0.670 | 978 | 886 | 1.2 | 2.0 | 7.413 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 25 | 1977 | 197 | 0.497 | 95 | 14 | 0.3 | 0.9 | 34.997 | D |
| 2 - Newgate Lane (South) | 1356 | 339 | 171 | 2155 | 0.629 | 1353 | 1902 | 1.0 | 1.7 | 4.544 | A |
| 3 - Longfield Avenue | 922 | 231 | 969 | 1635 | 0.564 | 920 | 555 | 0.7 | 1.3 | 5.018 | A |
| 4 - Newgate Lane (North) | 1202 | 300 | 805 | 1375 | 0.874 | 1186 | 1084 | 2.0 | 6.0 | 17.820 | C |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 98 | 25 | 1994 | 189 | 0.518 | 98 | 14 | 0.9 | 1.0 | 39.403 | E |
| 2 - Newgate Lane (South) | 1356 | 339 | 174 | 2152 | 0.630 | 1356 | 1917 | 1.7 | 1.7 | 4.584 | A |
| 3 - Longfield Avenue | 922 | 231 | 972 | 1633 | 0.565 | 922 | 558 | 1.3 | 1.3 | 5.062 | A |
| 4 - Newgate Lane (North) | 1202 | 300 | 807 | 1374 | 0.875 | 1200 | 1087 | 6.0 | 6.5 | 20.382 | C |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 80 | 20 | 1648 | 353 | 0.227 | 83 | 11 | 1.0 | 0.3 | 13.605 | B |
| 2 - Newgate Lane (South) | 1107 | 277 | 146 | 2173 | 0.509 | 1110 | 1585 | 1.7 | 1.1 | 3.441 | A |
| 3 - Longfield Avenue | 753 | 188 | 796 | 1768 | 0.426 | 755 | 459 | 1.3 | 0.7 | 3.562 | A |
| 4 - Newgate Lane (North) | 981 | 245 | 661 | 1463 | 0.671 | 999 | 891 | 6.5 | 2.1 | 8.107 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 1369 | 486 | 0.138 | 68 | 9 | 0.3 | 0.2 | 8.712 | A |
| 2 - Newgate Lane (South) | 927 | 232 | 120 | 2193 | 0.423 | 928 | 1317 | 1.1 | 0.7 | 2.890 | A |
| 3 - Longfield Avenue | 631 | 158 | 666 | 1869 | 0.337 | 632 | 383 | 0.7 | 0.5 | 2.913 | A |
| 4 - Newgate Lane (North) | 822 | 205 | 553 | 1529 | 0.537 | 825 | 744 | 2.1 | 1.2 | 5.194 | A |

Queue Variation Results for each time segment
16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.74 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.51 | 0.51 | 1.00 | 1.40 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.16 | 0.56 | 1.06 | 1.50 | 1.50 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.28 | 0.00 | 0.00 | 0.28 | 0.28 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.04 | 0.06 | 0.74 | 2.02 | 2.90 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.73 | 0.07 | 0.76 | 1.20 | 1.20 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.00 | 0.05 | 0.47 | 5.39 | 8.77 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.93 | 0.03 | 0.28 | 0.93 | 2.58 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.70 | 0.03 | 0.26 | 1.70 | 1.70 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.28 | 0.03 | 0.26 | 1.28 | 1.28 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 6.04 | 0.04 | 0.40 | 15.42 | 32.81 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 1.02 | 0.04 | 0.36 | 2.54 | 4.76 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.71 | 0.03 | 0.27 | 1.71 | 1.71 | | | N/A | N/A |
| 3 - Longfield Avenue | 1.29 | 0.03 | 0.27 | 1.29 | 1.50 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 6.47 | 0.03 | 0.32 | 8.70 | 31.72 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.30 | 0.03 | 0.28 | 0.55 | 1.03 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.06 | 0.31 | 1.06 | 1.37 | 1.72 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.75 | 0.29 | 0.95 | 1.39 | 1.45 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.11 | 0.04 | 0.44 | 5.75 | 9.81 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.26 | 0.47 | 0.50 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.75 | 0.08 | 0.80 | 1.07 | 1.07 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.51 | 0.05 | 0.48 | 1.29 | 1.40 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.19 | 0.03 | 0.32 | 2.42 | 6.04 | | | N/A | N/A |

2019 Base DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 5.29 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|-------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D10 | 2019 Base DS2 | AM | with Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 55 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1395 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 268 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 890 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 20 | 21 | 14 |
| | 2 - Newgate Lane (South) | 40 | 0 | 260 | 1095 |
| | 3 - Longfield Avenue | 38 | 128 | 0 | 102 |
| | 4 - Newgate Lane (North) | 20 | 792 | 78 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 6 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.10 | 7.15 | 0.1 | 0.5 | A | 50 | 76 |
| 2 - Newgate Lane (South) | 0.70 | 5.72 | 2.4 | 5.0 | A | 1280 | 1920 |
| 3 - Longfield Avenue | 0.21 | 3.28 | 0.3 | 0.9 | A | 246 | 369 |
| 4 - Newgate Lane (North) | 0.57 | 5.11 | 1.4 | 1.7 | A | 817 | 1226 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 749 | 781 | 0.053 | 41 | 74 | 0.0 | 0.1 | 5.354 | A |
| 2 - Newgate Lane (South) | 1050 | 262 | 85 | 2219 | 0.473 | 1046 | 705 | 0.0 | 0.9 | 3.180 | A |
| 3 - Longfield Avenue | 202 | 50 | 862 | 1718 | 0.118 | 201 | 269 | 0.0 | 0.1 | 2.406 | A |
| 4 - Newgate Lane (North) | 670 | 168 | 155 | 1771 | 0.379 | 668 | 908 | 0.0 | 0.6 | 3.454 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 897 | 710 | 0.070 | 49 | 88 | 0.1 | 0.1 | 5.989 | A |
| 2 - Newgate Lane (South) | 1254 | 313 | 102 | 2206 | 0.568 | 1252 | 844 | 0.9 | 1.4 | 3.914 | A |
| 3 - Longfield Avenue | 241 | 60 | 1031 | 1588 | 0.152 | 241 | 322 | 0.1 | 0.2 | 2.710 | A |
| 4 - Newgate Lane (North) | 800 | 200 | 185 | 1752 | 0.457 | 799 | 1087 | 0.6 | 0.9 | 4.001 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1097 | 615 | 0.098 | 60 | 108 | 0.1 | 0.1 | 7.136 | A |
| 2 - Newgate Lane (South) | 1535 | 384 | 124 | 2189 | 0.701 | 1531 | 1033 | 1.4 | 2.4 | 5.651 | A |
| 3 - Longfield Avenue | 295 | 74 | 1261 | 1410 | 0.209 | 295 | 394 | 0.2 | 0.3 | 3.272 | A |
| 4 - Newgate Lane (North) | 980 | 245 | 227 | 1727 | 0.568 | 978 | 1330 | 0.9 | 1.4 | 5.084 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 61 | 15 | 1099 | 614 | 0.099 | 61 | 108 | 0.1 | 0.1 | 7.151 | A |
| 2 - Newgate Lane (South) | 1535 | 384 | 125 | 2189 | 0.701 | 1535 | 1035 | 2.4 | 2.4 | 5.722 | A |
| 3 - Longfield Avenue | 295 | 74 | 1265 | 1408 | 0.210 | 295 | 395 | 0.3 | 0.3 | 3.279 | A |
| 4 - Newgate Lane (North) | 980 | 245 | 227 | 1727 | 0.568 | 980 | 1333 | 1.4 | 1.4 | 5.112 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 49 | 12 | 900 | 709 | 0.070 | 50 | 88 | 0.1 | 0.1 | 6.005 | A |
| 2 - Newgate Lane (South) | 1254 | 313 | 102 | 2206 | 0.568 | 1258 | 847 | 2.4 | 1.4 | 3.963 | A |
| 3 - Longfield Avenue | 241 | 60 | 1036 | 1584 | 0.152 | 241 | 324 | 0.3 | 0.2 | 2.718 | A |
| 4 - Newgate Lane (North) | 800 | 200 | 186 | 1752 | 0.457 | 802 | 1092 | 1.4 | 0.9 | 4.027 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 41 | 10 | 753 | 779 | 0.053 | 41 | 74 | 0.1 | 0.1 | 5.373 | A |
| 2 - Newgate Lane (South) | 1050 | 262 | 85 | 2219 | 0.473 | 1052 | 709 | 1.4 | 0.9 | 3.214 | A |
| 3 - Longfield Avenue | 202 | 50 | 866 | 1715 | 0.118 | 202 | 271 | 0.2 | 0.1 | 2.414 | A |
| 4 - Newgate Lane (North) | 670 | 168 | 155 | 1771 | 0.379 | 671 | 913 | 0.9 | 0.7 | 3.478 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.06 | 0.00 | 0.00 | 0.06 | 0.06 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.93 | 0.57 | 1.04 | 1.46 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.64 | 0.58 | 1.06 | 1.48 | 1.54 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.08 | 0.03 | 0.28 | 0.50 | 0.53 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.35 | 0.05 | 0.53 | 3.26 | 4.96 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.18 | 0.00 | 0.00 | 0.18 | 0.18 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.88 | 0.09 | 0.89 | 1.18 | 1.71 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.03 | 0.29 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.39 | 0.03 | 0.28 | 2.39 | 2.39 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.37 | 0.03 | 0.27 | 1.37 | 1.37 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.03 | 0.28 | 0.50 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.42 | 0.03 | 0.27 | 2.42 | 2.42 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.28 | 0.50 | 0.92 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.38 | 0.03 | 0.28 | 1.38 | 1.38 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.08 | 0.00 | 0.00 | 0.08 | 0.08 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.38 | 0.12 | 1.19 | 2.39 | 3.02 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.18 | 0.00 | 0.00 | 0.18 | 0.18 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.90 | 0.36 | 1.03 | 1.49 | 1.55 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.06 | 0.00 | 0.00 | 0.06 | 0.06 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.94 | 0.06 | 0.70 | 1.81 | 2.48 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.14 | 0.00 | 0.00 | 0.14 | 0.14 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.65 | 0.07 | 0.77 | 1.43 | 1.51 | | | N/A | N/A |

2019 Base DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.11 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|-------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D11 | 2019 Base DS2 | PM | with Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 84 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1121 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 279 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 859 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 22 | 29 | 33 |
| | 2 - Newgate Lane (South) | 4 | 0 | 269 | 848 |
| | 3 - Longfield Avenue | 4 | 172 | 0 | 104 |
| | 4 - Newgate Lane (North) | 4 | 783 | 72 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.15 | 7.18 | 0.2 | 0.5 | A | 77 | 116 |
| 2 - Newgate Lane (South) | 0.57 | 3.90 | 1.3 | 1.8 | A | 1029 | 1543 |
| 3 - Longfield Avenue | 0.19 | 2.72 | 0.2 | 0.5 | A | 256 | 384 |
| 4 - Newgate Lane (North) | 0.54 | 4.55 | 1.2 | 1.5 | A | 788 | 1182 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 770 | 771 | 0.082 | 63 | 9 | 0.0 | 0.1 | 5.146 | A |
| 2 - Newgate Lane (South) | 844 | 211 | 100 | 2207 | 0.382 | 842 | 733 | 0.0 | 0.6 | 2.672 | A |
| 3 - Longfield Avenue | 210 | 53 | 665 | 1870 | 0.112 | 210 | 277 | 0.0 | 0.1 | 2.168 | A |
| 4 - Newgate Lane (North) | 647 | 162 | 135 | 1783 | 0.363 | 644 | 739 | 0.0 | 0.6 | 3.188 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 922 | 698 | 0.108 | 75 | 11 | 0.1 | 0.1 | 5.845 | A |
| 2 - Newgate Lane (South) | 1008 | 252 | 120 | 2193 | 0.460 | 1007 | 877 | 0.6 | 0.9 | 3.080 | A |
| 3 - Longfield Avenue | 251 | 63 | 795 | 1769 | 0.142 | 251 | 332 | 0.1 | 0.2 | 2.370 | A |
| 4 - Newgate Lane (North) | 772 | 193 | 161 | 1767 | 0.437 | 771 | 885 | 0.6 | 0.8 | 3.650 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1128 | 600 | 0.154 | 92 | 13 | 0.1 | 0.2 | 7.167 | A |
| 2 - Newgate Lane (South) | 1235 | 309 | 147 | 2173 | 0.568 | 1233 | 1074 | 0.9 | 1.3 | 3.881 | A |
| 3 - Longfield Avenue | 307 | 77 | 973 | 1632 | 0.188 | 307 | 406 | 0.2 | 0.2 | 2.716 | A |
| 4 - Newgate Lane (North) | 946 | 236 | 197 | 1745 | 0.542 | 944 | 1083 | 0.8 | 1.2 | 4.534 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 92 | 23 | 1130 | 600 | 0.154 | 92 | 13 | 0.2 | 0.2 | 7.184 | A |
| 2 - Newgate Lane (South) | 1235 | 309 | 147 | 2172 | 0.568 | 1235 | 1075 | 1.3 | 1.3 | 3.897 | A |
| 3 - Longfield Avenue | 307 | 77 | 975 | 1631 | 0.188 | 307 | 407 | 0.2 | 0.2 | 2.719 | A |
| 4 - Newgate Lane (North) | 946 | 236 | 198 | 1745 | 0.542 | 946 | 1084 | 1.2 | 1.2 | 4.552 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 76 | 19 | 925 | 697 | 0.108 | 76 | 11 | 0.2 | 0.1 | 5.864 | A |
| 2 - Newgate Lane (South) | 1008 | 252 | 120 | 2192 | 0.460 | 1010 | 880 | 1.3 | 0.9 | 3.095 | A |
| 3 - Longfield Avenue | 251 | 63 | 798 | 1767 | 0.142 | 251 | 333 | 0.2 | 0.2 | 2.374 | A |
| 4 - Newgate Lane (North) | 772 | 193 | 162 | 1767 | 0.437 | 774 | 887 | 1.2 | 0.8 | 3.671 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 63 | 16 | 774 | 769 | 0.082 | 63 | 9 | 0.1 | 0.1 | 5.166 | A |
| 2 - Newgate Lane (South) | 844 | 211 | 101 | 2207 | 0.382 | 845 | 736 | 0.9 | 0.6 | 2.687 | A |
| 3 - Longfield Avenue | 210 | 53 | 667 | 1868 | 0.112 | 210 | 278 | 0.2 | 0.1 | 2.171 | A |
| 4 - Newgate Lane (North) | 647 | 162 | 135 | 1783 | 0.363 | 648 | 742 | 0.8 | 0.6 | 3.206 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.63 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.57 | 0.56 | 1.01 | 1.41 | 1.47 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.86 | 0.07 | 0.81 | 1.36 | 1.80 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.78 | 0.09 | 0.83 | 1.19 | 1.19 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.18 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.32 | 0.03 | 0.26 | 1.32 | 1.32 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.23 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.18 | 0.03 | 0.26 | 1.18 | 1.18 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.18 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.33 | 0.03 | 0.27 | 1.33 | 1.33 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.23 | 0.03 | 0.25 | 0.45 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.19 | 0.03 | 0.27 | 1.19 | 1.19 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.12 | 0.00 | 0.00 | 0.12 | 0.12 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.87 | 0.54 | 1.01 | 1.42 | 1.48 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.17 | 0.00 | 0.00 | 0.17 | 0.17 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.79 | 0.52 | 0.99 | 1.41 | 1.46 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.09 | 0.00 | 0.00 | 0.09 | 0.09 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.63 | 0.09 | 0.82 | 1.38 | 1.45 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.13 | 0.00 | 0.00 | 0.13 | 0.13 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.58 | 0.07 | 0.73 | 1.36 | 1.44 | | | N/A | N/A |

2024 Base DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.33 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D12 | 2024 Base DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 60 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1469 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 297 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1035 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 24 | 22 | 14 |
| | 2 - Newgate Lane (South) | 42 | 0 | 274 | 1153 |
| | 3 - Longfield Avenue | 39 | 152 | 0 | 106 |
| | 4 - Newgate Lane (North) | 21 | 934 | 81 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 5 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.13 | 8.56 | 0.2 | 0.5 | A | 55 | 82 |
| 2 - Newgate Lane (South) | 0.74 | 6.56 | 2.9 | 6.2 | A | 1348 | 2021 |
| 3 - Longfield Avenue | 0.24 | 3.54 | 0.3 | 1.3 | A | 272 | 409 |
| 4 - Newgate Lane (North) | 0.67 | 6.66 | 2.1 | 3.5 | A | 950 | 1425 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 875 | 721 | 0.062 | 45 | 77 | 0.0 | 0.1 | 5.825 | A |
| 2 - Newgate Lane (South) | 1106 | 276 | 88 | 2217 | 0.499 | 1102 | 832 | 0.0 | 1.0 | 3.341 | A |
| 3 - Longfield Avenue | 223 | 56 | 907 | 1683 | 0.133 | 223 | 282 | 0.0 | 0.2 | 2.495 | A |
| 4 - Newgate Lane (North) | 779 | 195 | 175 | 1758 | 0.443 | 776 | 955 | 0.0 | 0.8 | 3.847 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 13 | 1047 | 639 | 0.084 | 54 | 92 | 0.1 | 0.1 | 6.732 | A |
| 2 - Newgate Lane (South) | 1320 | 330 | 105 | 2204 | 0.599 | 1318 | 996 | 1.0 | 1.5 | 4.213 | A |
| 3 - Longfield Avenue | 267 | 67 | 1085 | 1546 | 0.173 | 267 | 338 | 0.2 | 0.2 | 2.850 | A |
| 4 - Newgate Lane (North) | 931 | 233 | 210 | 1738 | 0.536 | 929 | 1142 | 0.8 | 1.2 | 4.682 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 16 | 1281 | 528 | 0.125 | 66 | 112 | 0.1 | 0.2 | 8.519 | A |
| 2 - Newgate Lane (South) | 1617 | 404 | 128 | 2186 | 0.740 | 1612 | 1218 | 1.5 | 2.9 | 6.446 | A |
| 3 - Longfield Avenue | 327 | 82 | 1327 | 1360 | 0.240 | 326 | 413 | 0.2 | 0.3 | 3.526 | A |
| 4 - Newgate Lane (North) | 1140 | 285 | 257 | 1709 | 0.667 | 1136 | 1397 | 1.2 | 2.1 | 6.583 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 16 | 1284 | 526 | 0.125 | 66 | 112 | 0.2 | 0.2 | 8.557 | A |
| 2 - Newgate Lane (South) | 1617 | 404 | 129 | 2186 | 0.740 | 1617 | 1221 | 2.9 | 2.9 | 6.565 | A |
| 3 - Longfield Avenue | 327 | 82 | 1331 | 1357 | 0.241 | 327 | 414 | 0.3 | 0.3 | 3.540 | A |
| 4 - Newgate Lane (North) | 1140 | 285 | 257 | 1709 | 0.667 | 1140 | 1401 | 2.1 | 2.1 | 6.661 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 13 | 1052 | 636 | 0.084 | 54 | 92 | 0.2 | 0.1 | 6.766 | A |
| 2 - Newgate Lane (South) | 1320 | 330 | 105 | 2203 | 0.599 | 1326 | 1001 | 2.9 | 1.6 | 4.285 | A |
| 3 - Longfield Avenue | 267 | 67 | 1092 | 1541 | 0.173 | 267 | 340 | 0.3 | 0.2 | 2.865 | A |
| 4 - Newgate Lane (North) | 931 | 233 | 210 | 1737 | 0.536 | 934 | 1149 | 2.1 | 1.2 | 4.743 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 880 | 718 | 0.063 | 45 | 77 | 0.1 | 0.1 | 5.853 | A |
| 2 - Newgate Lane (South) | 1106 | 276 | 88 | 2216 | 0.499 | 1108 | 837 | 1.6 | 1.0 | 3.381 | A |
| 3 - Longfield Avenue | 223 | 56 | 912 | 1679 | 0.133 | 224 | 284 | 0.2 | 0.2 | 2.505 | A |
| 4 - Newgate Lane (North) | 779 | 195 | 176 | 1758 | 0.443 | 781 | 960 | 1.2 | 0.8 | 3.888 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.03 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.83 | 0.58 | 1.05 | 1.47 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.53 | 0.05 | 0.49 | 3.93 | 6.17 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.20 | 0.06 | 0.82 | 2.52 | 3.52 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.87 | 0.03 | 0.29 | 2.87 | 4.89 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.06 | 0.03 | 0.28 | 2.06 | 2.06 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.91 | 0.03 | 0.28 | 2.91 | 2.91 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.03 | 0.32 | 1.03 | 1.29 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.09 | 0.03 | 0.28 | 2.09 | 2.09 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.57 | 0.09 | 1.17 | 3.11 | 4.24 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.23 | 0.12 | 1.11 | 1.97 | 2.57 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.04 | 0.05 | 0.51 | 2.30 | 3.43 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.85 | 0.06 | 0.67 | 1.52 | 2.00 | | | N/A | N/A |

2024 Base DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.79 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D13 | 2024 Base DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 90 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1189 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 310 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 986 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 25 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 285 | 900 |
| | 3 - Longfield Avenue | 4 | 199 | 0 | 107 |
| | 4 - Newgate Lane (North) | 4 | 908 | 74 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.19 | 8.67 | 0.2 | 0.9 | A | 82 | 123 |
| 2 - Newgate Lane (South) | 0.60 | 4.25 | 1.5 | 2.4 | A | 1091 | 1637 |
| 3 - Longfield Avenue | 0.22 | 2.89 | 0.3 | 1.0 | A | 285 | 427 |
| 4 - Newgate Lane (North) | 0.63 | 5.68 | 1.7 | 2.6 | A | 905 | 1357 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 886 | 716 | 0.094 | 67 | 9 | 0.0 | 0.1 | 5.612 | A |
| 2 - Newgate Lane (South) | 895 | 224 | 104 | 2205 | 0.406 | 892 | 849 | 0.0 | 0.7 | 2.778 | A |
| 3 - Longfield Avenue | 234 | 58 | 704 | 1839 | 0.127 | 233 | 292 | 0.0 | 0.1 | 2.241 | A |
| 4 - Newgate Lane (North) | 742 | 186 | 156 | 1770 | 0.419 | 740 | 781 | 0.0 | 0.7 | 3.515 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1060 | 633 | 0.127 | 80 | 11 | 0.1 | 0.1 | 6.593 | A |
| 2 - Newgate Lane (South) | 1069 | 267 | 124 | 2190 | 0.488 | 1068 | 1017 | 0.7 | 1.0 | 3.255 | A |
| 3 - Longfield Avenue | 279 | 70 | 842 | 1733 | 0.161 | 279 | 350 | 0.1 | 0.2 | 2.475 | A |
| 4 - Newgate Lane (North) | 887 | 222 | 186 | 1752 | 0.506 | 885 | 935 | 0.7 | 1.0 | 4.189 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1298 | 520 | 0.190 | 98 | 14 | 0.1 | 0.2 | 8.629 | A |
| 2 - Newgate Lane (South) | 1309 | 327 | 152 | 2169 | 0.604 | 1307 | 1244 | 1.0 | 1.5 | 4.228 | A |
| 3 - Longfield Avenue | 342 | 85 | 1031 | 1588 | 0.215 | 341 | 428 | 0.2 | 0.3 | 2.888 | A |
| 4 - Newgate Lane (North) | 1086 | 271 | 228 | 1726 | 0.629 | 1083 | 1144 | 1.0 | 1.7 | 5.627 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1300 | 519 | 0.190 | 99 | 14 | 0.2 | 0.2 | 8.669 | A |
| 2 - Newgate Lane (South) | 1309 | 327 | 152 | 2169 | 0.604 | 1309 | 1247 | 1.5 | 1.5 | 4.251 | A |
| 3 - Longfield Avenue | 342 | 85 | 1033 | 1586 | 0.215 | 342 | 429 | 0.3 | 0.3 | 2.891 | A |
| 4 - Newgate Lane (North) | 1086 | 271 | 228 | 1726 | 0.629 | 1086 | 1146 | 1.7 | 1.7 | 5.675 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1065 | 631 | 0.128 | 81 | 11 | 0.2 | 0.1 | 6.630 | A |
| 2 - Newgate Lane (South) | 1069 | 267 | 125 | 2189 | 0.488 | 1071 | 1021 | 1.5 | 1.0 | 3.277 | A |
| 3 - Longfield Avenue | 279 | 70 | 845 | 1731 | 0.161 | 279 | 351 | 0.3 | 0.2 | 2.480 | A |
| 4 - Newgate Lane (North) | 887 | 222 | 187 | 1752 | 0.506 | 889 | 938 | 1.7 | 1.0 | 4.228 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 67 | 17 | 891 | 713 | 0.095 | 68 | 9 | 0.1 | 0.1 | 5.641 | A |
| 2 - Newgate Lane (South) | 895 | 224 | 104 | 2204 | 0.406 | 896 | 854 | 1.0 | 0.7 | 2.795 | A |
| 3 - Longfield Avenue | 234 | 58 | 707 | 1837 | 0.127 | 234 | 293 | 0.2 | 0.1 | 2.247 | A |
| 4 - Newgate Lane (North) | 742 | 186 | 156 | 1770 | 0.419 | 744 | 785 | 1.0 | 0.7 | 3.547 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.69 | 0.56 | 1.02 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.72 | 0.56 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.96 | 0.06 | 0.78 | 1.78 | 2.39 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.19 | 0.00 | 0.00 | 0.19 | 0.19 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.03 | 0.07 | 0.82 | 1.90 | 2.64 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.23 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.53 | 0.03 | 0.26 | 1.53 | 1.53 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.25 | 0.46 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.68 | 0.03 | 0.27 | 1.68 | 1.68 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.24 | 0.03 | 0.28 | 0.50 | 0.91 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.54 | 0.03 | 0.27 | 1.54 | 1.54 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.27 | 0.03 | 0.28 | 0.55 | 1.02 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.70 | 0.03 | 0.27 | 1.70 | 1.70 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.98 | 0.50 | 1.02 | 1.22 | 1.22 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.19 | 0.00 | 0.00 | 0.19 | 0.19 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.04 | 0.18 | 1.04 | 1.48 | 1.80 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.70 | 0.09 | 0.81 | 1.40 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.73 | 0.07 | 0.72 | 1.37 | 1.37 | | | N/A | N/A |

2024 Base + Dev DS2, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 6.47 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D14 | 2024 Base + Dev DS2 | AM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 60 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1479 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 299 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 1049 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 24 | 22 | 14 |
| | 2 - Newgate Lane (South) | 42 | 0 | 276 | 1161 |
| | 3 - Longfield Avenue | 39 | 154 | 0 | 106 |
| | 4 - Newgate Lane (North) | 21 | 947 | 81 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 5 | 5 | 27 |
| | 2 - Newgate Lane (South) | 4 | 0 | 3 | 4 |
| | 3 - Longfield Avenue | 9 | 0 | 0 | 1 |
| | 4 - Newgate Lane (North) | 5 | 5 | 4 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.13 | 8.72 | 0.2 | 0.5 | A | 55 | 83 |
| 2 - Newgate Lane (South) | 0.74 | 6.70 | 3.0 | 6.4 | A | 1357 | 2036 |
| 3 - Longfield Avenue | 0.24 | 3.57 | 0.3 | 1.3 | A | 275 | 412 |
| 4 - Newgate Lane (North) | 0.68 | 6.86 | 2.2 | 3.8 | A | 962 | 1443 |

Main Results for each time segment

07:45 - 08:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 887 | 715 | 0.063 | 45 | 77 | 0.0 | 0.1 | 5.873 | A |
| 2 - Newgate Lane (South) | 1114 | 278 | 88 | 2217 | 0.502 | 1109 | 844 | 0.0 | 1.0 | 3.364 | A |
| 3 - Longfield Avenue | 225 | 56 | 913 | 1678 | 0.134 | 225 | 284 | 0.0 | 0.2 | 2.506 | A |
| 4 - Newgate Lane (North) | 789 | 197 | 177 | 1757 | 0.449 | 786 | 961 | 0.0 | 0.9 | 3.889 | A |

08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 14 | 1061 | 632 | 0.085 | 54 | 92 | 0.1 | 0.1 | 6.808 | A |
| 2 - Newgate Lane (South) | 1330 | 332 | 105 | 2204 | 0.603 | 1328 | 1010 | 1.0 | 1.6 | 4.256 | A |
| 3 - Longfield Avenue | 269 | 67 | 1093 | 1540 | 0.175 | 269 | 339 | 0.2 | 0.2 | 2.868 | A |
| 4 - Newgate Lane (North) | 943 | 236 | 212 | 1736 | 0.543 | 941 | 1150 | 0.9 | 1.2 | 4.756 | A |

08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 17 | 1298 | 520 | 0.127 | 66 | 112 | 0.1 | 0.2 | 8.673 | A |
| 2 - Newgate Lane (South) | 1628 | 407 | 128 | 2186 | 0.745 | 1623 | 1236 | 1.6 | 2.9 | 6.569 | A |
| 3 - Longfield Avenue | 329 | 82 | 1336 | 1353 | 0.244 | 329 | 415 | 0.2 | 0.3 | 3.559 | A |
| 4 - Newgate Lane (North) | 1155 | 289 | 260 | 1707 | 0.676 | 1151 | 1406 | 1.2 | 2.2 | 6.767 | A |

08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 66 | 17 | 1302 | 518 | 0.128 | 66 | 113 | 0.2 | 0.2 | 8.716 | A |
| 2 - Newgate Lane (South) | 1628 | 407 | 129 | 2186 | 0.745 | 1628 | 1239 | 2.9 | 3.0 | 6.698 | A |
| 3 - Longfield Avenue | 329 | 82 | 1341 | 1349 | 0.244 | 329 | 416 | 0.3 | 0.3 | 3.574 | A |
| 4 - Newgate Lane (North) | 1155 | 289 | 260 | 1707 | 0.676 | 1154 | 1410 | 2.2 | 2.2 | 6.856 | A |

08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 54 | 14 | 1067 | 630 | 0.086 | 54 | 92 | 0.2 | 0.1 | 6.846 | A |
| 2 - Newgate Lane (South) | 1330 | 332 | 106 | 2203 | 0.603 | 1335 | 1015 | 3.0 | 1.6 | 4.334 | A |
| 3 - Longfield Avenue | 269 | 67 | 1099 | 1535 | 0.175 | 269 | 341 | 0.3 | 0.2 | 2.881 | A |
| 4 - Newgate Lane (North) | 943 | 236 | 213 | 1736 | 0.543 | 946 | 1156 | 2.2 | 1.3 | 4.824 | A |

09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 45 | 11 | 892 | 713 | 0.063 | 45 | 77 | 0.1 | 0.1 | 5.902 | A |
| 2 - Newgate Lane (South) | 1114 | 278 | 88 | 2216 | 0.502 | 1116 | 849 | 1.6 | 1.1 | 3.402 | A |
| 3 - Longfield Avenue | 225 | 56 | 919 | 1674 | 0.135 | 225 | 285 | 0.2 | 0.2 | 2.516 | A |
| 4 - Newgate Lane (North) | 789 | 197 | 178 | 1757 | 0.449 | 791 | 966 | 1.3 | 0.9 | 3.931 | A |

Queue Variation Results for each time segment

07:45 - 08:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.04 | 0.57 | 1.04 | 1.45 | 1.51 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.85 | 0.58 | 1.05 | 1.47 | 1.53 | | | N/A | N/A |

08:00 - 08:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.56 | 0.05 | 0.49 | 4.01 | 6.35 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.21 | 0.00 | 0.00 | 0.21 | 0.21 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.24 | 0.06 | 0.80 | 2.66 | 3.76 | | | N/A | N/A |

08:15 - 08:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.28 | 0.51 | 0.54 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.95 | 0.03 | 0.29 | 2.95 | 5.48 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.32 | 0.03 | 0.26 | 0.46 | 0.49 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.15 | 0.03 | 0.28 | 2.15 | 2.15 | | | N/A | N/A |

08:30 - 08:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.16 | 0.03 | 0.27 | 0.49 | 0.52 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 2.99 | 0.03 | 0.28 | 2.99 | 2.99 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.33 | 0.03 | 0.32 | 1.06 | 1.31 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 2.17 | 0.03 | 0.28 | 2.17 | 2.17 | | | N/A | N/A |

08:45 - 09:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.10 | 0.00 | 0.00 | 0.10 | 0.10 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.60 | 0.09 | 1.16 | 3.28 | 4.48 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.22 | 0.00 | 0.00 | 0.22 | 0.22 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.27 | 0.11 | 1.12 | 2.06 | 2.79 | | | N/A | N/A |

09:00 - 09:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.07 | 0.00 | 0.00 | 0.07 | 0.07 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.06 | 0.05 | 0.50 | 2.39 | 3.58 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.16 | 0.00 | 0.00 | 0.16 | 0.16 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.87 | 0.06 | 0.64 | 1.63 | 2.09 | | | N/A | N/A |

2024 Base + Dev DS2, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|------------------|--|--|
| Warning | Geometry | 4 - Newgate Lane (North) - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Warning | Queue variations | Analysis Options | Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high. |

Junction Network

Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|----------|------------------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1 | NGL - Longfield Avenue | Standard Roundabout | | 1, 2, 3, 4 | 4.90 | A |

Junction Network Options

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Description | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|------------------------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D15 | 2024 Base + Dev DS2 | PM | w/ Daedalus, w/ Stubbington Bypass | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|--------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Davis Way | | ONE HOUR | ✓ | 90 | 100.000 |
| 2 - Newgate Lane (South) | | ONE HOUR | ✓ | 1207 | 100.000 |
| 3 - Longfield Avenue | | ONE HOUR | ✓ | 318 | 100.000 |
| 4 - Newgate Lane (North) | | ONE HOUR | ✓ | 997 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 26 | 30 | 34 |
| | 2 - Newgate Lane (South) | 4 | 0 | 291 | 912 |
| | 3 - Longfield Avenue | 4 | 207 | 0 | 107 |
| | 4 - Newgate Lane (North) | 4 | 919 | 74 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|--------------------------|---------------|--------------------------|----------------------|--------------------------|
| | | 1 - Davis Way | 2 - Newgate Lane (South) | 3 - Longfield Avenue | 4 - Newgate Lane (North) |
| From | 1 - Davis Way | 0 | 4 | 0 | 0 |
| | 2 - Newgate Lane (South) | 0 | 0 | 1 | 2 |
| | 3 - Longfield Avenue | 0 | 0 | 0 | 0 |
| | 4 - Newgate Lane (North) | 33 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max 95th percentile Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|--------------------------|---------|---------------|-----------------|---------------------------------|---------|-------------------------|-------------------------------|
| 1 - Davis Way | 0.19 | 8.88 | 0.2 | 1.0 | A | 82 | 124 |
| 2 - Newgate Lane (South) | 0.61 | 4.35 | 1.6 | 2.6 | A | 1107 | 1661 |
| 3 - Longfield Avenue | 0.22 | 2.94 | 0.3 | 1.1 | A | 292 | 438 |
| 4 - Newgate Lane (North) | 0.64 | 5.83 | 1.8 | 2.8 | A | 915 | 1372 |

Main Results for each time segment

16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 68 | 17 | 900 | 709 | 0.095 | 67 | 9 | 0.0 | 0.1 | 5.672 | A |
| 2 - Newgate Lane (South) | 908 | 227 | 104 | 2205 | 0.412 | 906 | 864 | 0.0 | 0.7 | 2.806 | A |
| 3 - Longfield Avenue | 240 | 60 | 713 | 1832 | 0.131 | 239 | 296 | 0.0 | 0.2 | 2.259 | A |
| 4 - Newgate Lane (North) | 751 | 188 | 162 | 1767 | 0.425 | 748 | 790 | 0.0 | 0.7 | 3.556 | A |

17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1077 | 625 | 0.129 | 81 | 11 | 0.1 | 0.1 | 6.693 | A |
| 2 - Newgate Lane (South) | 1085 | 271 | 124 | 2190 | 0.495 | 1084 | 1034 | 0.7 | 1.0 | 3.300 | A |
| 3 - Longfield Avenue | 286 | 72 | 853 | 1724 | 0.166 | 286 | 354 | 0.2 | 0.2 | 2.502 | A |
| 4 - Newgate Lane (North) | 896 | 224 | 194 | 1747 | 0.513 | 895 | 946 | 0.7 | 1.1 | 4.258 | A |

17:15 - 17:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1318 | 510 | 0.194 | 99 | 14 | 0.1 | 0.2 | 8.838 | A |
| 2 - Newgate Lane (South) | 1329 | 332 | 152 | 2169 | 0.613 | 1326 | 1265 | 1.0 | 1.6 | 4.323 | A |
| 3 - Longfield Avenue | 350 | 88 | 1044 | 1577 | 0.222 | 350 | 434 | 0.2 | 0.3 | 2.933 | A |
| 4 - Newgate Lane (North) | 1098 | 274 | 237 | 1721 | 0.638 | 1095 | 1157 | 1.1 | 1.7 | 5.781 | A |

17:30 - 17:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 99 | 25 | 1321 | 509 | 0.194 | 99 | 14 | 0.2 | 0.2 | 8.884 | A |
| 2 - Newgate Lane (South) | 1329 | 332 | 152 | 2169 | 0.613 | 1328 | 1268 | 1.6 | 1.6 | 4.349 | A |
| 3 - Longfield Avenue | 350 | 88 | 1046 | 1576 | 0.222 | 350 | 435 | 0.3 | 0.3 | 2.936 | A |
| 4 - Newgate Lane (North) | 1098 | 274 | 237 | 1721 | 0.638 | 1098 | 1159 | 1.7 | 1.8 | 5.833 | A |

17:45 - 18:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 81 | 20 | 1082 | 623 | 0.130 | 81 | 11 | 0.2 | 0.2 | 6.732 | A |
| 2 - Newgate Lane (South) | 1085 | 271 | 125 | 2189 | 0.496 | 1087 | 1038 | 1.6 | 1.0 | 3.324 | A |
| 3 - Longfield Avenue | 286 | 72 | 856 | 1722 | 0.166 | 286 | 356 | 0.3 | 0.2 | 2.509 | A |
| 4 - Newgate Lane (North) | 896 | 224 | 194 | 1747 | 0.513 | 899 | 949 | 1.8 | 1.1 | 4.299 | A |

18:00 - 18:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|--------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Davis Way | 68 | 17 | 905 | 707 | 0.096 | 68 | 9 | 0.2 | 0.1 | 5.704 | A |
| 2 - Newgate Lane (South) | 908 | 227 | 104 | 2204 | 0.412 | 910 | 868 | 1.0 | 0.7 | 2.823 | A |
| 3 - Longfield Avenue | 240 | 60 | 716 | 1830 | 0.131 | 240 | 298 | 0.2 | 0.2 | 2.265 | A |
| 4 - Newgate Lane (North) | 751 | 188 | 162 | 1766 | 0.425 | 752 | 794 | 1.1 | 0.8 | 3.589 | A |

Queue Variation Results for each time segment

16:45 - 17:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.71 | 0.56 | 1.01 | 1.42 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.74 | 0.56 | 1.01 | 1.41 | 1.46 | | | N/A | N/A |

17:00 - 17:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.99 | 0.06 | 0.77 | 1.86 | 2.59 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.05 | 0.07 | 0.81 | 1.97 | 2.79 | | | N/A | N/A |

17:15 - 17:30

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.24 | 0.03 | 0.26 | 0.47 | 0.49 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.59 | 0.03 | 0.26 | 1.59 | 1.59 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.28 | 0.03 | 0.25 | 0.45 | 0.48 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.75 | 0.03 | 0.27 | 1.75 | 1.75 | | | N/A | N/A |

17:30 - 17:45

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.24 | 0.03 | 0.28 | 0.50 | 1.00 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.60 | 0.03 | 0.27 | 1.60 | 1.60 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.29 | 0.03 | 0.29 | 0.76 | 1.13 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.76 | 0.03 | 0.27 | 1.76 | 1.76 | | | N/A | N/A |

17:45 - 18:00

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 1.00 | 0.42 | 1.03 | 1.47 | 1.47 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.20 | 0.00 | 0.00 | 0.20 | 0.20 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 1.07 | 0.16 | 1.05 | 1.59 | 1.87 | | | N/A | N/A |

18:00 - 18:15

| Arm | Mean (PCU) | Q05 (PCU) | Q50 (PCU) | Q90 (PCU) | Q95 (PCU) | Percentile message | Marker message | Probability of reaching or exceeding marker | Probability of exactly reaching marker |
|--------------------------|------------|-----------|-----------|-----------|-----------|--------------------|----------------|---|--|
| 1 - Davis Way | 0.11 | 0.00 | 0.00 | 0.11 | 0.11 | | | N/A | N/A |
| 2 - Newgate Lane (South) | 0.72 | 0.08 | 0.81 | 1.41 | 1.48 | | | N/A | N/A |
| 3 - Longfield Avenue | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | | | N/A | N/A |
| 4 - Newgate Lane (North) | 0.75 | 0.06 | 0.71 | 1.50 | 1.53 | | | N/A | N/A |

APPENDIX J

PARTIALLY SIGNALISED PEEL COMMON ROUNDABOUT MODELLING REPORTS

Pegasus Group LinSig Report

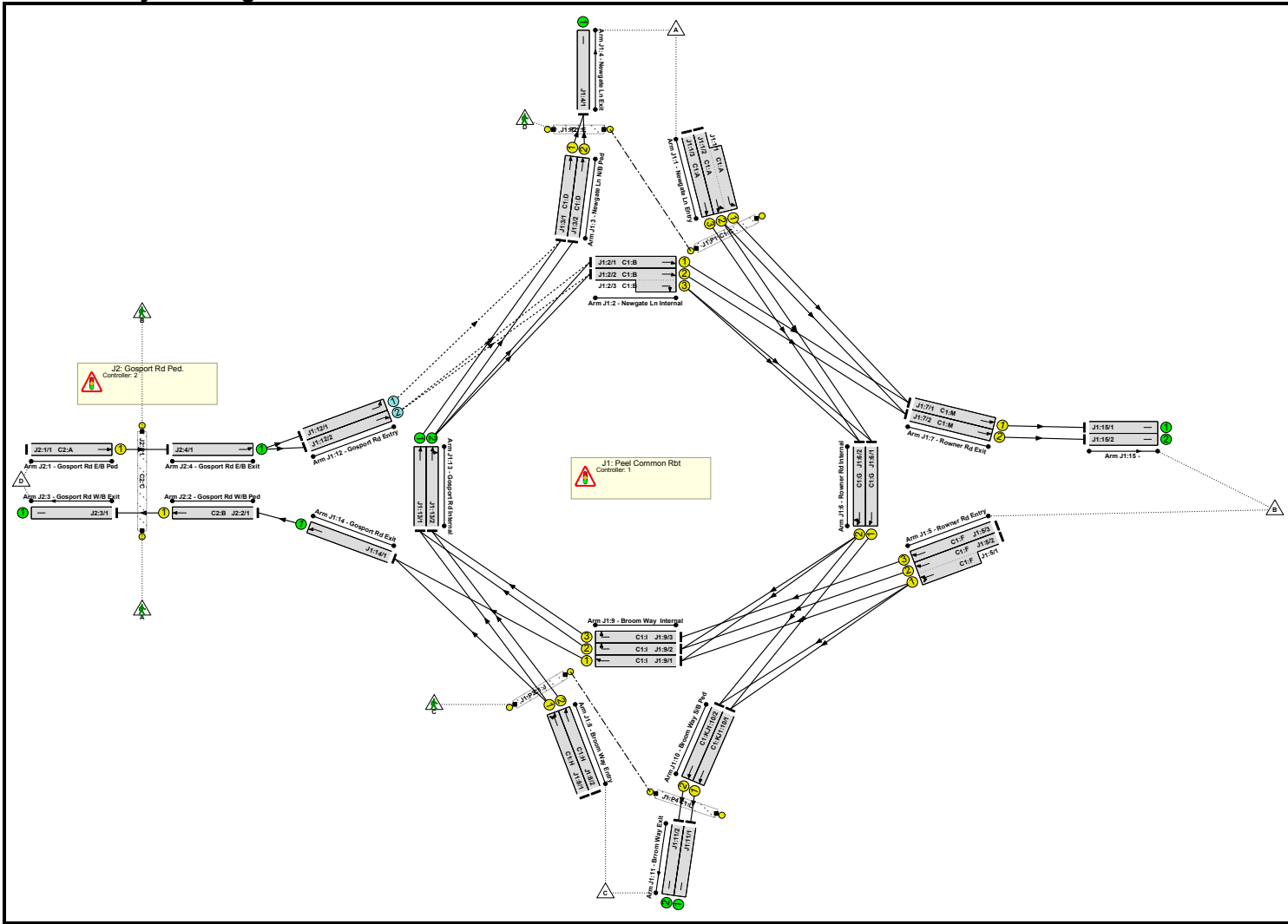
User and Project Details

| | |
|-----------------|-------------|
| Project: | |
| Title: | |
| Location: | |
| Company: | |
| Address: | |
| Linsig Version: | 3, 2, 39, 0 |

Scenarios

| Number | Scenario Name | Flow Group | Network Control Plan | Time | Cycle Time (s) | PRC (%) | Delay (pcuHr) |
|--------|------------------------|------------------------|----------------------|---------------|----------------|---------|---------------|
| 1 | 2019 DS1 BASE AM | 2019 DS1 BASE AM | Stage Plan 1 | 08:00 - 09:00 | 100 | 53.0 | 34.79 |
| 2 | 2019 DS1 BASE PM | 2019 DS1 BASE PM | Stage Plan 1 | 17:00 - 18:00 | 100 | 33.2 | 32.33 |
| 3 | 2024 DS1 BASE AM | 2024 DS1 BASE AM | Stage Plan 1 | 08:00 - 09:00 | 100 | 33.8 | 43.56 |
| 4 | 2024 DS1 BASE PM | 2024 DS1 BASE PM | Stage Plan 1 | 17:00 - 18:00 | 100 | 25.0 | 40.70 |
| 5 | 2024 DS1 BASE + DEV AM | 2024 DS1 BASE + DEV AM | Stage Plan 1 | 08:00 - 09:00 | 100 | 31.7 | 43.95 |
| 6 | 2024 DS1 BASE + DEV PM | 2024 DS1 BASE + DEV PM | Stage Plan 1 | 17:00 - 18:00 | 100 | 23.4 | 41.16 |
| 7 | 2019 DS2 BASE AM | 2019 DS2 BASE AM | Stage Plan 1 | 08:00 - 09:00 | 100 | 6.2 | 41.72 |
| 8 | 2019 DS2 BASE PM | 2019 DS2 BASE PM | Stage Plan 1 | 17:00 - 18:00 | 100 | -13.2 | 75.85 |
| 9 | 2024 DS2 BASE AM | 2024 DS2 BASE AM | Stage Plan 1 | 08:00 - 09:00 | 100 | -0.8 | 53.20 |
| 10 | 2024 DS2 BASE PM | 2024 DS2 BASE PM | Stage Plan 1 | 17:00 - 18:00 | 100 | -18.1 | 142.71 |
| 11 | 2024 DS2 BASE + DEV AM | 2024 DS2 BASE + DEV AM | Stage Plan 1 | 08:00 - 09:00 | 100 | -1.8 | 55.23 |
| 12 | 2024 DS2 BASE + DEV PM | 2024 DS2 BASE + DEV PM | Stage Plan 1 | 17:00 - 18:00 | 100 | -21.9 | 151.52 |

Network Layout Diagram



Lane Input Data

| Junction: J1: Peel Common Rbt | | | | | | | | | | | | |
|---------------------------------|-----------|--------|-------------|-----------|-----------------------|---------------|-----------------------------------|----------------|----------|---------------|-----------------|--------------------|
| Lane | Lane Type | Phases | Start Disp. | End Disp. | Physical Length (PCU) | Sat Flow Type | Def User Saturation Flow (PCU/Hr) | Lane Width (m) | Gradient | Nearside Lane | Turns | Turning Radius (m) |
| J1:1/1 (Newgate Ln Entry) | U | A | 2 | 3 | 15.7 | Geom | - | 3.65 | 0.00 | Y | Arm J1:7 Left | 25.00 |
| J1:1/2 (Newgate Ln Entry) | U | A | 2 | 3 | 60.0 | Geom | - | 3.65 | 0.00 | N | Arm J1:6 Ahead | 28.00 |
| | | | | | | | | | | | Arm J1:7 Left | Inf |
| J1:1/3 (Newgate Ln Entry) | U | A | 2 | 3 | 60.0 | User | 1800 | - | - | - | - | - |
| J1:2/1 (Newgate Ln Internal) | U | B | 2 | 3 | 60.0 | User | 1800 | - | - | - | - | - |
| J1:2/2 (Newgate Ln Internal) | U | B | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J1:7 Ahead | Inf |
| J1:2/3 (Newgate Ln Internal) | U | B | 2 | 3 | 5.0 | User | 1800 | - | - | - | - | - |
| J1:3/1 (Newgate Ln N/B Ped) | U | D | 2 | 3 | 60.0 | User | 1800 | - | - | - | - | - |
| J1:3/2 (Newgate Ln N/B Ped) | U | D | 2 | 3 | 60.0 | User | 3600 | - | - | - | - | - |
| J1:4/1 (Newgate Ln Exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| J1:5/1 (Rowner Rd Entry) | U | F | 2 | 3 | 7.8 | Geom | - | 3.50 | 0.00 | Y | Arm J1:9 Ahead | Inf |
| | | | | | | | | | | | Arm J1:10 Left | 40.00 |
| J1:5/2 (Rowner Rd Entry) | U | F | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | N | Arm J1:9 Ahead | Inf |
| J1:5/3 (Rowner Rd Entry) | U | F | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | N | Arm J1:9 Ahead | Inf |
| J1:6/1 (Rowner Rd Internal) | U | G | 2 | 3 | 60.0 | Geom | - | 5.00 | 0.00 | Y | Arm J1:10 Ahead | 24.00 |
| J1:6/2 (Rowner Rd Internal) | U | G | 2 | 3 | 60.0 | Geom | - | 5.00 | 0.00 | N | Arm J1:9 Right | Inf |
| | | | | | | | | | | | Arm J1:10 Ahead | Inf |
| J1:7/1 (Rowner Rd Exit) | U | M | 2 | 3 | 60.0 | User | 1800 | - | - | - | - | - |

| | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|------|------|------|------|------|---|-----------------|-------|
| J1:7/2 (Rowner Rd Exit) | U | M | 2 | 3 | 22.6 | Geom | - | 3.50 | 0.00 | Y | Arm J1:15 Ahead | Inf |
| J1:8/1 (Broom Way Entry) | U | H | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm J1:13 Ahead | Inf |
| | | | | | | | | | | | Arm J1:14 Left | 40.00 |
| J1:8/2 (Broom Way Entry) | U | H | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | N | Arm J1:13 Ahead | Inf |
| J1:9/1 (Broom Way Internal) | U | I | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:14 Ahead | Inf |
| J1:9/2 (Broom Way Internal) | U | I | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:13 Right | 50.00 |
| J1:9/3 (Broom Way Internal) | U | I | 2 | 3 | 60.0 | User | 1800 | - | - | - | - | - |
| J1:10/1 (Broom Way S/B Ped) | U | K | 2 | 3 | 10.4 | Geom | - | 3.50 | 0.00 | Y | Arm J1:11 Ahead | Inf |
| J1:10/2 (Broom Way S/B Ped) | U | K | 2 | 3 | 10.4 | Geom | - | 3.50 | 0.00 | N | Arm J1:11 Ahead | Inf |
| J1:11/1 (Broom Way Exit) | U | | 2 | 3 | 10.4 | User | 2000 | - | - | - | - | - |
| J1:11/2 (Broom Way Exit) | U | | 2 | 3 | 60.0 | User | 2000 | - | - | - | - | - |
| J1:12/1 (Gosport Rd Entry) | O | | 2 | 3 | 60.0 | Geom | - | 3.25 | 0.00 | Y | Arm J1:3 Left | Inf |
| J1:12/2 (Gosport Rd Entry) | O | | 2 | 3 | 60.0 | User | 2500 | - | - | - | - | - |
| J1:13/1 (Gosport Rd Internal) | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | Y | Arm J1:3 Ahead | 24.00 |
| J1:13/2 (Gosport Rd Internal) | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | N | Arm J1:2 Right | 20.00 |
| | | | | | | | | | | | Arm J1:3 Ahead | Inf |
| J1:14/1 (Gosport Rd Exit) | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | Y | Arm J2:2 Ahead | Inf |
| J1:15/1 | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| J1:15/2 | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |

| Junction: J2: Gosport Rd Ped. | | | | | | | | | | | | |
|---------------------------------|-----------|--------|-------------|-----------|-----------------------|---------------|-----------------------------------|----------------|----------|---------------|-----------------|--------------------|
| Lane | Lane Type | Phases | Start Disp. | End Disp. | Physical Length (PCU) | Sat Flow Type | Def User Saturation Flow (PCU/Hr) | Lane Width (m) | Gradient | Nearside Lane | Turns | Turning Radius (m) |
| J2:1/1 (Gosport Rd E/B Ped) | U | A | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | Y | Arm J2:4 Ahead | Inf |
| J2:2/1 (Gosport Rd W/B Ped) | U | B | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | Y | Arm J2:3 Ahead | Inf |
| J2:3/1 (Gosport Rd W/B Exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| J2:4/1 (Gosport Rd E/B Exit) | U | | 2 | 3 | 60.0 | Geom | - | 4.00 | 0.00 | Y | Arm J1:12 Ahead | Inf |

Give-Way Lane Input Data

| Junction: J1: Peel Common Rbt | | | | | | | | | | | | |
|-------------------------------|----------------|-----------------------------------|-----------------------------------|---------------|------------------|--------------|--------------------------|----------------------------|-----|------------------------|-------------------------------|--|
| Lane | Movement | Max Flow when Giving Way (PCU/Hr) | Min Flow when Giving Way (PCU/Hr) | Opposing Lane | Opp. Lane Coeff. | Opp. Mvmnts. | Right Turn Storage (PCU) | Non-Blocking Storage (PCU) | RTF | Right Turn Move up (s) | Max Turns in Intergreen (PCU) | |
| J1:12/1 (Gosport Rd Entry) | J1:3/1 (Left) | 1439 | 0 | J1:13/1 | 0.22 | All | - | - | - | - | - | |
| J1:12/2 (Gosport Rd Entry) | J1:2/1 (Ahead) | 1439 | 0 | J1:13/1 | 1.09 | All | - | - | - | - | - | |
| | | | | J1:13/2 | 1.09 | All | | | | | | |
| | J1:2/2 (Ahead) | 1900 | 0 | J1:13/1 | 0.22 | All | | | | | | |
| | | | | J1:13/2 | 0.22 | All | | | | | | |

Junction: J2: Gosport Rd Ped.

There are no Opposed Lanes in this Junction

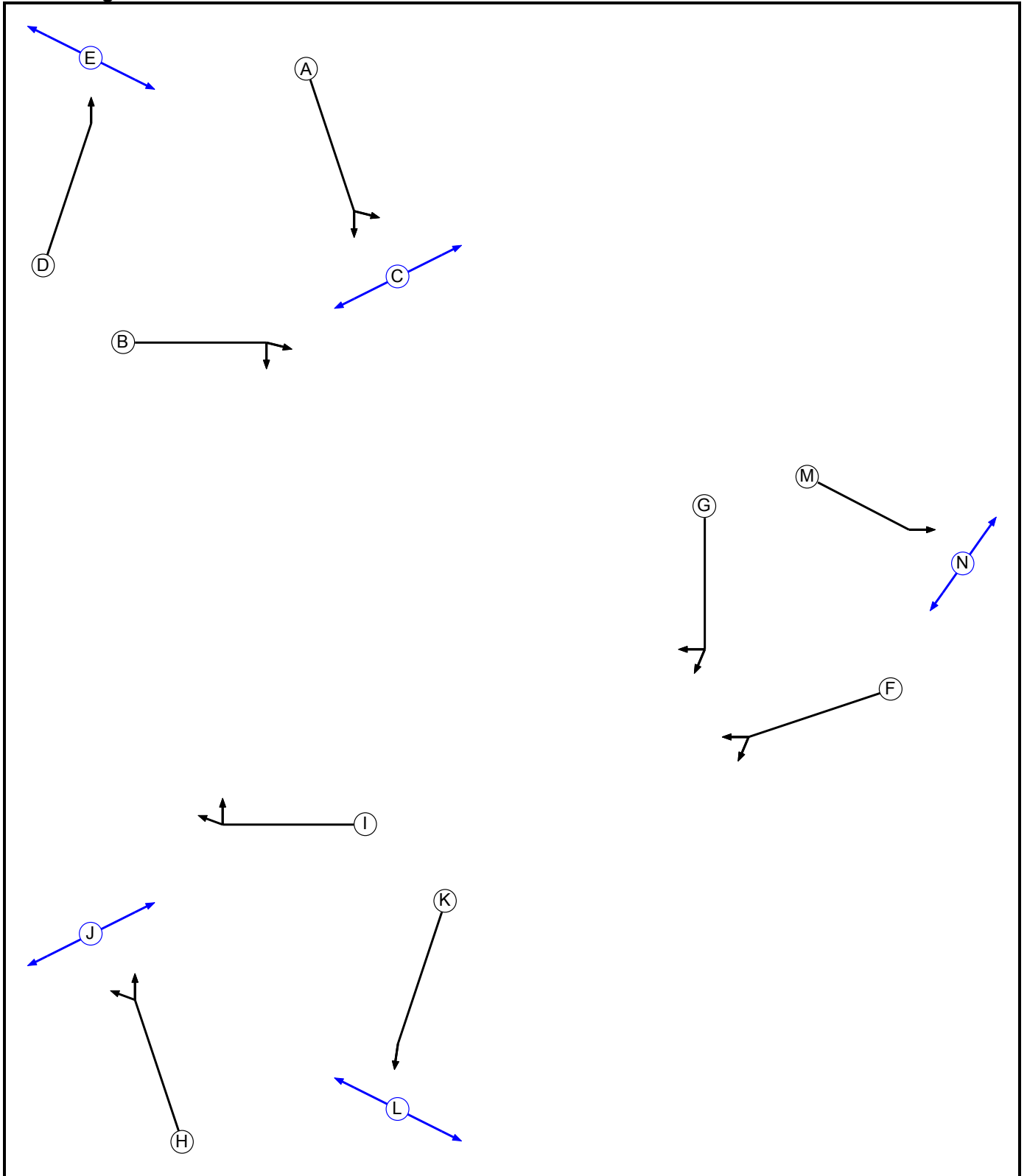
Lane Connector Input Data

| Junction: J1: Peel Common Rbt | | | | |
|--------------------------------------|------------------|-----------------|-------------------------|---------------------------|
| Org Lane | Dest Lane | Junction | Mean Cruise Time | Platoon Dispersion |
| J1:1/1 | J1:7/1 | Internal | 11 | 35 |
| J1:1/2 | J1:6/1 | Internal | 10 | 35 |
| J1:1/2 | J1:7/2 | Internal | 10 | 35 |
| J1:1/3 | J1:6/2 | Internal | 7 | 35 |
| J1:2/1 | J1:7/1 | Internal | 10 | 35 |
| J1:2/2 | J1:7/2 | Internal | 11 | 35 |
| J1:2/3 | J1:6/1 | Internal | 7 | 35 |
| J1:2/3 | J1:6/2 | Internal | 7 | 35 |
| J1:3/1 | J1:4/1 | Internal | 5 | 35 |
| J1:3/2 | J1:4/1 | Internal | 8 | 35 |
| J1:5/1 | J1:9/1 | Internal | 5 | 35 |
| J1:5/1 | J1:10/1 | Internal | 16 | 35 |
| J1:5/1 | J1:10/2 | Internal | 16 | 35 |
| J1:5/2 | J1:9/2 | Internal | 5 | 35 |
| J1:5/3 | J1:9/3 | Internal | 5 | 35 |
| J1:6/1 | J1:10/1 | Internal | 16 | 35 |
| J1:6/2 | J1:9/1 | Internal | 10 | 35 |
| J1:6/2 | J1:9/2 | Internal | 10 | 35 |
| J1:6/2 | J1:10/2 | Internal | 16 | 35 |
| J1:7/1 | J1:15/1 | Internal | 5 | 35 |
| J1:7/2 | J1:15/2 | Internal | 5 | 35 |
| J1:8/1 | J1:13/1 | Internal | 4 | 35 |
| J1:8/1 | J1:14/1 | Internal | 3 | 35 |
| J1:8/2 | J1:13/2 | Internal | 4 | 35 |
| J1:9/1 | J1:14/1 | Internal | 4 | 35 |
| J1:9/2 | J1:13/1 | Internal | 10 | 35 |
| J1:9/3 | J1:13/2 | Internal | 10 | 35 |
| J1:10/1 | J1:11/1 | Internal | 5 | 35 |
| J1:10/2 | J1:11/2 | Internal | 5 | 35 |
| J1:12/1 | J1:3/1 | Internal | 8 | 35 |
| J1:12/2 | J1:2/1 | Internal | 10 | 35 |
| J1:12/2 | J1:2/2 | Internal | 5 | 35 |
| J1:13/1 | J1:3/1 | Internal | 8 | 35 |
| J1:13/2 | J1:2/1 | Internal | 5 | 35 |
| J1:13/2 | J1:2/2 | Internal | 5 | 35 |
| J1:13/2 | J1:3/2 | Internal | 5 | 35 |
| J1:14/1 | J2:2/1 | Leaving | 2 | 35 |

| | | | | |
|--------|---------|----------|----|----|
| J2:4/1 | J1:12/1 | Entering | 10 | 35 |
| J2:4/1 | J1:12/2 | Entering | 2 | 35 |

| Junction: J2: Gosport Rd Ped. | | | | |
|--------------------------------------|------------------|-----------------|-------------------------|---------------------------|
| Org Lane | Dest Lane | Junction | Mean Cruise Time | Platoon Dispersion |
| J1:14/1 | J2:2/1 | Entering | 2 | 35 |
| J2:1/1 | J2:4/1 | Internal | 1 | 35 |
| J2:2/1 | J2:3/1 | Internal | 10 | 35 |
| J2:4/1 | J1:12/1 | Leaving | 10 | 35 |
| J2:4/1 | J1:12/2 | Leaving | 2 | 35 |

C1 - Peel Common Rbt
Phase Diagram



Phase Input Data

| Phase Name | Phase Type | Stage Stream | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|--------------|------------|----------|
| A | Traffic | 1 | | 7 | 7 |
| B | Traffic | 1 | | 7 | 4 |
| C | Pedestrian | 1 | | 5 | 5 |
| D | Traffic | 2 | | 7 | 7 |
| E | Pedestrian | 2 | | 5 | 5 |
| F | Traffic | 3 | | 7 | 7 |
| G | Traffic | 3 | | 7 | 4 |
| H | Traffic | 4 | | 7 | 7 |
| I | Traffic | 4 | | 7 | 4 |
| J | Pedestrian | 4 | | 5 | 5 |
| K | Traffic | 5 | | 7 | 7 |
| L | Pedestrian | 5 | | 5 | 5 |
| M | Traffic | 6 | | 7 | 7 |
| N | Pedestrian | 6 | | 7 | 7 |

Phase Intergreens Matrix

| | Starting Phase | | | | | | | | | | | | | |
|-------------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | I | J | K | L | M | N |
| Terminating Phase | A | 5 | 5 | - | - | - | - | - | - | - | - | - | - | - |
| | B | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| | C | 8 | - | - | - | - | - | - | - | - | - | - | - | - |
| | D | - | - | - | 5 | - | - | - | - | - | - | - | - | - |
| | E | - | - | - | 6 | - | - | - | - | - | - | - | - | - |
| | F | - | - | - | - | 5 | - | - | - | - | - | - | - | - |
| | G | - | - | - | - | 5 | - | - | - | - | - | - | - | - |
| | H | - | - | - | - | - | - | 5 | 5 | - | - | - | - | - |
| | I | - | - | - | - | - | - | 5 | - | - | - | - | - | - |
| | J | - | - | - | - | - | - | 8 | - | - | - | - | - | - |
| | K | - | - | - | - | - | - | - | - | - | 5 | - | - | - |
| | L | - | - | - | - | - | - | - | - | 8 | - | - | - | - |
| | M | - | - | - | - | - | - | - | - | - | - | - | 5 | - |
| | N | - | - | - | - | - | - | - | - | - | - | 8 | - | - |

Phases in Stage

| Stream | Stage No. | Phases in Stage |
|--------|-----------|-----------------|
| 1 | 1 | A |
| 1 | 2 | B C |
| 2 | 1 | D |
| 2 | 2 | E |
| 3 | 1 | F |
| 3 | 2 | G |
| 4 | 1 | H |
| 4 | 2 | I J |
| 5 | 1 | K |
| 5 | 2 | L |
| 6 | 1 | M |
| 6 | 2 | N |

Phase Delays

Stage Stream: 1

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-------------|-------------|-------|--------|-------|------------|
| 2 | 1 | B | Losing | 3 | 3 |

Stage Stream: 2

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Stage Stream: 3

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-------------|-------------|-------|--------|-------|------------|
| 2 | 1 | G | Losing | 3 | 3 |

Stage Stream: 4

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-------------|-------------|-------|--------|-------|------------|
| 2 | 1 | I | Losing | 3 | 3 |

Stage Stream: 5

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Stage Stream: 6

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Prohibited Stage Change

Stage Stream: 1

| | To Stage | |
|------------|----------|---|
| From Stage | 1 | 2 |
| | 1 | 5 |
| | 2 | 8 |

Stage Stream: 2

| | To Stage | |
|------------|----------|---|
| From Stage | 1 | 2 |
| | 1 | 5 |
| | 2 | 6 |

Stage Stream: 3

| | To Stage | |
|------------|----------|---|
| From Stage | 1 | 2 |
| | 1 | 5 |
| | 2 | 8 |

Stage Stream: 4

| | To Stage | |
|------------|----------|---|
| From Stage | 1 | 2 |
| | 1 | 5 |
| | 2 | 8 |

Stage Stream: 5

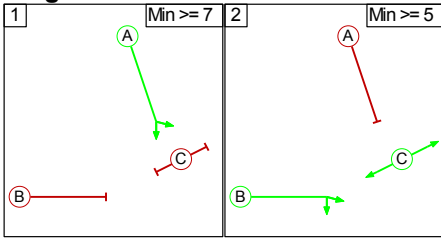
| | To Stage | |
|------------|----------|---|
| From Stage | 1 | 2 |
| | 1 | 5 |
| | 2 | 8 |

Stage Stream: 6

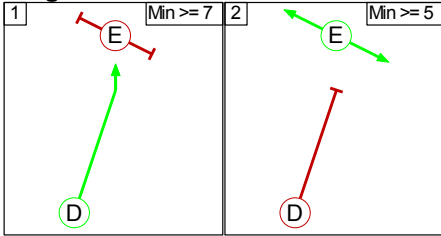
| | | To Stage | |
|------------|---|----------|---|
| | | 1 | 2 |
| From Stage | 1 | | 5 |
| | 2 | 8 | |

Stage Diagram

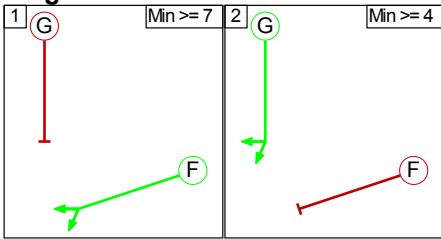
Stage Stream: 1



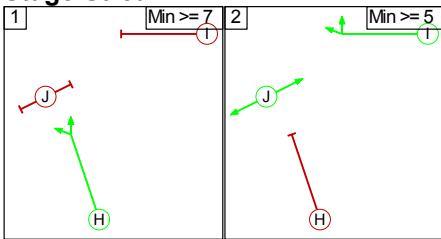
Stage Stream: 2



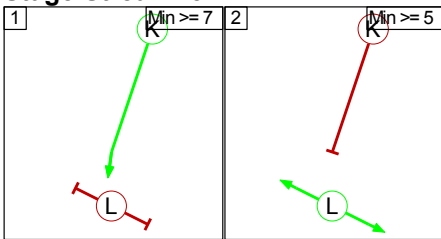
Stage Stream: 3



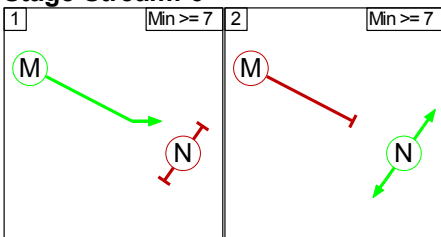
Stage Stream: 4



Stage Stream: 5



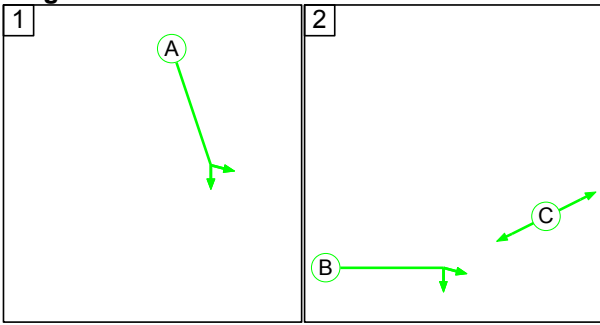
Stage Stream: 6



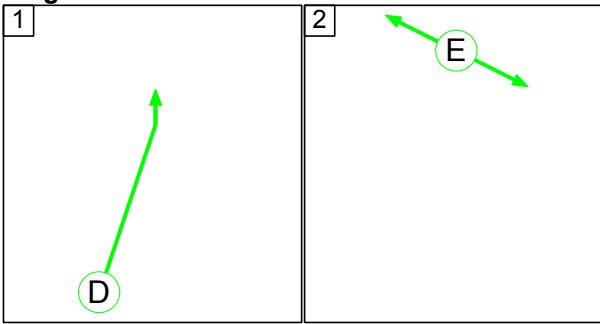
Stage Sequence Summary

Stage Sequence: Staging Plan No. 1

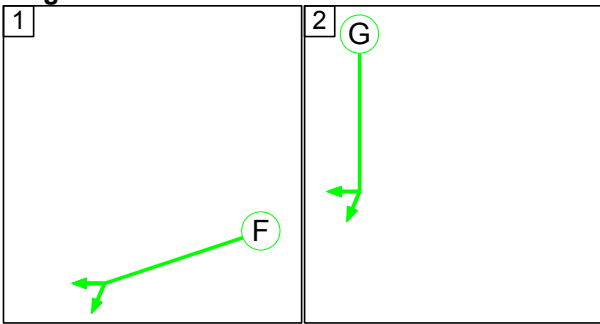
Stage Stream: 1



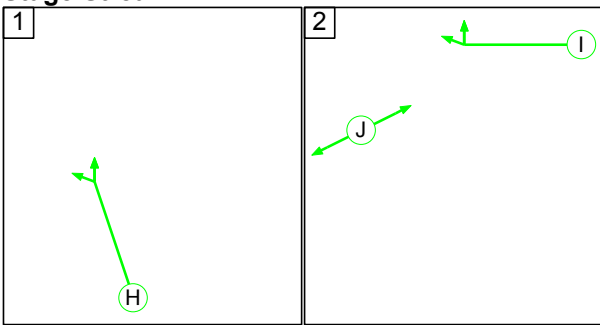
Stage Stream: 2



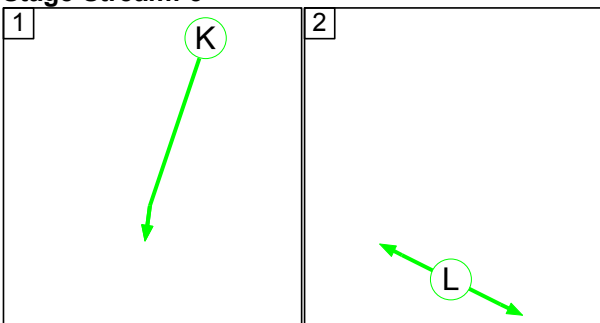
Stage Stream: 3



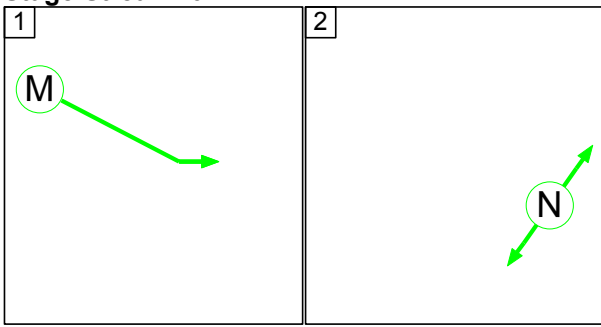
Stage Stream: 4



Stage Stream: 5



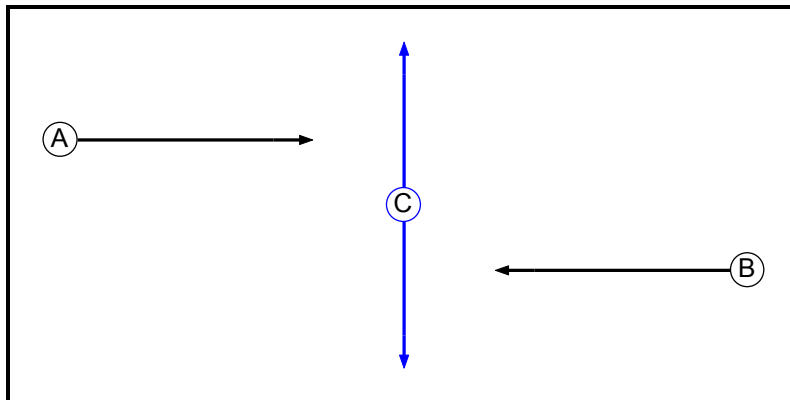
Stage Stream: 6



Network Control Plans

| Plan | Controller | Sequence Name | Sequence |
|--------------|----------------------|----------------------|--|
| Stage Plan 1 | C1 - Peel Common Rbt | Staging Plan No. 1 | Stream 1: 1,2 Stream 2: 1,2 Stream 3: 1,2 Stream 4: 1,2 Stream 5: 1,2 Stream 6: 1,2 |
| | C2 - Gosport Rd Ped. | Stage Sequence No. 1 | 1,2 |

**C2 - Gosport Rd Ped.
Phase Diagram**



Phase Input Data

| Phase Name | Phase Type | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|------------|----------|
| A | Traffic | | 7 | 7 |
| B | Traffic | | 7 | 7 |
| C | Pedestrian | | 5 | 5 |

Phase Intergreens Matrix

| | | | | |
|-------------------|----------------|----|----|---|
| Terminating Phase | Starting Phase | | | |
| | | A | B | C |
| | A | | - | 5 |
| | B | - | | 5 |
| | C | 10 | 10 | |

Phases in Stage

| Stage No. | Phases in Stage |
|-----------|-----------------|
| 1 | A B |
| 2 | C |

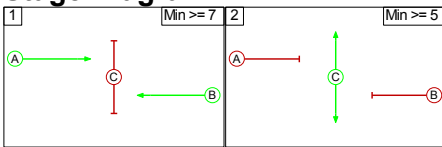
Phase Delays

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Prohibited Stage Change

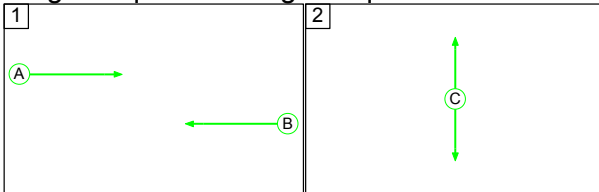
| | | |
|------------|----------|----|
| From Stage | To Stage | |
| | 1 | 2 |
| | 1 | 5 |
| | 2 | 10 |

Stage Diagram



Stage Sequence Summary

Stage Sequence: Stage Sequence No. 1



Network Control Plans

| Plan | Controller | Sequence Name | Sequence |
|--------------|----------------------|----------------------|--|
| Stage Plan 1 | C1 - Peel Common Rbt | Staging Plan No. 1 | Stream 1: 1,2 Stream 2: 1,2 Stream 3: 1,2 Stream 4: 1,2 Stream 5: 1,2 Stream 6: 1,2 |
| | C2 - Gosport Rd Ped. | Stage Sequence No. 1 | 1,2 |

Traffic Flow Groups

| Flow Group | Start Time | End Time | Duration | Formula |
|------------------------------|------------|----------|----------|---------|
| 1: '2019 DS1 BASE AM' | 08:00 | 09:00 | 01:00 | |
| 2: '2019 DS1 BASE PM' | 17:00 | 18:00 | 01:00 | |
| 3: '2024 DS1 BASE AM' | 08:00 | 09:00 | 01:00 | |
| 4: '2024 DS1 BASE PM' | 17:00 | 18:00 | 01:00 | |
| 5: '2024 DS1 BASE + DEV AM' | 08:00 | 09:00 | 01:00 | |
| 6: '2024 DS1 BASE + DEV PM' | 17:00 | 18:00 | 01:00 | |
| 7: '2019 DS2 BASE AM' | 08:00 | 09:00 | 01:00 | |
| 8: '2019 DS2 BASE PM' | 17:00 | 18:00 | 01:00 | |
| 9: '2024 DS2 BASE AM' | 08:00 | 09:00 | 01:00 | |
| 10: '2024 DS2 BASE PM' | 17:00 | 18:00 | 01:00 | |
| 11: '2024 DS2 BASE + DEV AM' | 08:00 | 09:00 | 01:00 | |
| 12: '2024 DS2 BASE + DEV PM' | 17:00 | 18:00 | 01:00 | |

Scenario 1: '2019 DS1 BASE AM' (FG1: '2019 DS1 BASE AM', Plan 1: 'Stage Plan 1')

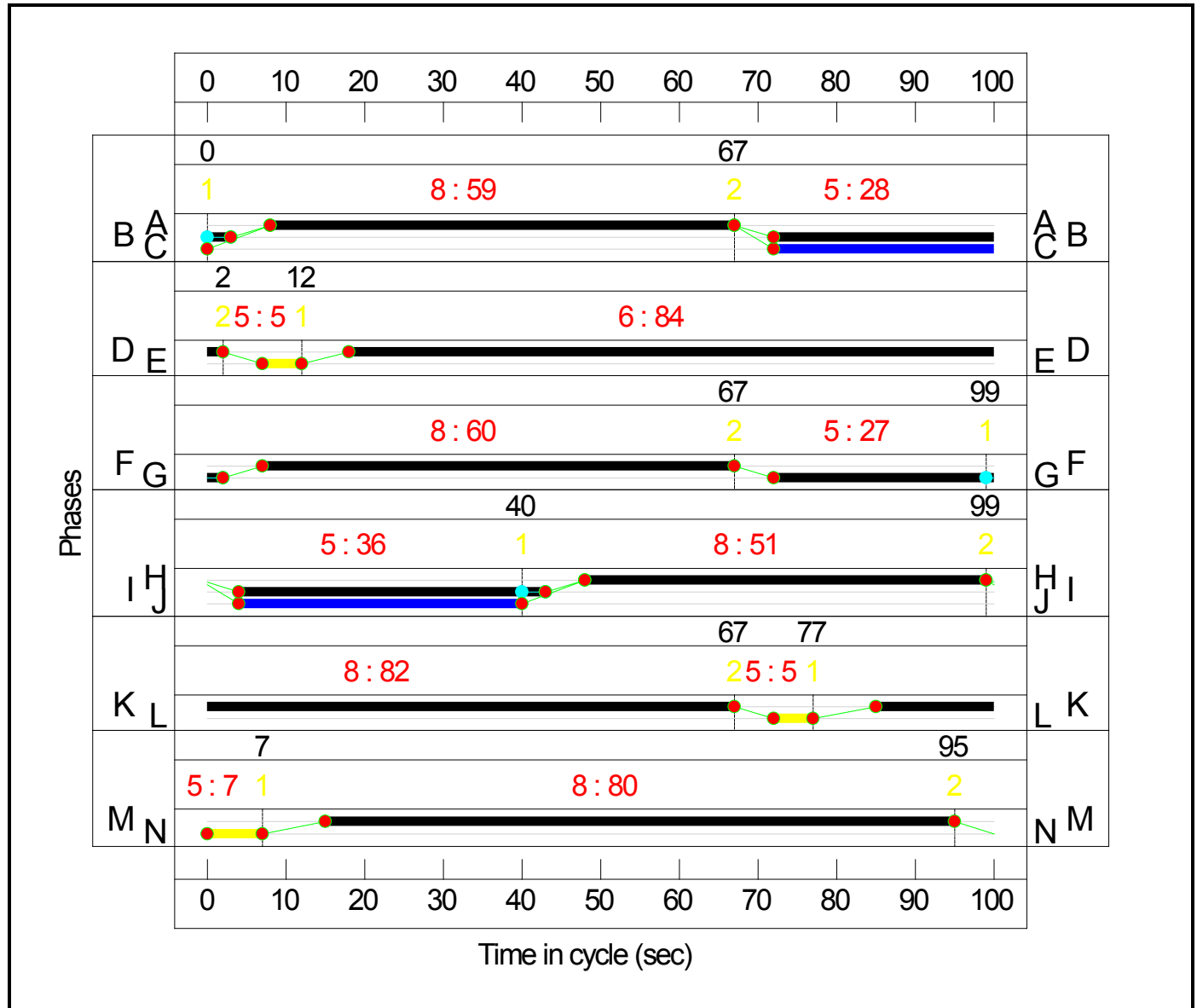
Traffic Flows, Actual

Actual Flow :

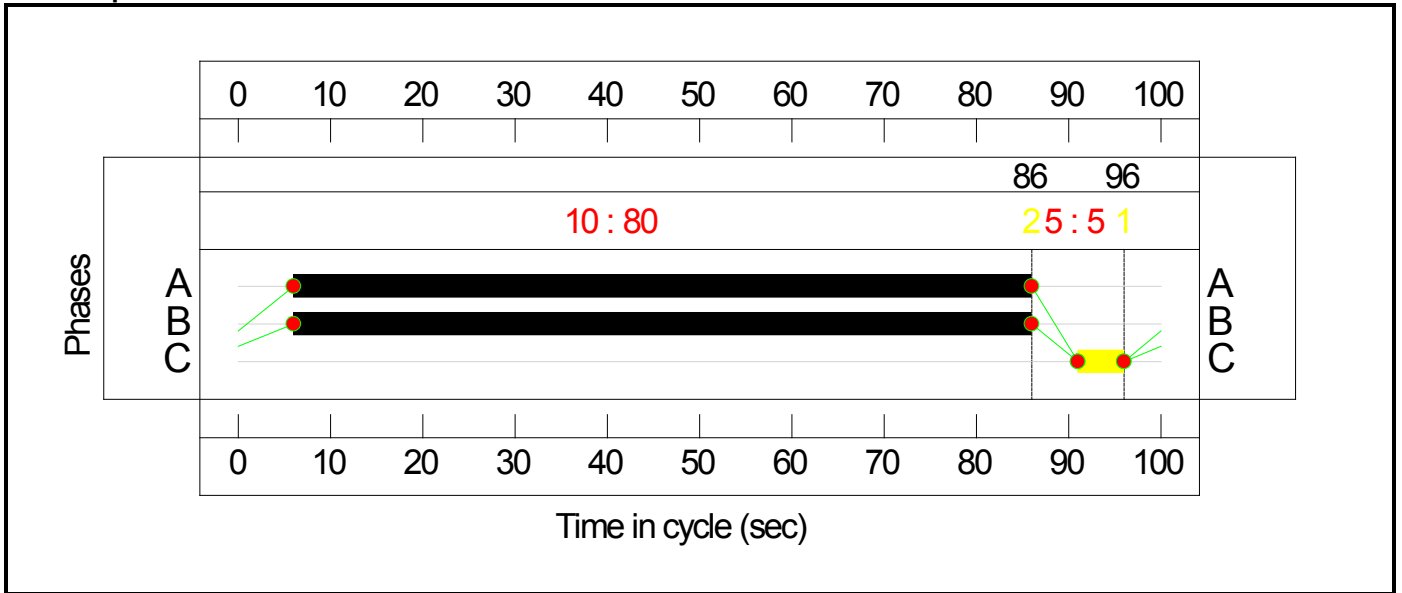
| | | Destination | | | | |
|--------|------|-------------|-----|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 461 | 305 | 85 | 851 |
| | B | 839 | 0 | 86 | 364 | 1289 |
| | C | 675 | 207 | 0 | 256 | 1138 |
| | D | 103 | 52 | 271 | 0 | 426 |
| | Tot. | 1617 | 720 | 662 | 705 | 3704 |

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln Entry Ahead Left | U | C1:A | | 1 | 59 | - | 739 | 2060:1868 | 1481 | 49.9% | - | - | - | 2.6 | 12.6 | 7.6 | 8.0 |
| J1:1/3 | Newgate Ln Entry Ahead | U | C1:A | | 1 | 59 | - | 112 | 1800 | 1080 | 10.4% | - | - | - | 0.3 | 10.4 | 1.3 | 1.4 |
| J1:2/1 | Newgate Ln Internal Ahead | U | C1:B | | 1 | 31 | - | 234 | 1800 | 576 | 40.6% | - | - | - | 1.1 | 16.4 | 4.9 | 5.2 |
| J1:2/2+J1:2/3 | Newgate Ln Internal Right Ahead | U | C1:B | | 1 | 31 | - | 296 | 1965:1800 | 595 | 49.7% | - | - | - | 2.4 | 29.6 | 4.7 | 5.2 |
| J1:3/1 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 761 | 1800 | 1530 | 49.7% | - | - | - | 0.6 | 2.8 | 4.1 | 4.6 |
| J1:3/2 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 856 | 3600 | 3060 | 28.0% | - | - | - | 0.3 | 1.2 | 1.2 | 1.4 |
| J1:5/2+J1:5/1 | Rowner Rd Entry Ahead Left | U | C1:F | | 1 | 60 | - | 870 | 2105:1951 | 1500 | 58.0% | - | - | - | 3.0 | 12.6 | 6.3 | 6.9 |
| J1:5/3 | Rowner Rd Entry Ahead | U | C1:F | | 1 | 60 | - | 419 | 2105 | 1284 | 32.6% | - | - | - | 1.3 | 11.6 | 5.6 | 5.8 |
| J1:6/1 | Rowner Rd Internal Ahead | U | C1:G | | 1 | 30 | - | 307 | 1991 | 617 | 49.7% | - | - | - | 3.6 | 41.9 | 8.0 | 8.5 |
| J1:6/2 | Rowner Rd Internal Right Ahead | U | C1:G | | 1 | 30 | - | 354 | 2255 | 699 | 50.6% | - | - | - | 1.8 | 18.7 | 3.2 | 3.7 |
| J1:7/1 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 460 | 1800 | 1458 | 31.6% | - | - | - | 0.4 | 3.2 | 1.6 | 1.8 |
| J1:7/2 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 260 | 1965 | 1592 | 16.3% | - | - | - | 0.1 | 1.7 | 0.2 | 0.3 |
| J1:8/1 | Broom Way Entry Ahead Left | U | C1:H | | 1 | 51 | - | 494 | 1928 | 1003 | 49.3% | - | - | - | 2.6 | 19.0 | 8.8 | 9.3 |

| | | | | | | | | | | | | | | | | | | |
|---------|---------------------------------------|---|------|--|---|----|---|------|------|------|-------|-----|---|---|-----|------|------|------|
| J1:8/2 | Broom Way Entry Ahead | U | C1:H | | 1 | 51 | - | 644 | 2105 | 1095 | 58.8% | - | - | - | 3.7 | 20.6 | 12.3 | 13.1 |
| J1:9/1 | Broom Way Internal Ahead | U | C1:I | | 1 | 39 | - | 449 | 2155 | 862 | 52.1% | - | - | - | 2.6 | 20.6 | 6.2 | 6.7 |
| J1:9/2 | Broom Way Internal Right | U | C1:I | | 1 | 39 | - | 420 | 2092 | 837 | 50.2% | - | - | - | 2.2 | 18.5 | 3.4 | 3.9 |
| J1:9/3 | Broom Way Internal Right | U | C1:I | | 1 | 39 | - | 419 | 1800 | 720 | 58.2% | - | - | - | 2.4 | 20.4 | 4.2 | 4.9 |
| J1:10/1 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 308 | 1965 | 1631 | 18.9% | - | - | - | 0.1 | 1.4 | 0.0 | 0.1 |
| J1:10/2 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 354 | 2105 | 1747 | 20.3% | - | - | - | 0.2 | 1.7 | 0.4 | 0.5 |
| J1:11/1 | Brrom Way Exit | U | - | | - | - | - | 308 | 2000 | 2000 | 15.4% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:11/2 | Brrom Way Exit | U | - | | - | - | - | 354 | 2000 | 2000 | 17.7% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:12/1 | Gosport Rd Entry Left | O | - | | - | - | - | 103 | 1940 | 1294 | 8.0% | 103 | 0 | 0 | 0.0 | 1.5 | 0.0 | 0.0 |
| J1:12/2 | Gosport Rd Entry Ahead | O | - | | - | - | - | 323 | 2500 | 760 | 42.5% | 323 | 0 | 0 | 1.1 | 12.3 | 3.1 | 3.5 |
| J1:13/1 | Gosport Rd Internal Ahead | U | - | | - | - | - | 658 | 1896 | 1896 | 34.7% | - | - | - | 0.3 | 1.5 | 1.1 | 1.3 |
| J1:13/2 | Gosport Rd Internal Right Ahead | U | - | | - | - | - | 1063 | 2124 | 2124 | 50.0% | - | - | - | 0.5 | 1.7 | 10.0 | 10.5 |
| J1:14/1 | Gosport Rd Exit Ahead | U | - | | - | - | - | 705 | 2015 | 2015 | 35.0% | - | - | - | 0.3 | 1.4 | 5.1 | 5.4 |
| J2:1/1 | Gosport Rd E/B Ped Ahead | U | C2:A | | 1 | 80 | - | 426 | 2015 | 1632 | 26.1% | - | - | - | 0.4 | 3.8 | 2.8 | 3.0 |
| J2:2/1 | Gosport Rd W/B Ped Ahead | U | C2:B | | 1 | 80 | - | 705 | 2015 | 1632 | 43.2% | - | - | - | 0.5 | 2.7 | 1.3 | 1.7 |
| J2:4/1 | Gosport Rd E/B Exit Ahead | U | - | | - | - | - | 426 | 2015 | 2015 | 21.1% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |

| | | | | | | | | | | | | | | | | | | |
|-------|------------------|---|------|--|---|----|---|---|---|------|------|---|---|---|-----|-----|---|-----|
| J2:P1 | Unnamed Ped Link | - | C2:C | | 1 | 5 | - | 0 | - | 1000 | 0.0% | - | - | - | 0.0 | 0.0 | - | 0.0 |
| J1:P1 | Unnamed Ped Link | - | C1:C | | 1 | 28 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P2 | Unnamed Ped Link | - | C1:E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P3 | Unnamed Ped Link | - | C1:J | | 1 | 36 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P4 | Unnamed Ped Link | - | C1:L | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

| | | | | | | |
|----------------------|---------------------------------------|-------|---|-------|----------------|-----|
| C1 - Peel Common Rbt | Stream: 1 PRC for Signalled Lanes (%) | 80.4 | Total Delay for Signalled Lanes (pcuHr) | 6.41 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 2 PRC for Signalled Lanes (%) | 80.9 | Total Delay for Signalled Lanes (pcuHr) | 0.87 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 3 PRC for Signalled Lanes (%) | 55.2 | Total Delay for Signalled Lanes (pcuHr) | 9.79 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 4 PRC for Signalled Lanes (%) | 53.0 | Total Delay for Signalled Lanes (pcuHr) | 13.39 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 5 PRC for Signalled Lanes (%) | 344.2 | Total Delay for Signalled Lanes (pcuHr) | 0.28 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 6 PRC for Signalled Lanes (%) | 185.3 | Total Delay for Signalled Lanes (pcuHr) | 0.54 | Cycle Time (s) | 100 |
| C2 - Gosport Rd Ped. | PRC for Signalled Lanes (%) | 108.4 | Total Delay for Signalled Lanes (pcuHr) | 0.97 | Cycle Time (s) | 100 |
| | PRC Over All Lanes (%) | 53.0 | Total Delay Over All Lanes(pcuHr) | 34.79 | | |

Scenario 2: '2019 DS1 BASE PM' (FG2: '2019 DS1 BASE PM', Plan 1: 'Stage Plan 1')

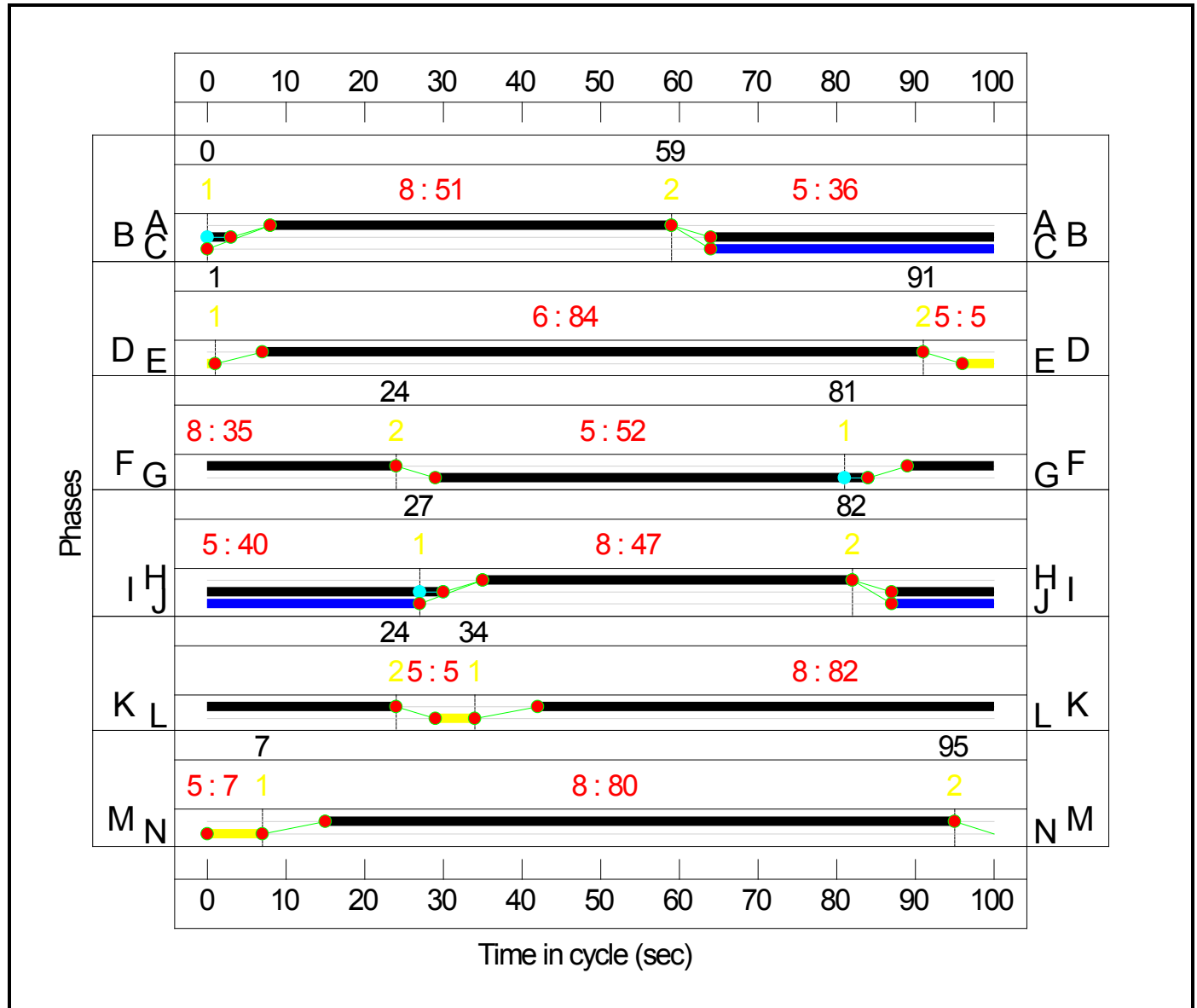
Traffic Flows, Actual

Actual Flow :

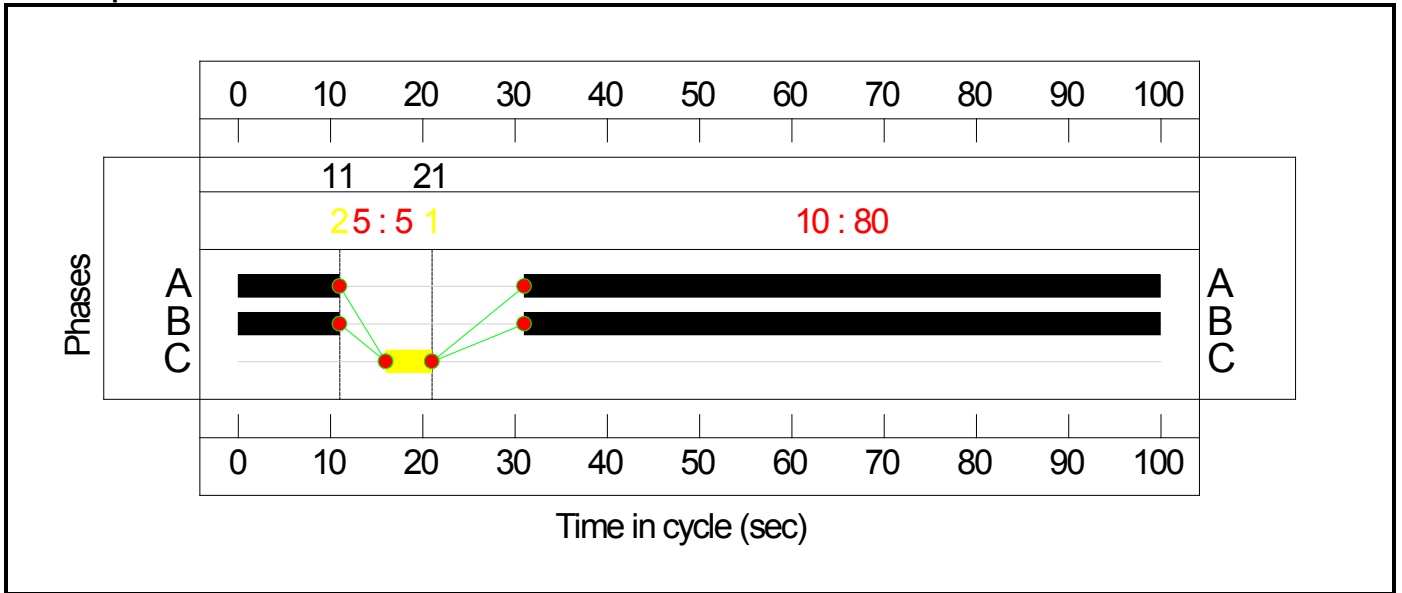
| | | Destination | | | | |
|--------|------|-------------|------|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 633 | 556 | 161 | 1350 |
| | B | 523 | 0 | 71 | 149 | 743 |
| | C | 306 | 224 | 0 | 181 | 711 |
| | D | 95 | 334 | 305 | 0 | 734 |
| | Tot. | 924 | 1191 | 932 | 491 | 3538 |

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln Entry Ahead Left | U | C1:A | | 1 | 51 | - | 942 | 2063:1868 | 1394 | 67.6% | - | - | - | 5.1 | 19.4 | 11.1 | 12.2 |
| J1:1/3 | Newgate Ln Entry Ahead | U | C1:A | | 1 | 51 | - | 408 | 1800 | 936 | 43.6% | - | - | - | 2.1 | 18.3 | 7.0 | 7.4 |
| J1:2/1 | Newgate Ln Internal Ahead | U | C1:B | | 1 | 39 | - | 243 | 1800 | 720 | 33.8% | - | - | - | 1.1 | 16.4 | 5.4 | 5.6 |
| J1:2/2+J1:2/3 | Newgate Ln Internal Right Ahead | U | C1:B | | 1 | 39 | - | 620 | 1965:1800 | 930 | 66.7% | - | - | - | 3.4 | 19.6 | 8.3 | 9.3 |
| J1:3/1 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 461 | 1800 | 1530 | 30.1% | - | - | - | 0.3 | 2.0 | 0.6 | 0.8 |
| J1:3/2 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 463 | 3600 | 3060 | 15.1% | - | - | - | 0.1 | 0.8 | 0.2 | 0.3 |
| J1:5/2+J1:5/1 | Rowner Rd Entry Ahead Left | U | C1:F | | 1 | 35 | - | 484 | 2105:1942 | 988 | 49.0% | - | - | - | 3.6 | 26.8 | 5.4 | 5.8 |
| J1:5/3 | Rowner Rd Entry Ahead | U | C1:F | | 1 | 35 | - | 259 | 2105 | 758 | 34.2% | - | - | - | 1.9 | 27.0 | 5.2 | 5.4 |
| J1:6/1 | Rowner Rd Internal Ahead | U | C1:G | | 1 | 55 | - | 465 | 1991 | 1115 | 41.7% | - | - | - | 1.3 | 10.4 | 7.5 | 7.8 |
| J1:6/2 | Rowner Rd Internal Right Ahead | U | C1:G | | 1 | 55 | - | 557 | 2255 | 1263 | 44.1% | - | - | - | 1.9 | 12.5 | 10.1 | 10.5 |
| J1:7/1 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 586 | 1800 | 1458 | 40.2% | - | - | - | 0.4 | 2.6 | 0.6 | 0.9 |
| J1:7/2 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 605 | 1965 | 1592 | 38.0% | - | - | - | 0.5 | 3.0 | 2.0 | 2.3 |
| J1:8/1 | Broom Way Entry Ahead Left | U | C1:H | | 1 | 47 | - | 283 | 1919 | 921 | 30.7% | - | - | - | 1.5 | 18.7 | 4.7 | 4.9 |

| | | | | | | | | | | | | | | | | | | |
|---------|---------------------------------|---|------|--|---|----|---|-----|------|------|-------|-----|---|---|-----|------|-----|-----|
| J1:8/2 | Broom Way Entry Ahead | U | C1:H | | 1 | 47 | - | 428 | 2105 | 1010 | 42.4% | - | - | - | 2.4 | 20.1 | 7.7 | 8.1 |
| J1:9/1 | Broom Way Internal Ahead | U | C1:I | | 1 | 43 | - | 310 | 2155 | 948 | 32.7% | - | - | - | 1.9 | 22.5 | 4.9 | 5.1 |
| J1:9/2 | Broom Way Internal Right | U | C1:I | | 1 | 43 | - | 264 | 2092 | 920 | 28.7% | - | - | - | 0.2 | 3.0 | 0.0 | 0.2 |
| J1:9/3 | Broom Way Internal Right | U | C1:I | | 1 | 43 | - | 259 | 1800 | 792 | 32.7% | - | - | - | 0.3 | 3.8 | 3.7 | 4.0 |
| J1:10/1 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 468 | 1965 | 1631 | 28.7% | - | - | - | 0.2 | 1.6 | 0.0 | 0.2 |
| J1:10/2 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 464 | 2105 | 1747 | 26.6% | - | - | - | 0.2 | 1.7 | 0.3 | 0.5 |
| J1:11/1 | Brrom Way Exit | U | - | | - | - | - | 468 | 2000 | 2000 | 23.4% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Brrom Way Exit | U | - | | - | - | - | 464 | 2000 | 2000 | 23.2% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:12/1 | Gosport Rd Entry Left | O | - | | - | - | - | 95 | 1940 | 1358 | 7.0% | 95 | 0 | 0 | 0.0 | 1.4 | 0.0 | 0.0 |
| J1:12/2 | Gosport Rd Entry Ahead | O | - | | - | - | - | 639 | 2500 | 1247 | 51.2% | 639 | 0 | 0 | 1.4 | 8.1 | 6.8 | 7.3 |
| J1:13/1 | Gosport Rd Internal Ahead | U | - | | - | - | - | 366 | 1896 | 1896 | 19.3% | - | - | - | 0.1 | 1.2 | 0.0 | 0.1 |
| J1:13/2 | Gosport Rd Internal Right Ahead | U | - | | - | - | - | 687 | 2104 | 2104 | 32.7% | - | - | - | 0.2 | 1.3 | 4.7 | 4.9 |
| J1:14/1 | Gosport Rd Exit Ahead | U | - | | - | - | - | 491 | 2015 | 2015 | 24.4% | - | - | - | 0.2 | 1.2 | 2.8 | 3.0 |
| J2:1/1 | Gosport Rd E/B Ped Ahead | U | C2:A | | 1 | 80 | - | 734 | 2015 | 1632 | 45.0% | - | - | - | 1.0 | 4.8 | 5.9 | 6.3 |
| J2:2/1 | Gosport Rd W/B Ped Ahead | U | C2:B | | 1 | 80 | - | 491 | 2015 | 1632 | 30.1% | - | - | - | 0.3 | 2.3 | 0.9 | 1.1 |
| J2:4/1 | Gosport Rd E/B Exit Ahead | U | - | | - | - | - | 734 | 2015 | 2015 | 36.4% | - | - | - | 0.3 | 1.4 | 0.0 | 0.3 |

| | | | | | | | | | | | | | | | | | | |
|-------|------------------|---|------|----------------------|-----------|-----------------------------|-------|--|---|------|------|-------|-----------------|---|-----|-----|-----|-----|
| J2:P1 | Unnamed Ped Link | - | C2:C | | 1 | 5 | - | 0 | - | 1000 | 0.0% | - | - | - | 0.0 | 0.0 | - | 0.0 |
| J1:P1 | Unnamed Ped Link | - | C1:C | | 1 | 36 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P2 | Unnamed Ped Link | - | C1:E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P3 | Unnamed Ped Link | - | C1:J | | 1 | 40 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P4 | Unnamed Ped Link | - | C1:L | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| | | | | C1 - Peel Common Rbt | Stream: 1 | PRC for Signalled Lanes (%) | 33.2 | Total Delay for Signalled Lanes (pcuHr): | | | | 11.64 | Cycle Time (s): | | | | 100 | |
| | | | | C1 - Peel Common Rbt | Stream: 2 | PRC for Signalled Lanes (%) | 198.7 | Total Delay for Signalled Lanes (pcuHr): | | | | 0.36 | Cycle Time (s): | | | | 100 | |
| | | | | C1 - Peel Common Rbt | Stream: 3 | PRC for Signalled Lanes (%) | 83.7 | Total Delay for Signalled Lanes (pcuHr): | | | | 8.82 | Cycle Time (s): | | | | 100 | |
| | | | | C1 - Peel Common Rbt | Stream: 4 | PRC for Signalled Lanes (%) | 112.5 | Total Delay for Signalled Lanes (pcuHr): | | | | 6.28 | Cycle Time (s): | | | | 100 | |
| | | | | C1 - Peel Common Rbt | Stream: 5 | PRC for Signalled Lanes (%) | 213.6 | Total Delay for Signalled Lanes (pcuHr): | | | | 0.42 | Cycle Time (s): | | | | 100 | |
| | | | | C1 - Peel Common Rbt | Stream: 6 | PRC for Signalled Lanes (%) | 123.9 | Total Delay for Signalled Lanes (pcuHr): | | | | 0.92 | Cycle Time (s): | | | | 100 | |
| | | | | C2 - Gosport Rd Ped. | | PRC for Signalled Lanes (%) | 100.1 | Total Delay for Signalled Lanes (pcuHr): | | | | 1.30 | Cycle Time (s): | | | | 100 | |
| | | | | | | PRC Over All Lanes (%) | 33.2 | Total Delay Over All Lanes(pcuHr): | | | | 32.33 | | | | | | |

Scenario 3: '2024 DS1 BASE AM' (FG3: '2024 DS1 BASE AM', Plan 1: 'Stage Plan 1')

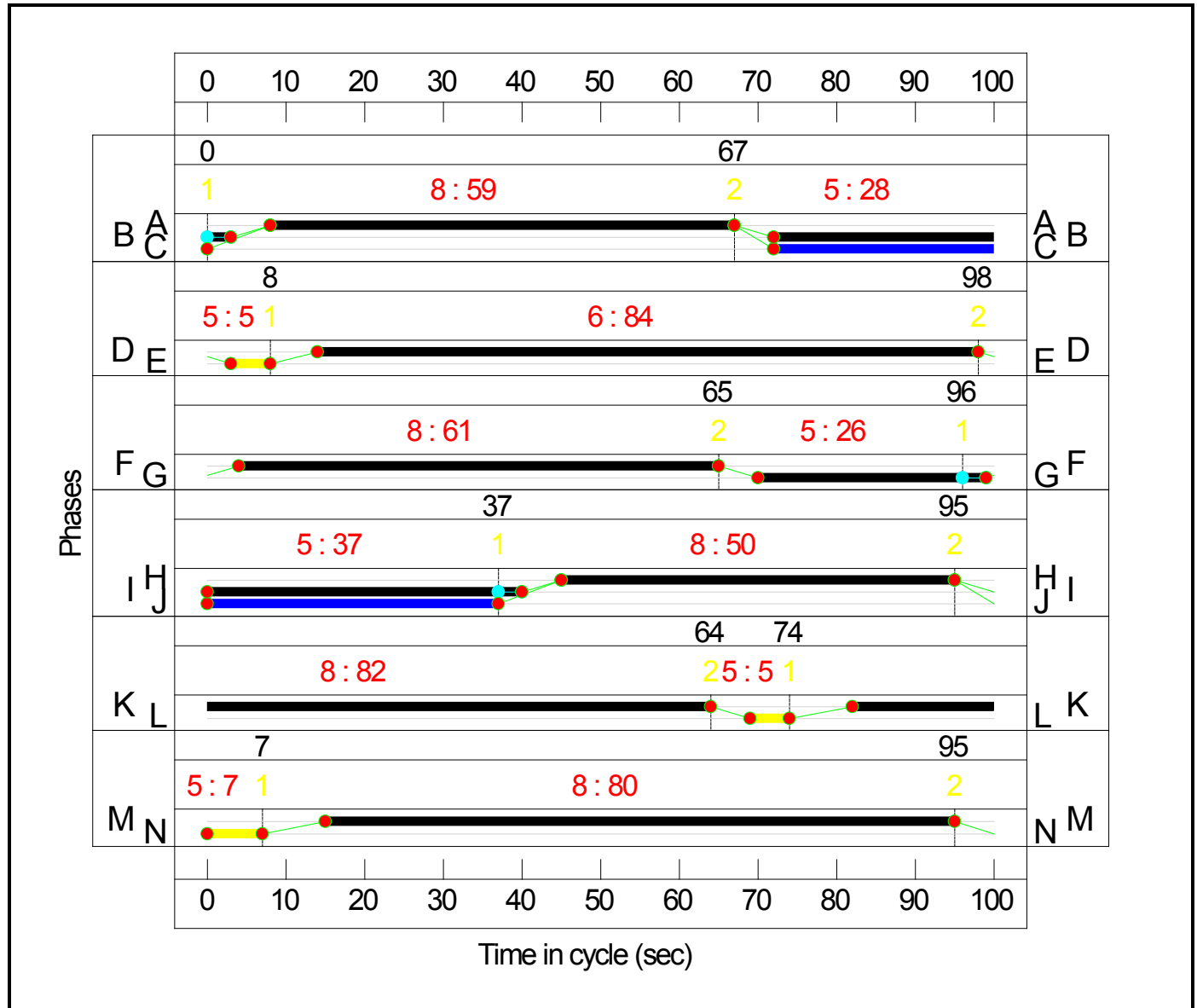
Traffic Flows, Actual

Actual Flow :

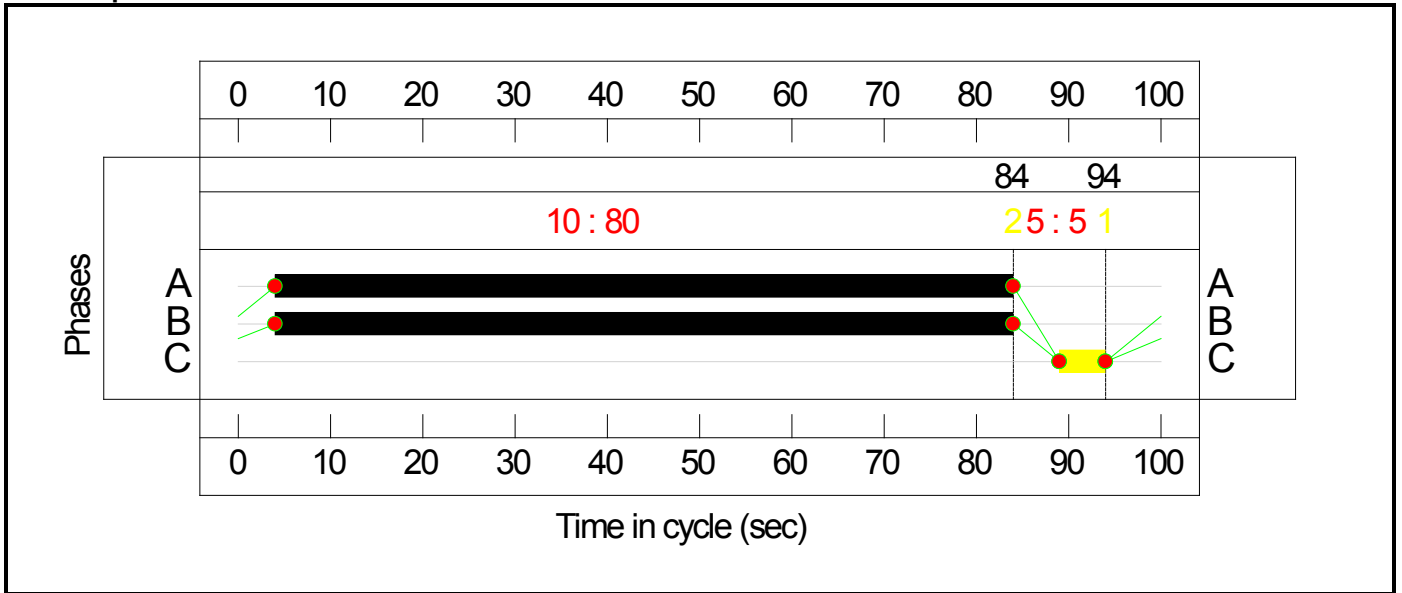
| | | Destination | | | | |
|--------|------|-------------|-----|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 476 | 454 | 110 | 1040 |
| | B | 867 | 0 | 172 | 395 | 1434 |
| | C | 718 | 300 | 0 | 276 | 1294 |
| | D | 121 | 66 | 283 | 0 | 470 |
| | Tot. | 1706 | 842 | 909 | 781 | 4238 |

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln Entry Ahead Left | U | C1:A | | 1 | 59 | - | 792 | 2057:1868 | 1480 | 53.5% | - | - | - | 2.9 | 13.0 | 8.3 | 8.8 |
| J1:1/3 | Newgate Ln Entry Ahead | U | C1:A | | 1 | 59 | - | 248 | 1800 | 1080 | 23.0% | - | - | - | 0.8 | 11.4 | 3.2 | 3.3 |
| J1:2/1 | Newgate Ln Internal Ahead | U | C1:B | | 1 | 31 | - | 301 | 1800 | 576 | 52.3% | - | - | - | 1.4 | 16.2 | 6.8 | 7.3 |
| J1:2/2+J1:2/3 | Newgate Ln Internal Right Ahead | U | C1:B | | 1 | 31 | - | 348 | 1965:1800 | 624 | 55.8% | - | - | - | 2.7 | 28.3 | 4.8 | 5.4 |
| J1:3/1 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 832 | 1800 | 1530 | 54.4% | - | - | - | 0.7 | 3.1 | 3.6 | 4.2 |
| J1:3/2 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 874 | 3600 | 3060 | 28.6% | - | - | - | 0.3 | 1.2 | 1.1 | 1.3 |
| J1:5/2+J1:5/1 | Rowner Rd Entry Ahead Left | U | C1:F | | 1 | 61 | - | 978 | 2105:1943 | 1454 | 67.3% | - | - | - | 3.7 | 13.5 | 8.9 | 9.9 |
| J1:5/3 | Rowner Rd Entry Ahead | U | C1:F | | 1 | 61 | - | 456 | 2105 | 1305 | 34.9% | - | - | - | 1.4 | 11.3 | 6.1 | 6.3 |
| J1:6/1 | Rowner Rd Internal Ahead | U | C1:G | | 1 | 29 | - | 394 | 1991 | 597 | 66.0% | - | - | - | 4.4 | 40.4 | 9.8 | 10.8 |
| J1:6/2 | Rowner Rd Internal Right Ahead | U | C1:G | | 1 | 29 | - | 453 | 2255 | 677 | 67.0% | - | - | - | 3.9 | 31.4 | 8.3 | 9.3 |
| J1:7/1 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 543 | 1800 | 1458 | 37.2% | - | - | - | 0.6 | 3.9 | 3.1 | 3.4 |
| J1:7/2 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 299 | 1965 | 1592 | 18.8% | - | - | - | 0.2 | 2.3 | 0.5 | 0.6 |
| J1:8/1 | Broom Way Entry Ahead Left | U | C1:H | | 1 | 50 | - | 576 | 1930 | 984 | 58.5% | - | - | - | 3.4 | 21.5 | 11.0 | 11.7 |

| | | | | | | | | | | | | | | | | | | |
|---------|---------------------------------|---|------|--|---|----|---|------|------|------|-------|-----|---|---|-----|------|------|------|
| J1:8/2 | Broom Way Entry Ahead | U | C1:H | | 1 | 50 | - | 718 | 2105 | 1074 | 66.9% | - | - | - | 4.6 | 23.3 | 14.8 | 15.8 |
| J1:9/1 | Broom Way Internal Ahead | U | C1:I | | 1 | 40 | - | 505 | 2155 | 884 | 57.2% | - | - | - | 2.9 | 20.6 | 7.4 | 8.1 |
| J1:9/2 | Broom Way Internal Right | U | C1:I | | 1 | 40 | - | 411 | 2092 | 858 | 47.9% | - | - | - | 2.1 | 18.2 | 3.5 | 3.9 |
| J1:9/3 | Broom Way Internal Right | U | C1:I | | 1 | 40 | - | 456 | 1800 | 738 | 61.8% | - | - | - | 2.7 | 21.0 | 5.0 | 5.8 |
| J1:10/1 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 421 | 1965 | 1631 | 25.8% | - | - | - | 0.2 | 1.6 | 0.1 | 0.3 |
| J1:10/2 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 488 | 2105 | 1747 | 27.9% | - | - | - | 0.3 | 1.9 | 0.7 | 0.9 |
| J1:11/1 | Broom Way Exit | U | - | | - | - | - | 421 | 2000 | 2000 | 21.1% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:11/2 | Broom Way Exit | U | - | | - | - | - | 488 | 2000 | 2000 | 24.4% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:12/1 | Gosport Rd Entry Left | O | - | | - | - | - | 121 | 1940 | 1282 | 9.4% | 121 | 0 | 0 | 0.1 | 1.5 | 0.0 | 0.1 |
| J1:12/2 | Gosport Rd Entry Ahead | O | - | | - | - | - | 349 | 2500 | 797 | 43.8% | 349 | 0 | 0 | 1.5 | 16.0 | 4.3 | 4.7 |
| J1:13/1 | Gosport Rd Internal Ahead | U | - | | - | - | - | 711 | 1896 | 1896 | 37.5% | - | - | - | 0.3 | 1.5 | 0.5 | 0.8 |
| J1:13/2 | Gosport Rd Internal Right Ahead | U | - | | - | - | - | 1174 | 2114 | 2114 | 55.5% | - | - | - | 0.6 | 2.0 | 13.0 | 13.6 |
| J1:14/1 | Gosport Rd Exit Ahead | U | - | | - | - | - | 781 | 2015 | 2015 | 38.8% | - | - | - | 0.3 | 1.5 | 6.3 | 6.6 |
| J2:1/1 | Gosport Rd E/B Ped Ahead | U | C2:A | | 1 | 80 | - | 470 | 2015 | 1632 | 28.8% | - | - | - | 0.5 | 3.9 | 3.1 | 3.3 |
| J2:2/1 | Gosport Rd W/B Ped Ahead | U | C2:B | | 1 | 80 | - | 781 | 2015 | 1632 | 47.9% | - | - | - | 0.6 | 2.8 | 1.8 | 2.2 |
| J2:4/1 | Gosport Rd E/B Exit Ahead | U | - | | - | - | - | 470 | 2015 | 2015 | 23.3% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|-------|------------------|---|------|--|---|----|---|---|---|------|------|---|---|---|-----|-----|---|-----|
| J2:P1 | Unnamed Ped Link | - | C2:C | | 1 | 5 | - | 0 | - | 1000 | 0.0% | - | - | - | 0.0 | 0.0 | - | 0.0 |
| J1:P1 | Unnamed Ped Link | - | C1:C | | 1 | 28 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P2 | Unnamed Ped Link | - | C1:E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P3 | Unnamed Ped Link | - | C1:J | | 1 | 37 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P4 | Unnamed Ped Link | - | C1:L | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

| | | | | | | |
|----------------------|---------------------------------------|-------|--|-------|-----------------|-----|
| C1 - Peel Common Rbt | Stream: 1 PRC for Signalled Lanes (%) | 61.3 | Total Delay for Signalled Lanes (pcuHr): | 7.74 | Cycle Time (s): | 100 |
| C1 - Peel Common Rbt | Stream: 2 PRC for Signalled Lanes (%) | 65.5 | Total Delay for Signalled Lanes (pcuHr): | 1.00 | Cycle Time (s): | 100 |
| C1 - Peel Common Rbt | Stream: 3 PRC for Signalled Lanes (%) | 33.8 | Total Delay for Signalled Lanes (pcuHr): | 13.46 | Cycle Time (s): | 100 |
| C1 - Peel Common Rbt | Stream: 4 PRC for Signalled Lanes (%) | 34.6 | Total Delay for Signalled Lanes (pcuHr): | 15.71 | Cycle Time (s): | 100 |
| C1 - Peel Common Rbt | Stream: 5 PRC for Signalled Lanes (%) | 222.2 | Total Delay for Signalled Lanes (pcuHr): | 0.44 | Cycle Time (s): | 100 |
| C1 - Peel Common Rbt | Stream: 6 PRC for Signalled Lanes (%) | 141.7 | Total Delay for Signalled Lanes (pcuHr): | 0.78 | Cycle Time (s): | 100 |
| C2 - Gosport Rd Ped. | PRC for Signalled Lanes (%) | 88.1 | Total Delay for Signalled Lanes (pcuHr): | 1.12 | Cycle Time (s): | 100 |
| | PRC Over All Lanes (%) | 33.8 | Total Delay Over All Lanes(pcuHr): | 43.56 | | |

Scenario 4: '2024 DS1 BASE PM' (FG4: '2024 DS1 BASE PM', Plan 1: 'Stage Plan 1')

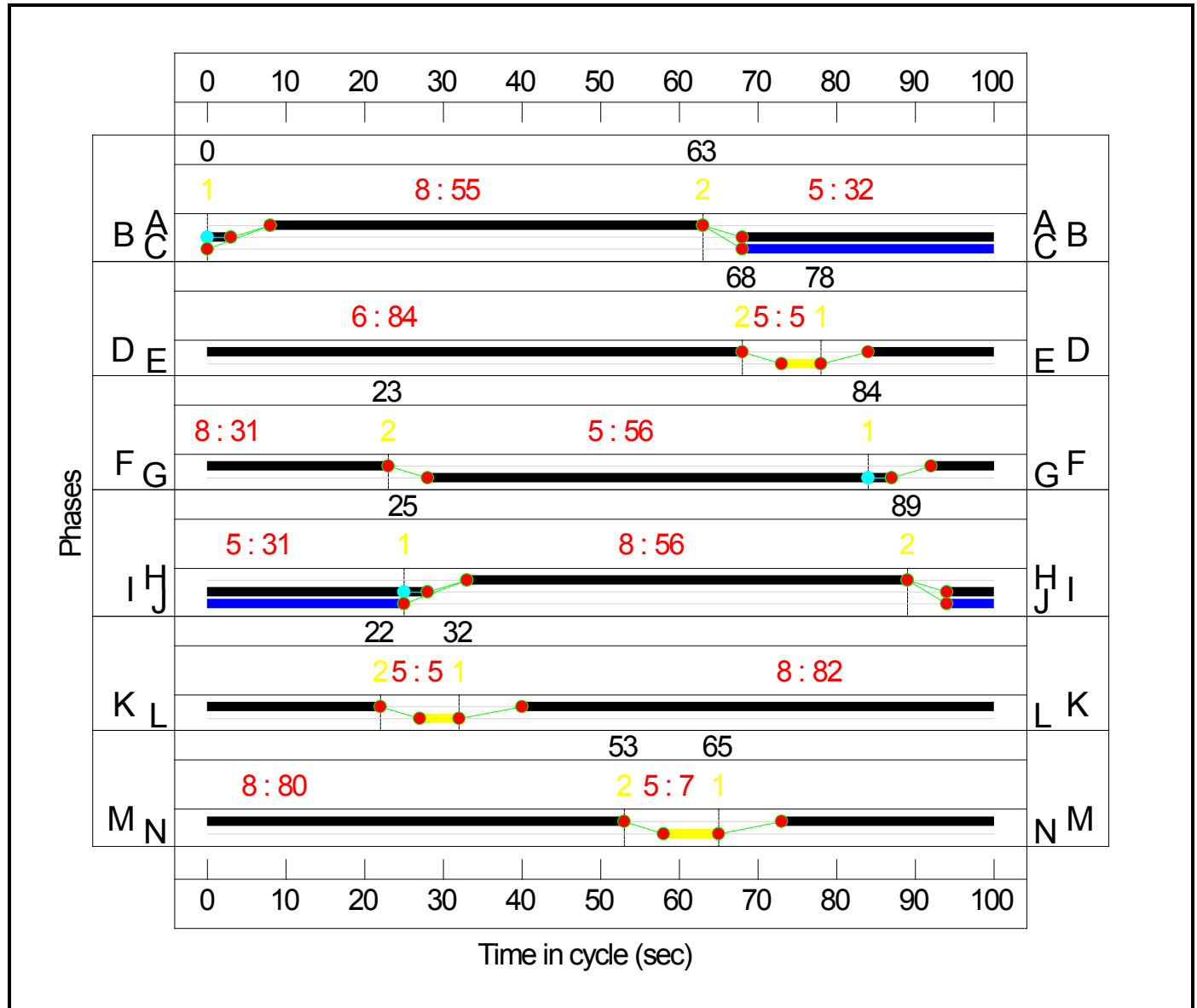
Traffic Flows, Actual

Actual Flow :

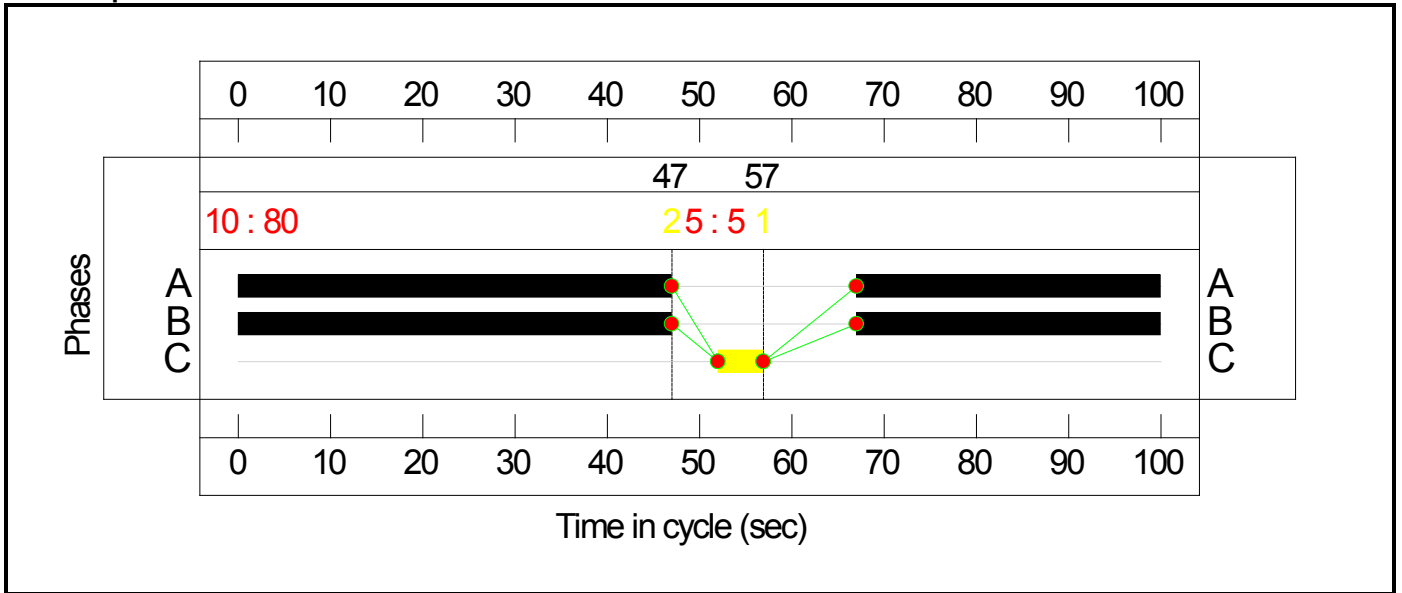
| | | Destination | | | | |
|--------|------|-------------|------|------|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 655 | 714 | 189 | 1558 |
| | B | 541 | 0 | 156 | 173 | 870 |
| | C | 338 | 318 | 0 | 198 | 854 |
| | D | 113 | 358 | 319 | 0 | 790 |
| | Tot. | 992 | 1331 | 1189 | 560 | 4072 |

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln Entry Ahead Left | U | C1:A | | 1 | 55 | - | 1030 | 2059:1868 | 1441 | 71.5% | - | - | - | 5.1 | 17.9 | 12.3 | 13.5 |
| J1:1/3 | Newgate Ln Entry Ahead | U | C1:A | | 1 | 55 | - | 528 | 1800 | 1008 | 52.4% | - | - | - | 2.6 | 17.4 | 9.1 | 9.6 |
| J1:2/1 | Newgate Ln Internal Ahead | U | C1:B | | 1 | 35 | - | 405 | 1800 | 648 | 62.5% | - | - | - | 2.9 | 26.1 | 9.3 | 10.1 |
| J1:2/2+J1:2/3 | Newgate Ln Internal Right Ahead | U | C1:B | | 1 | 35 | - | 590 | 1965:1800 | 820 | 72.0% | - | - | - | 4.3 | 26.0 | 5.7 | 6.9 |
| J1:3/1 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 533 | 1800 | 1530 | 34.8% | - | - | - | 0.3 | 2.2 | 0.8 | 1.1 |
| J1:3/2 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 459 | 3600 | 3060 | 15.0% | - | - | - | 0.1 | 1.2 | 0.8 | 0.8 |
| J1:5/2+J1:5/1 | Rowner Rd Entry Ahead Left | U | C1:F | | 1 | 31 | - | 591 | 2105:1931 | 871 | 67.8% | - | - | - | 5.5 | 33.6 | 7.4 | 8.4 |
| J1:5/3 | Rowner Rd Entry Ahead | U | C1:F | | 1 | 31 | - | 279 | 2105 | 674 | 41.4% | - | - | - | 2.4 | 31.2 | 6.0 | 6.4 |
| J1:6/1 | Rowner Rd Internal Ahead | U | C1:G | | 1 | 59 | - | 562 | 1991 | 1195 | 47.0% | - | - | - | 1.7 | 10.8 | 9.2 | 9.6 |
| J1:6/2 | Rowner Rd Internal Right Ahead | U | C1:G | | 1 | 59 | - | 660 | 2255 | 1353 | 48.8% | - | - | - | 2.2 | 11.9 | 12.6 | 13.1 |
| J1:7/1 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 755 | 1800 | 1458 | 51.8% | - | - | - | 0.8 | 3.6 | 2.2 | 2.7 |
| J1:7/2 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 576 | 1965 | 1592 | 36.2% | - | - | - | 0.5 | 2.9 | 1.7 | 2.0 |
| J1:8/1 | Broom Way Entry Ahead Left | U | C1:H | | 1 | 56 | - | 356 | 1925 | 1097 | 32.4% | - | - | - | 1.4 | 13.8 | 5.1 | 5.4 |

| | | | | | | | | | | | | | | | | | | |
|---------|---------------------------------|---|------|--|---|----|---|-----|------|------|-------|-----|---|---|-----|------|-----|-----|
| J1:8/2 | Broom Way Entry Ahead | U | C1:H | | 1 | 56 | - | 498 | 2105 | 1200 | 41.5% | - | - | - | 2.0 | 14.7 | 7.7 | 8.1 |
| J1:9/1 | Broom Way Internal Ahead | U | C1:I | | 1 | 34 | - | 362 | 2155 | 754 | 48.0% | - | - | - | 2.8 | 28.3 | 8.0 | 8.5 |
| J1:9/2 | Broom Way Internal Right | U | C1:I | | 1 | 34 | - | 262 | 2092 | 732 | 35.8% | - | - | - | 0.3 | 4.3 | 0.1 | 0.3 |
| J1:9/3 | Broom Way Internal Right | U | C1:I | | 1 | 34 | - | 279 | 1800 | 630 | 44.3% | - | - | - | 0.5 | 5.9 | 4.7 | 5.1 |
| J1:10/1 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 588 | 1965 | 1631 | 36.1% | - | - | - | 0.3 | 1.9 | 0.2 | 0.5 |
| J1:10/2 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 601 | 2105 | 1747 | 34.4% | - | - | - | 0.4 | 2.2 | 0.9 | 1.2 |
| J1:11/1 | Broom Way Exit | U | - | | - | - | - | 588 | 2000 | 2000 | 29.4% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:11/2 | Broom Way Exit | U | - | | - | - | - | 601 | 2000 | 2000 | 30.1% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:12/1 | Gosport Rd Entry Left | O | - | | - | - | - | 113 | 1940 | 1347 | 8.4% | 113 | 0 | 0 | 0.0 | 1.5 | 0.0 | 0.0 |
| J1:12/2 | Gosport Rd Entry Ahead | O | - | | - | - | - | 677 | 2500 | 1050 | 64.5% | 677 | 0 | 0 | 1.7 | 8.9 | 5.8 | 6.7 |
| J1:13/1 | Gosport Rd Internal Ahead | U | - | | - | - | - | 420 | 1896 | 1896 | 22.2% | - | - | - | 0.1 | 1.2 | 0.0 | 0.1 |
| J1:13/2 | Gosport Rd Internal Right Ahead | U | - | | - | - | - | 777 | 2091 | 2091 | 37.2% | - | - | - | 0.3 | 1.4 | 5.3 | 5.6 |
| J1:14/1 | Gosport Rd Exit Ahead | U | - | | - | - | - | 560 | 2015 | 2015 | 27.8% | - | - | - | 0.2 | 1.4 | 6.3 | 6.5 |
| J2:1/1 | Gosport Rd E/B Ped Ahead | U | C2:A | | 1 | 80 | - | 790 | 2015 | 1632 | 48.4% | - | - | - | 1.1 | 5.1 | 6.8 | 7.3 |
| J2:2/1 | Gosport Rd W/B Ped Ahead | U | C2:B | | 1 | 80 | - | 560 | 2015 | 1632 | 34.3% | - | - | - | 0.4 | 2.6 | 1.3 | 1.6 |
| J2:4/1 | Gosport Rd E/B Exit Ahead | U | - | | - | - | - | 790 | 2015 | 2015 | 39.2% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |

| | | | | | | | | | | | | | | | | | | |
|-------|------------------|---|------|--|---|----|---|---|---|------|------|---|---|---|-----|-----|---|-----|
| J2:P1 | Unnamed Ped Link | - | C2:C | | 1 | 5 | - | 0 | - | 1000 | 0.0% | - | - | - | 0.0 | 0.0 | - | 0.0 |
| J1:P1 | Unnamed Ped Link | - | C1:C | | 1 | 32 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P2 | Unnamed Ped Link | - | C1:E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P3 | Unnamed Ped Link | - | C1:J | | 1 | 31 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P4 | Unnamed Ped Link | - | C1:L | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

| | | | | | | |
|----------------------|---------------------------------------|-------|---|-------|----------------|-----|
| C1 - Peel Common Rbt | Stream: 1 PRC for Signalled Lanes (%) | 25.0 | Total Delay for Signalled Lanes (pcuHr) | 14.89 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 2 PRC for Signalled Lanes (%) | 158.3 | Total Delay for Signalled Lanes (pcuHr) | 0.48 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 3 PRC for Signalled Lanes (%) | 32.7 | Total Delay for Signalled Lanes (pcuHr) | 11.80 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 4 PRC for Signalled Lanes (%) | 87.5 | Total Delay for Signalled Lanes (pcuHr) | 7.01 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 5 PRC for Signalled Lanes (%) | 149.6 | Total Delay for Signalled Lanes (pcuHr) | 0.67 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 6 PRC for Signalled Lanes (%) | 73.8 | Total Delay for Signalled Lanes (pcuHr) | 1.21 | Cycle Time (s) | 100 |
| C2 - Gosport Rd Ped. | PRC for Signalled Lanes (%) | 85.9 | Total Delay for Signalled Lanes (pcuHr) | 1.52 | Cycle Time (s) | 100 |
| | PRC Over All Lanes (%) | 25.0 | Total Delay Over All Lanes(pcuHr) | 40.70 | | |

Scenario 5: '2024 DS1 BASE + DEV AM' (FG5: '2024 DS1 BASE + DEV AM', Plan 1: 'Stage Plan 1')

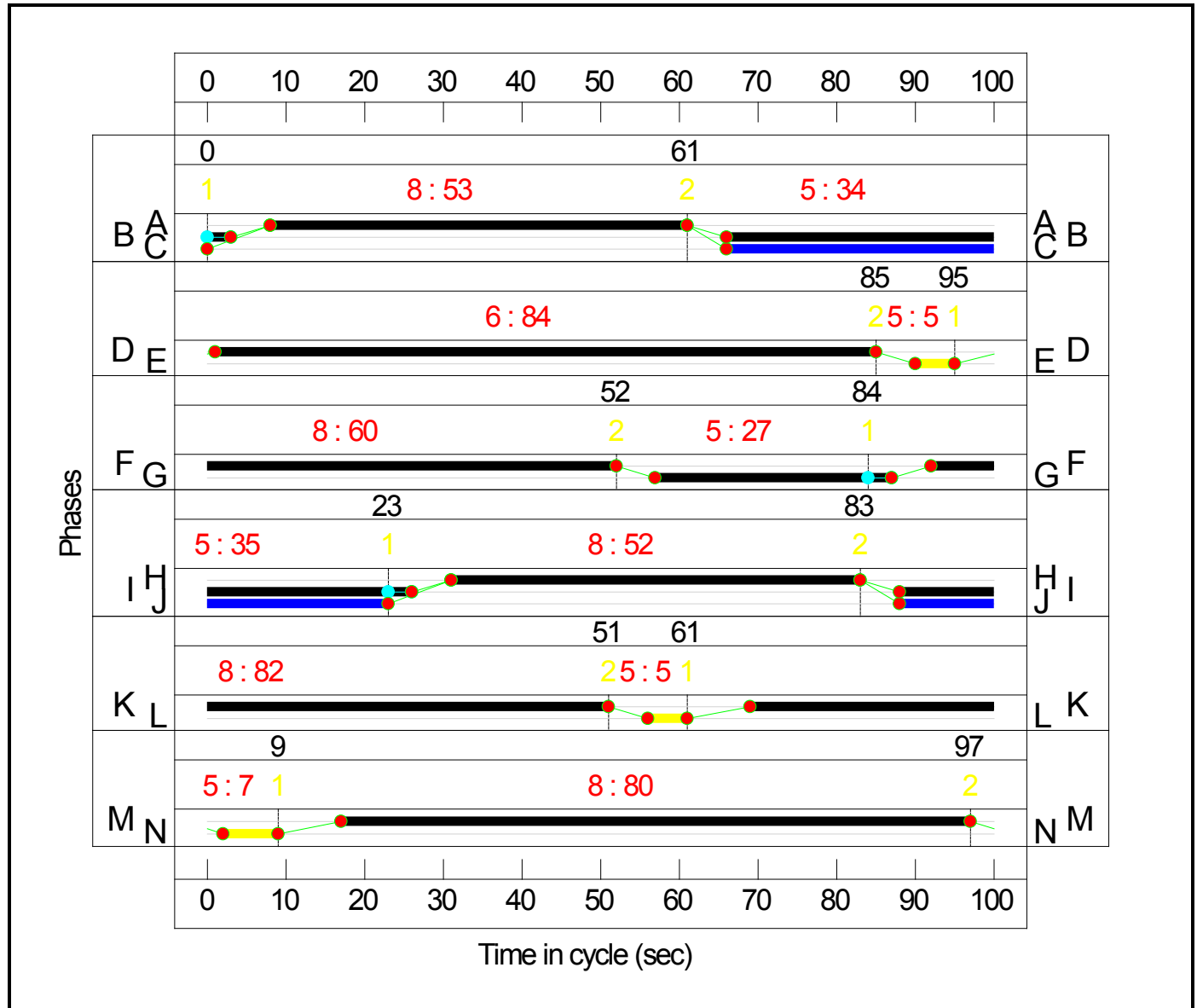
Traffic Flows, Actual

Actual Flow :

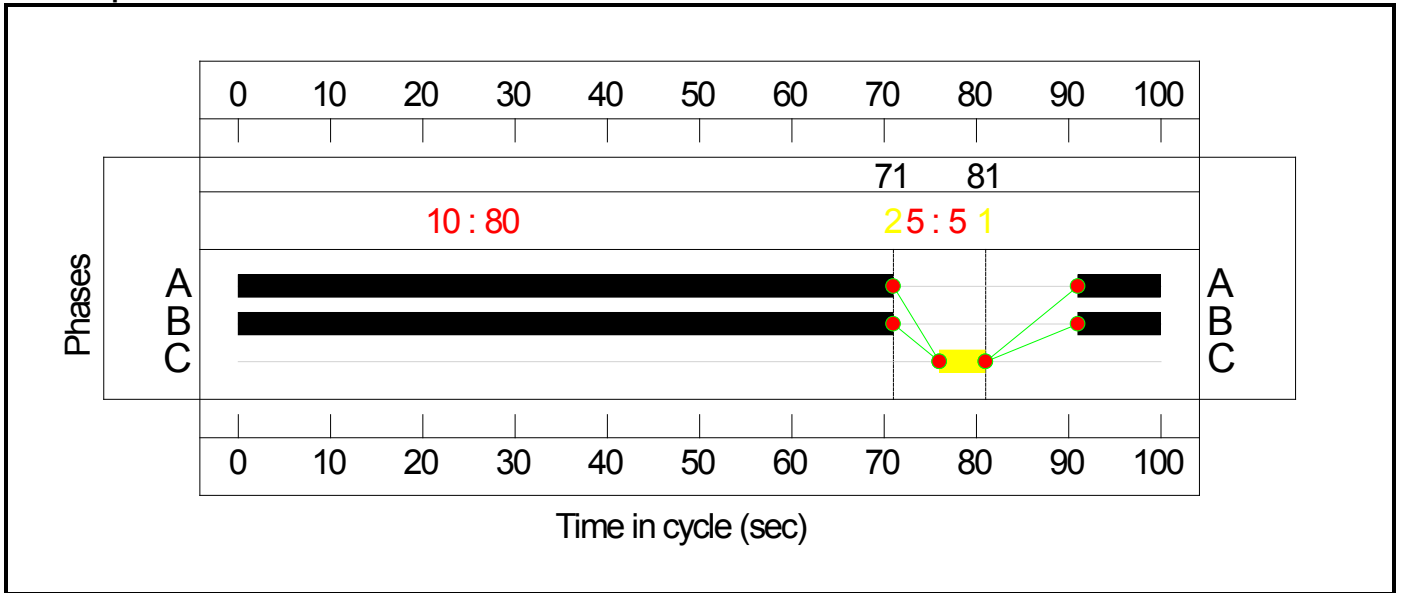
| | | Destination | | | | |
|--------|------|-------------|-----|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 504 | 472 | 115 | 1091 |
| | B | 872 | 0 | 172 | 395 | 1439 |
| | C | 723 | 300 | 0 | 276 | 1299 |
| | D | 122 | 66 | 283 | 0 | 471 |
| | Tot. | 1717 | 870 | 927 | 786 | 4300 |

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln Entry Ahead Left | U | C1:A | | 1 | 53 | - | 819 | 2058:1868 | 1370 | 59.8% | - | - | - | 3.9 | 17.1 | 9.8 | 10.6 |
| J1:1/3 | Newgate Ln Entry Ahead | U | C1:A | | 1 | 53 | - | 272 | 1800 | 972 | 28.0% | - | - | - | 1.1 | 15.0 | 4.1 | 4.3 |
| J1:2/1 | Newgate Ln Internal Ahead | U | C1:B | | 1 | 37 | - | 301 | 1800 | 684 | 44.0% | - | - | - | 1.6 | 19.5 | 7.2 | 7.6 |
| J1:2/2+J1:2/3 | Newgate Ln Internal Right Ahead | U | C1:B | | 1 | 37 | - | 348 | 1965:1800 | 733 | 47.5% | - | - | - | 2.0 | 21.0 | 7.0 | 7.5 |
| J1:3/1 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 838 | 1800 | 1530 | 54.8% | - | - | - | 0.7 | 3.1 | 3.6 | 4.2 |
| J1:3/2 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 879 | 3600 | 3060 | 28.7% | - | - | - | 0.3 | 1.2 | 1.1 | 1.3 |
| J1:5/2+J1:5/1 | Rowner Rd Entry Ahead Left | U | C1:F | | 1 | 60 | - | 981 | 2105:1943 | 1436 | 68.3% | - | - | - | 3.9 | 14.2 | 9.4 | 10.5 |
| J1:5/3 | Rowner Rd Entry Ahead | U | C1:F | | 1 | 60 | - | 458 | 2105 | 1284 | 35.7% | - | - | - | 1.5 | 11.9 | 6.2 | 6.5 |
| J1:6/1 | Rowner Rd Internal Ahead | U | C1:G | | 1 | 30 | - | 394 | 1991 | 617 | 63.8% | - | - | - | 3.6 | 33.1 | 9.2 | 10.1 |
| J1:6/2 | Rowner Rd Internal Right Ahead | U | C1:G | | 1 | 30 | - | 476 | 2255 | 699 | 68.1% | - | - | - | 4.2 | 31.5 | 8.7 | 9.8 |
| J1:7/1 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 558 | 1800 | 1458 | 38.3% | - | - | - | 0.4 | 2.6 | 0.7 | 1.0 |
| J1:7/2 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 312 | 1965 | 1592 | 19.6% | - | - | - | 0.1 | 1.6 | 0.3 | 0.4 |
| J1:8/1 | Broom Way Entry Ahead Left | U | C1:H | | 1 | 52 | - | 578 | 1930 | 1023 | 56.5% | - | - | - | 3.2 | 19.8 | 10.8 | 11.4 |

| | | | | | | | | | | | | | | | | | | |
|---------|---------------------------------------|---|------|--|---|----|---|------|------|------|-------|-----|---|---|-----|------|------|------|
| J1:8/2 | Broom Way Entry Ahead | U | C1:H | | 1 | 52 | - | 721 | 2105 | 1116 | 64.6% | - | - | - | 4.3 | 21.3 | 14.2 | 15.1 |
| J1:9/1 | Broom Way Internal Ahead | U | C1:I | | 1 | 38 | - | 510 | 2155 | 840 | 60.7% | - | - | - | 3.1 | 21.9 | 8.4 | 9.2 |
| J1:9/2 | Broom Way Internal Right | U | C1:I | | 1 | 38 | - | 414 | 2092 | 816 | 50.7% | - | - | - | 2.3 | 19.7 | 3.6 | 4.1 |
| J1:9/3 | Broom Way Internal Right | U | C1:I | | 1 | 38 | - | 458 | 1800 | 702 | 65.2% | - | - | - | 2.9 | 23.0 | 5.1 | 6.1 |
| J1:10/1 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 426 | 1965 | 1631 | 26.1% | - | - | - | 0.2 | 1.6 | 0.1 | 0.3 |
| J1:10/2 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 501 | 2105 | 1747 | 28.7% | - | - | - | 0.3 | 1.9 | 0.6 | 0.8 |
| J1:11/1 | Brrom Way Exit | U | - | | - | - | - | 426 | 2000 | 2000 | 21.3% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:11/2 | Brrom Way Exit | U | - | | - | - | - | 501 | 2000 | 2000 | 25.1% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:12/1 | Gosport Rd Entry Left | O | - | | - | - | - | 122 | 1940 | 1281 | 9.5% | 122 | 0 | 0 | 0.1 | 1.6 | 0.0 | 0.1 |
| J1:12/2 | Gosport Rd Entry Ahead | O | - | | - | - | - | 349 | 2500 | 808 | 43.2% | 349 | 0 | 0 | 1.4 | 14.6 | 3.9 | 4.3 |
| J1:13/1 | Gosport Rd Internal Ahead | U | - | | - | - | - | 716 | 1896 | 1896 | 37.8% | - | - | - | 0.3 | 1.5 | 0.5 | 0.8 |
| J1:13/2 | Gosport Rd Internal Right Ahead | U | - | | - | - | - | 1179 | 2115 | 2115 | 55.7% | - | - | - | 0.6 | 2.0 | 12.4 | 13.0 |
| J1:14/1 | Gosport Rd Exit Ahead | U | - | | - | - | - | 786 | 2015 | 2015 | 39.0% | - | - | - | 0.3 | 1.6 | 6.9 | 7.2 |
| J2:1/1 | Gosport Rd E/B Ped Ahead | U | C2:A | | 1 | 80 | - | 471 | 2015 | 1632 | 28.9% | - | - | - | 0.5 | 3.9 | 3.1 | 3.3 |
| J2:2/1 | Gosport Rd W/B Ped Ahead | U | C2:B | | 1 | 80 | - | 786 | 2015 | 1632 | 48.2% | - | - | - | 0.6 | 2.8 | 1.3 | 1.8 |
| J2:4/1 | Gosport Rd E/B Exit Ahead | U | - | | - | - | - | 471 | 2015 | 2015 | 23.4% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |

| | | | | | | | | | | | | | | | | | | |
|-------|------------------|---|------|----------------------|-----------|-----------------------------|-------|--|-------|-----------------|------|---|---|---|-----|-----|---|-----|
| J2:P1 | Unnamed Ped Link | - | C2:C | | 1 | 5 | - | 0 | - | 1000 | 0.0% | - | - | - | 0.0 | 0.0 | - | 0.0 |
| J1:P1 | Unnamed Ped Link | - | C1:C | | 1 | 34 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P2 | Unnamed Ped Link | - | C1:E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P3 | Unnamed Ped Link | - | C1:J | | 1 | 35 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P4 | Unnamed Ped Link | - | C1:L | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| | | | | C1 - Peel Common Rbt | Stream: 1 | PRC for Signalled Lanes (%) | 50.5 | Total Delay for Signalled Lanes (pcuHr): | 8.69 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C1 - Peel Common Rbt | Stream: 2 | PRC for Signalled Lanes (%) | 64.3 | Total Delay for Signalled Lanes (pcuHr): | 1.03 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C1 - Peel Common Rbt | Stream: 3 | PRC for Signalled Lanes (%) | 31.7 | Total Delay for Signalled Lanes (pcuHr): | 13.17 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C1 - Peel Common Rbt | Stream: 4 | PRC for Signalled Lanes (%) | 37.9 | Total Delay for Signalled Lanes (pcuHr): | 15.74 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C1 - Peel Common Rbt | Stream: 5 | PRC for Signalled Lanes (%) | 213.9 | Total Delay for Signalled Lanes (pcuHr): | 0.45 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C1 - Peel Common Rbt | Stream: 6 | PRC for Signalled Lanes (%) | 135.2 | Total Delay for Signalled Lanes (pcuHr): | 0.54 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C2 - Gosport Rd Ped. | | PRC for Signalled Lanes (%) | 86.9 | Total Delay for Signalled Lanes (pcuHr): | 1.13 | Cycle Time (s): | 100 | | | | | | | |
| | | | | | | PRC Over All Lanes (%) | 31.7 | Total Delay Over All Lanes(pcuHr): | 43.95 | | | | | | | | | |

Scenario 6: '2024 DS1 BASE + DEV PM' (FG6: '2024 DS1 BASE + DEV PM', Plan 1: 'Stage Plan 1')

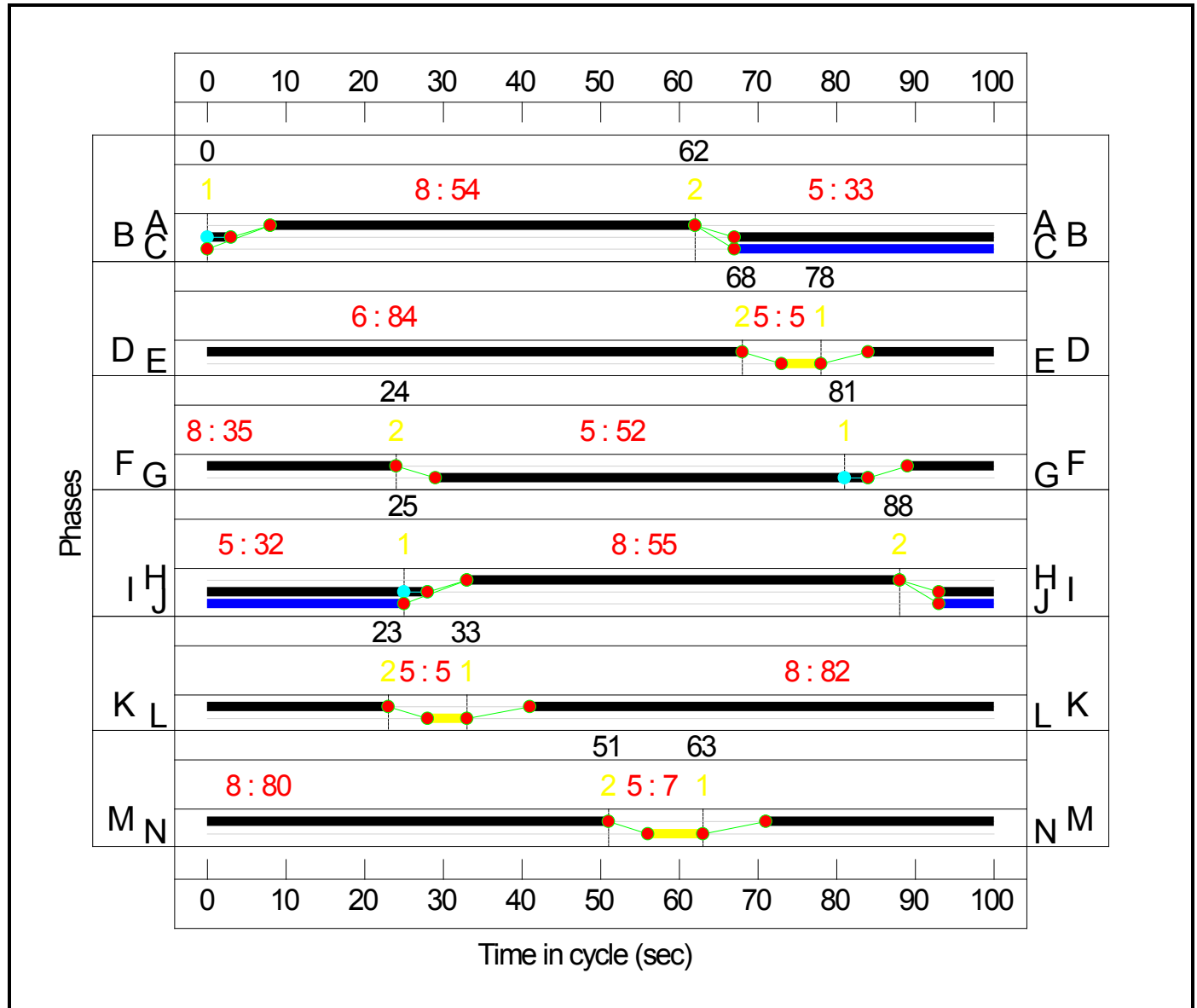
Traffic Flows, Actual

Actual Flow :

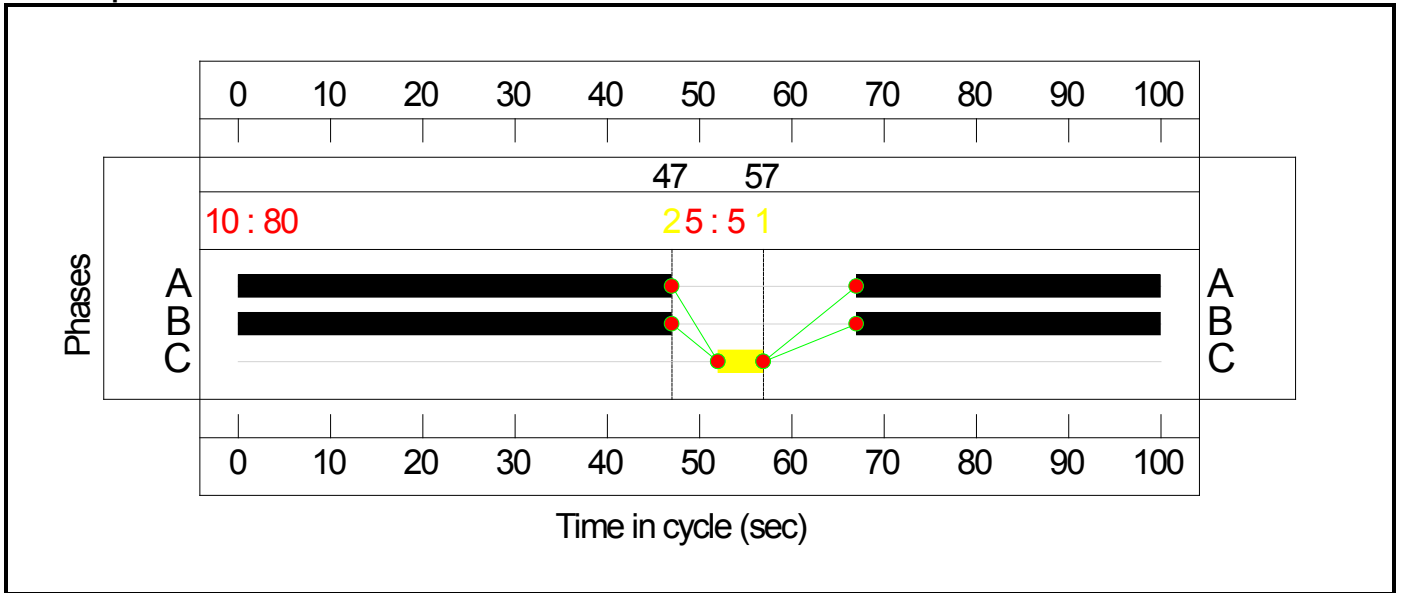
| | | Destination | | | | |
|--------|------|-------------|------|------|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 664 | 722 | 191 | 1577 |
| | B | 566 | 0 | 156 | 173 | 895 |
| | C | 352 | 318 | 0 | 198 | 868 |
| | D | 118 | 358 | 319 | 0 | 795 |
| | Tot. | 1036 | 1340 | 1197 | 562 | 4135 |

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln Entry Ahead Left | U | C1:A | | 1 | 54 | - | 1043 | 2059:1868 | 1430 | 72.9% | - | - | - | 5.5 | 18.9 | 12.7 | 14.0 |
| J1:1/3 | Newgate Ln Entry Ahead | U | C1:A | | 1 | 54 | - | 534 | 1800 | 990 | 53.9% | - | - | - | 2.7 | 18.3 | 9.3 | 9.9 |
| J1:2/1 | Newgate Ln Internal Ahead | U | C1:B | | 1 | 36 | - | 381 | 1800 | 666 | 57.2% | - | - | - | 2.5 | 23.7 | 8.7 | 9.4 |
| J1:2/2+J1:2/3 | Newgate Ln Internal Right Ahead | U | C1:B | | 1 | 36 | - | 614 | 1965:1800 | 853 | 72.0% | - | - | - | 4.3 | 25.3 | 4.8 | 6.1 |
| J1:3/1 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 558 | 1800 | 1530 | 36.5% | - | - | - | 0.4 | 2.3 | 0.8 | 1.1 |
| J1:3/2 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 478 | 3600 | 3060 | 15.6% | - | - | - | 0.2 | 1.2 | 0.8 | 0.9 |
| J1:5/2+J1:5/1 | Rowner Rd Entry Ahead Left | U | C1:F | | 1 | 35 | - | 605 | 2105:1931 | 964 | 62.8% | - | - | - | 4.9 | 29.2 | 7.0 | 7.9 |
| J1:5/3 | Rowner Rd Entry Ahead | U | C1:F | | 1 | 35 | - | 290 | 2105 | 758 | 38.3% | - | - | - | 2.2 | 27.6 | 6.0 | 6.3 |
| J1:6/1 | Rowner Rd Internal Ahead | U | C1:G | | 1 | 55 | - | 567 | 1991 | 1115 | 50.9% | - | - | - | 2.1 | 13.5 | 10.1 | 10.7 |
| J1:6/2 | Rowner Rd Internal Right Ahead | U | C1:G | | 1 | 55 | - | 665 | 2255 | 1263 | 52.7% | - | - | - | 2.6 | 14.1 | 13.4 | 14.0 |
| J1:7/1 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 743 | 1800 | 1458 | 51.0% | - | - | - | 0.7 | 3.6 | 2.2 | 2.7 |
| J1:7/2 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 597 | 1965 | 1592 | 37.5% | - | - | - | 0.5 | 2.9 | 1.7 | 2.0 |
| J1:8/1 | Broom Way Entry Ahead Left | U | C1:H | | 1 | 55 | - | 362 | 1926 | 1079 | 33.6% | - | - | - | 1.5 | 14.4 | 5.4 | 5.7 |

| | | | | | | | | | | | | | | | | | | |
|---------|---------------------------------------|---|------|--|---|----|---|-----|------|------|-------|-----|---|---|-----|------|-----|-----|
| J1:8/2 | Broom Way Entry Ahead | U | C1:H | | 1 | 55 | - | 506 | 2105 | 1179 | 42.9% | - | - | - | 2.2 | 15.4 | 8.0 | 8.4 |
| J1:9/1 | Broom Way Internal Ahead | U | C1:I | | 1 | 35 | - | 364 | 2155 | 776 | 46.9% | - | - | - | 2.8 | 28.1 | 8.8 | 9.3 |
| J1:9/2 | Broom Way Internal Right | U | C1:I | | 1 | 35 | - | 276 | 2092 | 753 | 36.6% | - | - | - | 0.4 | 4.6 | 0.1 | 0.4 |
| J1:9/3 | Broom Way Internal Right | U | C1:I | | 1 | 35 | - | 290 | 1800 | 648 | 44.8% | - | - | - | 0.5 | 6.1 | 4.6 | 5.0 |
| J1:10/1 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 593 | 1965 | 1631 | 36.4% | - | - | - | 0.3 | 1.8 | 0.1 | 0.4 |
| J1:10/2 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 604 | 2105 | 1747 | 34.6% | - | - | - | 0.3 | 2.0 | 0.7 | 1.0 |
| J1:11/1 | Brrom Way Exit | U | - | | - | - | - | 593 | 2000 | 2000 | 29.7% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:11/2 | Brrom Way Exit | U | - | | - | - | - | 604 | 2000 | 2000 | 30.2% | - | - | - | 0.2 | 1.3 | 0.0 | 0.2 |
| J1:12/1 | Gosport Rd Entry Left | O | - | | - | - | - | 118 | 1940 | 1342 | 8.8% | 118 | 0 | 0 | 0.0 | 1.5 | 0.0 | 0.0 |
| J1:12/2 | Gosport Rd Entry Ahead | O | - | | - | - | - | 677 | 2500 | 1075 | 63.0% | 677 | 0 | 0 | 1.6 | 8.5 | 5.5 | 6.3 |
| J1:13/1 | Gosport Rd Internal Ahead | U | - | | - | - | - | 440 | 1896 | 1896 | 23.2% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:13/2 | Gosport Rd Internal Right Ahead | U | - | | - | - | - | 796 | 2092 | 2092 | 38.0% | - | - | - | 0.3 | 1.4 | 5.9 | 6.2 |
| J1:14/1 | Gosport Rd Exit Ahead | U | - | | - | - | - | 562 | 2015 | 2015 | 27.9% | - | - | - | 0.2 | 1.4 | 6.9 | 7.1 |
| J2:1/1 | Gosport Rd E/B Ped Ahead | U | C2:A | | 1 | 80 | - | 795 | 2015 | 1632 | 48.7% | - | - | - | 1.1 | 5.1 | 6.8 | 7.3 |
| J2:2/1 | Gosport Rd W/B Ped Ahead | U | C2:B | | 1 | 80 | - | 562 | 2015 | 1632 | 34.4% | - | - | - | 0.4 | 2.7 | 1.4 | 1.6 |
| J2:4/1 | Gosport Rd E/B Exit Ahead | U | - | | - | - | - | 795 | 2015 | 2015 | 39.5% | - | - | - | 0.3 | 1.5 | 0.0 | 0.3 |

| | | | | | | | | | | | | | | | | | | |
|-------|------------------|---|------|----------------------|-----------|-----------------------------|-------|--|-------|-----------------|------|---|---|---|-----|-----|---|-----|
| J2:P1 | Unnamed Ped Link | - | C2:C | | 1 | 5 | - | 0 | - | 1000 | 0.0% | - | - | - | 0.0 | 0.0 | - | 0.0 |
| J1:P1 | Unnamed Ped Link | - | C1:C | | 1 | 33 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P2 | Unnamed Ped Link | - | C1:E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P3 | Unnamed Ped Link | - | C1:J | | 1 | 32 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P4 | Unnamed Ped Link | - | C1:L | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| | | | | C1 - Peel Common Rbt | Stream: 1 | PRC for Signalled Lanes (%) | 23.4 | Total Delay for Signalled Lanes (pcuHr): | 15.01 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C1 - Peel Common Rbt | Stream: 2 | PRC for Signalled Lanes (%) | 146.8 | Total Delay for Signalled Lanes (pcuHr): | 0.51 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C1 - Peel Common Rbt | Stream: 3 | PRC for Signalled Lanes (%) | 43.4 | Total Delay for Signalled Lanes (pcuHr): | 11.85 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C1 - Peel Common Rbt | Stream: 4 | PRC for Signalled Lanes (%) | 91.8 | Total Delay for Signalled Lanes (pcuHr): | 7.31 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C1 - Peel Common Rbt | Stream: 5 | PRC for Signalled Lanes (%) | 147.5 | Total Delay for Signalled Lanes (pcuHr): | 0.64 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C1 - Peel Common Rbt | Stream: 6 | PRC for Signalled Lanes (%) | 76.6 | Total Delay for Signalled Lanes (pcuHr): | 1.22 | Cycle Time (s): | 100 | | | | | | | |
| | | | | C2 - Gosport Rd Ped. | | PRC for Signalled Lanes (%) | 84.8 | Total Delay for Signalled Lanes (pcuHr): | 1.55 | Cycle Time (s): | 100 | | | | | | | |
| | | | | | | PRC Over All Lanes (%) | 23.4 | Total Delay Over All Lanes(pcuHr): | 41.16 | | | | | | | | | |

Scenario 7: '2019 DS2 BASE AM' (FG7: '2019 DS2 BASE AM', Plan 1: 'Stage Plan 1')

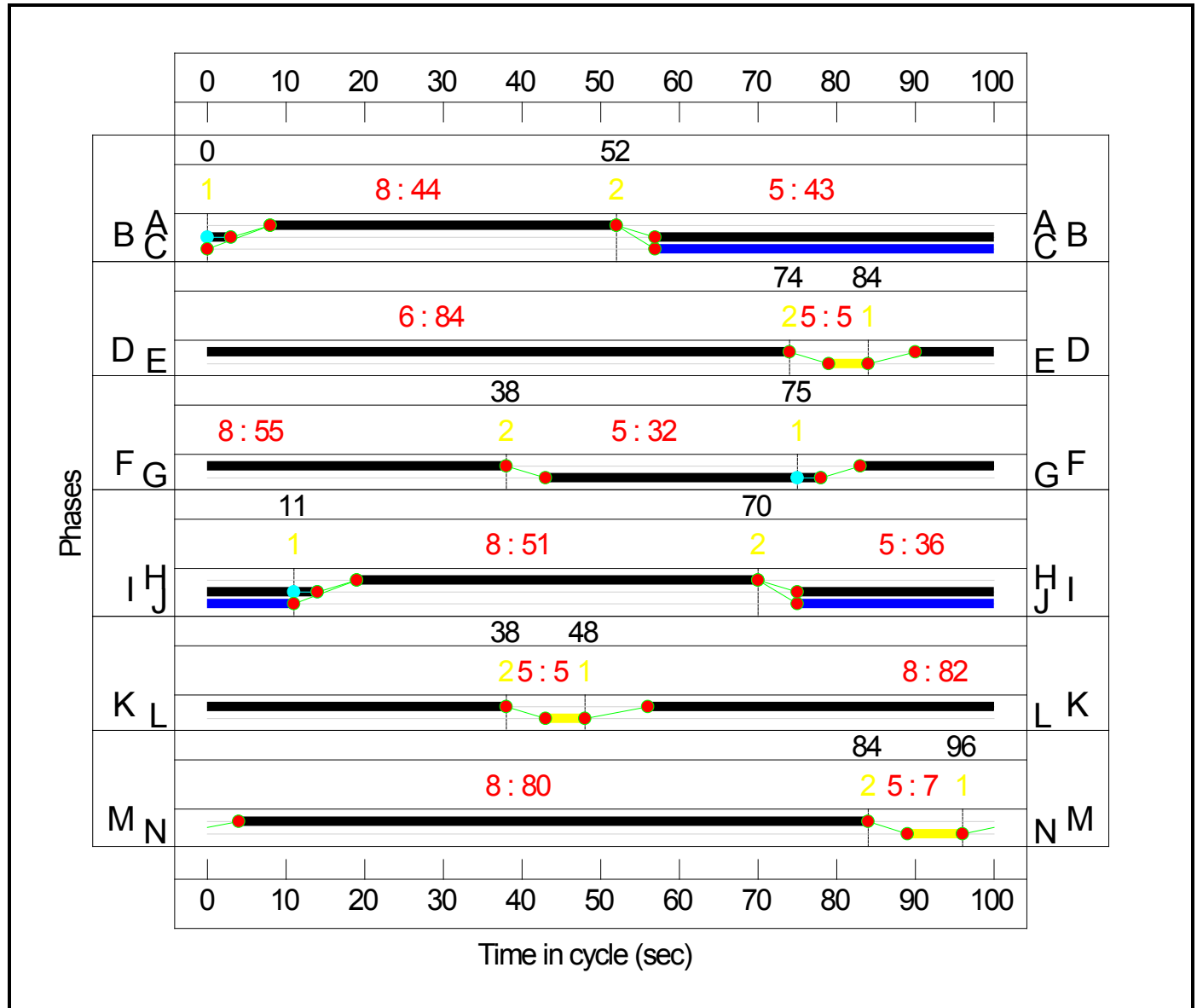
Traffic Flows, Actual

Actual Flow :

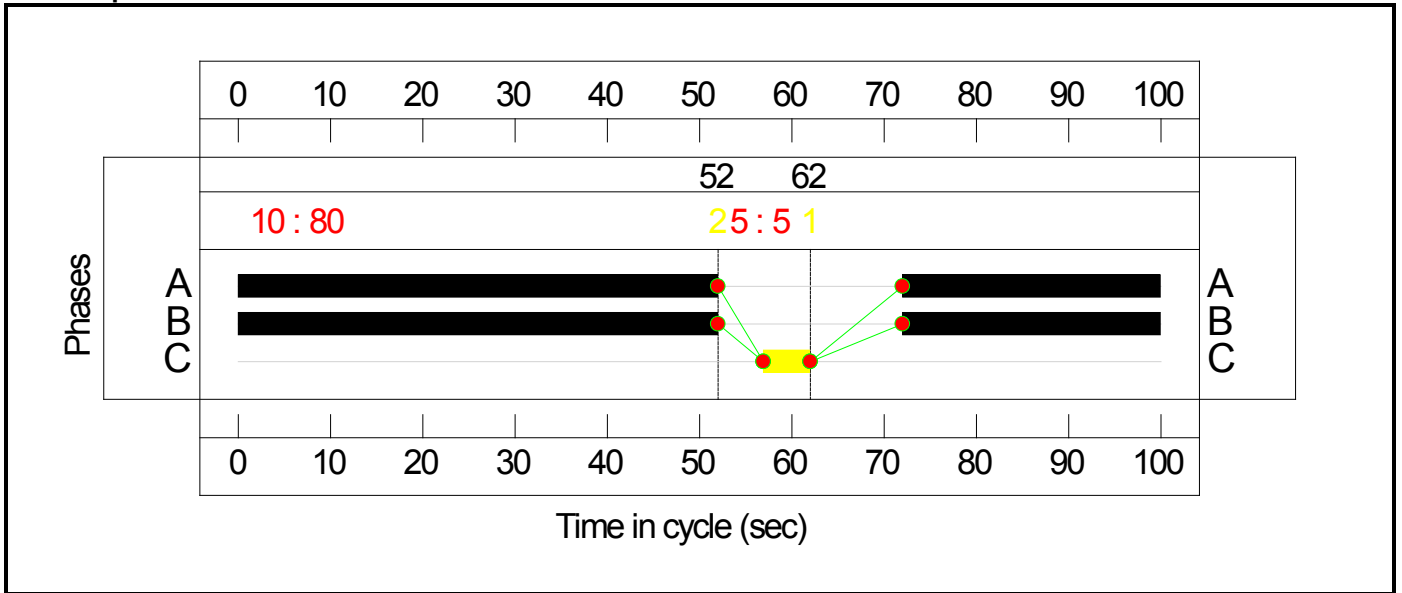
| | | Destination | | | | |
|--------|------|-------------|-----|-----|------|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 183 | 234 | 141 | 558 |
| | B | 463 | 0 | 88 | 550 | 1101 |
| | C | 639 | 148 | 0 | 692 | 1479 |
| | D | 220 | 152 | 302 | 0 | 674 |
| | Tot. | 1322 | 483 | 624 | 1383 | 3812 |

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln Entry Ahead Left | U | C1:A | | 1 | 44 | - | 417 | 2044:1868 | 1068 | 39.1% | - | - | - | 2.4 | 20.4 | 6.1 | 6.4 |
| J1:1/3 | Newgate Ln Entry Ahead | U | C1:A | | 1 | 44 | - | 141 | 1800 | 810 | 17.4% | - | - | - | 0.7 | 19.1 | 2.3 | 2.4 |
| J1:2/1 | Newgate Ln Internal Ahead | U | C1:B | | 1 | 46 | - | 188 | 1800 | 846 | 22.2% | - | - | - | 0.9 | 16.4 | 3.8 | 4.0 |
| J1:2/2+J1:2/3 | Newgate Ln Internal Right Ahead | U | C1:B | | 1 | 46 | - | 414 | 1965:1800 | 928 | 44.6% | - | - | - | 1.6 | 13.6 | 3.1 | 3.5 |
| J1:3/1 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 391 | 1800 | 1530 | 25.6% | - | - | - | 0.2 | 1.7 | 0.2 | 0.4 |
| J1:3/2 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 931 | 3600 | 3060 | 30.4% | - | - | - | 0.3 | 1.3 | 1.6 | 1.8 |
| J1:5/2+J1:5/1 | Rowner Rd Entry Ahead Left | U | C1:F | | 1 | 55 | - | 806 | 2105:1955 | 1193 | 67.6% | - | - | - | 4.2 | 18.6 | 12.9 | 14.0 |
| J1:5/3 | Rowner Rd Entry Ahead | U | C1:F | | 1 | 55 | - | 295 | 2105 | 1179 | 25.0% | - | - | - | 1.1 | 13.3 | 4.2 | 4.3 |
| J1:6/1 | Rowner Rd Internal Ahead | U | C1:G | | 1 | 35 | - | 283 | 1991 | 717 | 39.5% | - | - | - | 1.8 | 22.9 | 6.5 | 6.8 |
| J1:6/2 | Rowner Rd Internal Right Ahead | U | C1:G | | 1 | 35 | - | 394 | 2255 | 812 | 48.5% | - | - | - | 2.9 | 26.3 | 6.7 | 7.1 |
| J1:7/1 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 268 | 1800 | 1458 | 18.4% | - | - | - | 0.2 | 2.4 | 0.6 | 0.7 |
| J1:7/2 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 215 | 1965 | 1592 | 13.5% | - | - | - | 0.1 | 2.5 | 0.9 | 0.9 |
| J1:8/1 | Broom Way Entry Ahead Left | U | C1:H | | 1 | 51 | - | 695 | 1894 | 985 | 70.6% | - | - | - | 4.7 | 24.4 | 14.5 | 15.7 |

| | | | | | | | | | | | | | | | | | | |
|---------|---------------------------------------|---|------|--|---|----|---|------|------|------|-------|-----|---|---|-----|------|------|------|
| J1:8/2 | Broom Way Entry Ahead | U | C1:H | | 1 | 51 | - | 784 | 2105 | 1095 | 71.6% | - | - | - | 5.3 | 24.1 | 16.6 | 17.8 |
| J1:9/1 | Broom Way Internal Ahead | U | C1:I | | 1 | 39 | - | 691 | 2155 | 862 | 80.2% | - | - | - | 5.1 | 26.7 | 9.7 | 11.7 |
| J1:9/2 | Broom Way Internal Right | U | C1:I | | 1 | 39 | - | 168 | 2092 | 837 | 20.1% | - | - | - | 0.8 | 16.4 | 1.4 | 1.5 |
| J1:9/3 | Broom Way Internal Right | U | C1:I | | 1 | 39 | - | 295 | 1800 | 720 | 41.0% | - | - | - | 1.5 | 18.3 | 2.6 | 2.9 |
| J1:10/1 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 285 | 1965 | 1631 | 17.5% | - | - | - | 0.1 | 1.3 | 0.0 | 0.1 |
| J1:10/2 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 339 | 2105 | 1747 | 19.4% | - | - | - | 0.2 | 1.7 | 0.4 | 0.5 |
| J1:11/1 | Brrom Way Exit | U | - | | - | - | - | 285 | 2000 | 2000 | 14.3% | - | - | - | 0.1 | 1.0 | 0.0 | 0.1 |
| J1:11/2 | Brrom Way Exit | U | - | | - | - | - | 339 | 2000 | 2000 | 17.0% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:12/1 | Gosport Rd Entry Left | O | - | | - | - | - | 220 | 1940 | 1401 | 15.7% | 220 | 0 | 0 | 0.1 | 1.5 | 0.0 | 0.1 |
| J1:12/2 | Gosport Rd Entry Ahead | O | - | | - | - | - | 454 | 2500 | 856 | 53.0% | 454 | 0 | 0 | 1.5 | 11.5 | 4.2 | 4.7 |
| J1:13/1 | Gosport Rd Internal Ahead | U | - | | - | - | - | 171 | 1896 | 1896 | 9.0% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:13/2 | Gosport Rd Internal Right Ahead | U | - | | - | - | - | 1079 | 2133 | 2133 | 50.6% | - | - | - | 0.5 | 1.7 | 0.6 | 1.1 |
| J1:14/1 | Gosport Rd Exit Ahead | U | - | | - | - | - | 1383 | 2015 | 2015 | 68.6% | - | - | - | 1.1 | 3.0 | 10.2 | 11.3 |
| J2:1/1 | Gosport Rd E/B Ped Ahead | U | C2:A | | 1 | 80 | - | 674 | 2015 | 1632 | 41.3% | - | - | - | 0.9 | 4.6 | 5.2 | 5.6 |
| J2:2/1 | Gosport Rd W/B Ped Ahead | U | C2:B | | 1 | 80 | - | 1383 | 2015 | 1632 | 84.7% | - | - | - | 3.3 | 8.5 | 4.6 | 7.3 |
| J2:4/1 | Gosport Rd E/B Exit Ahead | U | - | | - | - | - | 674 | 2015 | 2015 | 33.4% | - | - | - | 0.3 | 1.3 | 0.0 | 0.3 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------------------------------|-------|--|-------|-----------------|-----|---|---|---|------|------|---|---|---|-----|-----|---|-----|----------------------|---------------------------------------|-------|--|------|-----------------|-----|----------------------|---------------------------------------|-------|--|------|-----------------|-----|----------------------|---------------------------------------|------|--|------|-----------------|-----|----------------------|---------------------------------------|------|--|-------|-----------------|-----|----------------------|---------------------------------------|-------|--|------|-----------------|-----|----------------------|---------------------------------------|-------|--|------|-----------------|-----|----------------------|-----------------------------|-----|--|------|-----------------|-----|--|------------------------|-----|------------------------------------|-------|--|--|
| J2:P1 | Unnamed Ped Link | - | C2:C | | 1 | 5 | - | 0 | - | 1000 | 0.0% | - | - | - | 0.0 | 0.0 | - | 0.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| J1:P1 | Unnamed Ped Link | - | C1:C | | 1 | 43 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| J1:P2 | Unnamed Ped Link | - | C1:E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| J1:P3 | Unnamed Ped Link | - | C1:J | | 1 | 36 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| J1:P4 | Unnamed Ped Link | - | C1:L | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="0"> <tr> <td>C1 - Peel Common Rbt</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>101.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>5.53</td> <td>Cycle Time (s):</td> <td>100</td> </tr> <tr> <td>C1 - Peel Common Rbt</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>195.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>0.53</td> <td>Cycle Time (s):</td> <td>100</td> </tr> <tr> <td>C1 - Peel Common Rbt</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>33.2</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>9.93</td> <td>Cycle Time (s):</td> <td>100</td> </tr> <tr> <td>C1 - Peel Common Rbt</td> <td>Stream: 4 PRC for Signalled Lanes (%)</td> <td>12.3</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>17.35</td> <td>Cycle Time (s):</td> <td>100</td> </tr> <tr> <td>C1 - Peel Common Rbt</td> <td>Stream: 5 PRC for Signalled Lanes (%)</td> <td>363.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>0.26</td> <td>Cycle Time (s):</td> <td>100</td> </tr> <tr> <td>C1 - Peel Common Rbt</td> <td>Stream: 6 PRC for Signalled Lanes (%)</td> <td>389.6</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>0.33</td> <td>Cycle Time (s):</td> <td>100</td> </tr> <tr> <td>C2 - Gosport Rd Ped.</td> <td>PRC for Signalled Lanes (%)</td> <td>6.2</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>4.11</td> <td>Cycle Time (s):</td> <td>100</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>6.2</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>41.72</td> <td></td> <td></td> </tr> </table> | | | | | | | | | | | | | | | | | | | C1 - Peel Common Rbt | Stream: 1 PRC for Signalled Lanes (%) | 101.8 | Total Delay for Signalled Lanes (pcuHr): | 5.53 | Cycle Time (s): | 100 | C1 - Peel Common Rbt | Stream: 2 PRC for Signalled Lanes (%) | 195.8 | Total Delay for Signalled Lanes (pcuHr): | 0.53 | Cycle Time (s): | 100 | C1 - Peel Common Rbt | Stream: 3 PRC for Signalled Lanes (%) | 33.2 | Total Delay for Signalled Lanes (pcuHr): | 9.93 | Cycle Time (s): | 100 | C1 - Peel Common Rbt | Stream: 4 PRC for Signalled Lanes (%) | 12.3 | Total Delay for Signalled Lanes (pcuHr): | 17.35 | Cycle Time (s): | 100 | C1 - Peel Common Rbt | Stream: 5 PRC for Signalled Lanes (%) | 363.8 | Total Delay for Signalled Lanes (pcuHr): | 0.26 | Cycle Time (s): | 100 | C1 - Peel Common Rbt | Stream: 6 PRC for Signalled Lanes (%) | 389.6 | Total Delay for Signalled Lanes (pcuHr): | 0.33 | Cycle Time (s): | 100 | C2 - Gosport Rd Ped. | PRC for Signalled Lanes (%) | 6.2 | Total Delay for Signalled Lanes (pcuHr): | 4.11 | Cycle Time (s): | 100 | | PRC Over All Lanes (%) | 6.2 | Total Delay Over All Lanes(pcuHr): | 41.72 | | |
| C1 - Peel Common Rbt | Stream: 1 PRC for Signalled Lanes (%) | 101.8 | Total Delay for Signalled Lanes (pcuHr): | 5.53 | Cycle Time (s): | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C1 - Peel Common Rbt | Stream: 2 PRC for Signalled Lanes (%) | 195.8 | Total Delay for Signalled Lanes (pcuHr): | 0.53 | Cycle Time (s): | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C1 - Peel Common Rbt | Stream: 3 PRC for Signalled Lanes (%) | 33.2 | Total Delay for Signalled Lanes (pcuHr): | 9.93 | Cycle Time (s): | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C1 - Peel Common Rbt | Stream: 4 PRC for Signalled Lanes (%) | 12.3 | Total Delay for Signalled Lanes (pcuHr): | 17.35 | Cycle Time (s): | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C1 - Peel Common Rbt | Stream: 5 PRC for Signalled Lanes (%) | 363.8 | Total Delay for Signalled Lanes (pcuHr): | 0.26 | Cycle Time (s): | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C1 - Peel Common Rbt | Stream: 6 PRC for Signalled Lanes (%) | 389.6 | Total Delay for Signalled Lanes (pcuHr): | 0.33 | Cycle Time (s): | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C2 - Gosport Rd Ped. | PRC for Signalled Lanes (%) | 6.2 | Total Delay for Signalled Lanes (pcuHr): | 4.11 | Cycle Time (s): | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PRC Over All Lanes (%) | 6.2 | Total Delay Over All Lanes(pcuHr): | 41.72 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Scenario 8: '2019 DS2 BASE PM' (FG8: '2019 DS2 BASE PM', Plan 1: 'Stage Plan 1')

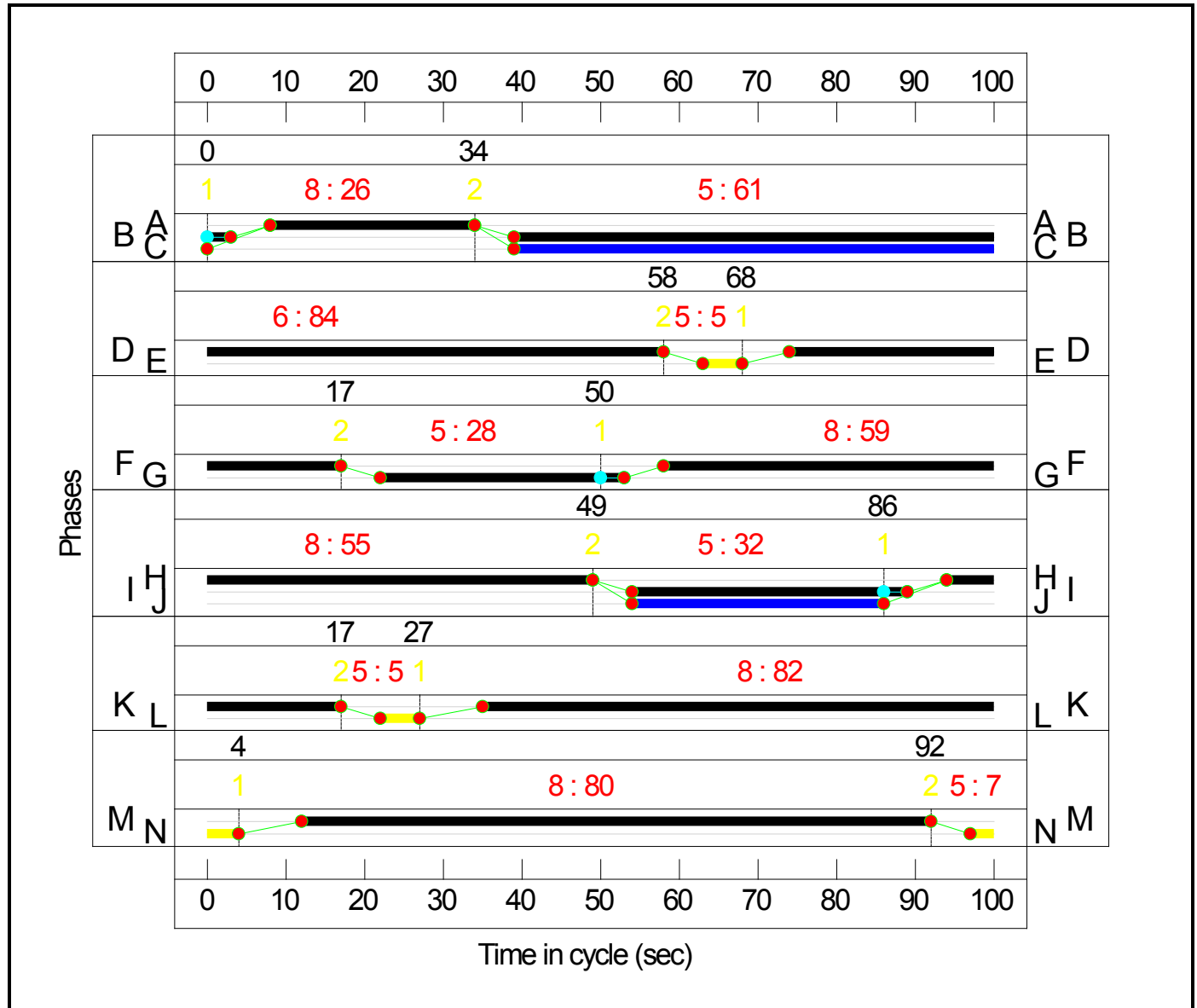
Traffic Flows, Actual

Actual Flow :

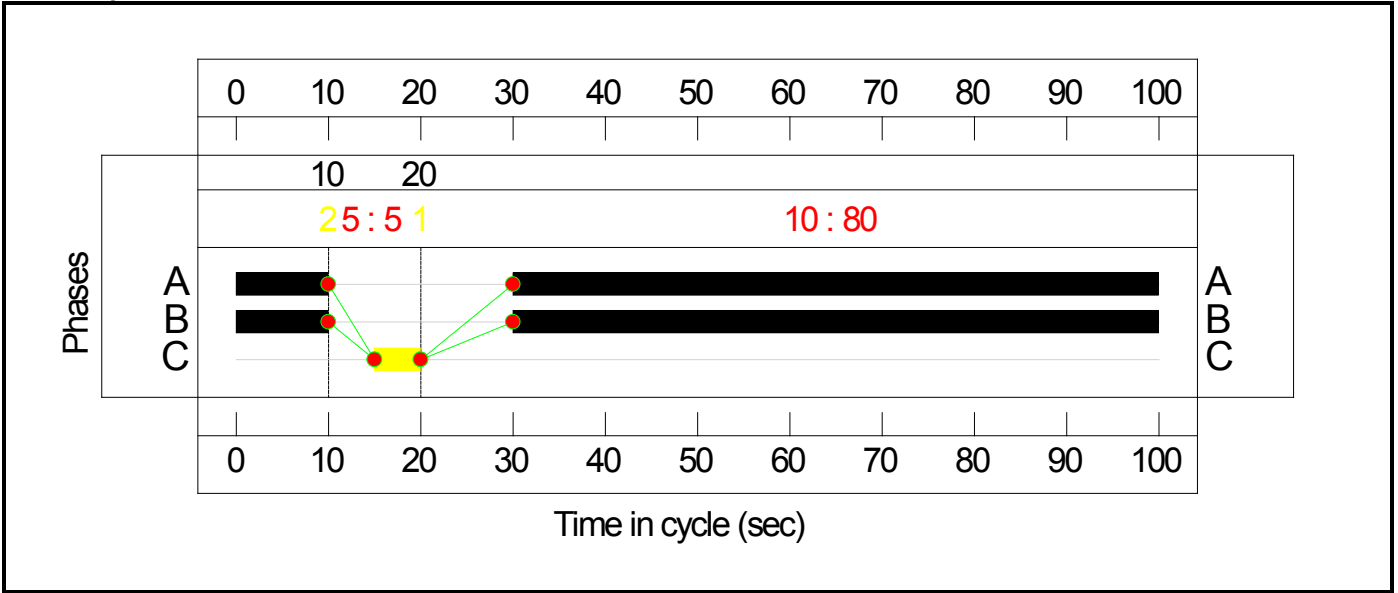
| | | Destination | | | | |
|--------|------|-------------|------|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 297 | 358 | 180 | 835 |
| | B | 78 | 0 | 69 | 311 | 458 |
| | C | 281 | 147 | 0 | 326 | 754 |
| | D | 124 | 911 | 486 | 0 | 1521 |
| | Tot. | 483 | 1355 | 913 | 817 | 3568 |

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

| Item | Lane Description | Lane Type | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Mean Max Queue (pcu) |
|---------------|---------------------------------|-----------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|-------------|-----------------------|------------------------------|-----------------------------|---------------------|---------------------------|----------------------------------|----------------------|
| J1:1/2+J1:1/1 | Newgate Ln Entry Ahead Left | U | C1:A | | 1 | 26 | - | 625 | 2030:1868 | 865 | 72.2% | - | - | - | 6.9 | 39.5 | 9.9 | 11.2 |
| J1:1/3 | Newgate Ln Entry Ahead | U | C1:A | | 1 | 26 | - | 210 | 1800 | 486 | 43.2% | - | - | - | 2.1 | 36.7 | 4.8 | 5.2 |
| J1:2/1 | Newgate Ln Internal Ahead | U | C1:B | | 1 | 64 | - | 524 | 1800 | 1170 | 44.2% | - | - | - | 2.0 | 13.8 | 8.1 | 8.5 |
| J1:2/2+J1:2/3 | Newgate Ln Internal Right Ahead | U | C1:B | | 1 | 64 | - | 1020 | 1965:1800 | 1398 | 71.6% | - | - | - | 2.4 | 8.7 | 5.3 | 6.5 |
| J1:3/1 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 154 | 1800 | 1530 | 10.1% | - | - | - | 0.1 | 2.7 | 0.7 | 0.8 |
| J1:3/2 | Newgate Ln N/B Ped Ahead | U | C1:D | | 1 | 84 | - | 329 | 3600 | 3060 | 10.8% | - | - | - | 0.1 | 1.1 | 0.7 | 0.7 |
| J1:5/2+J1:5/1 | Rowner Rd Entry Ahead Left | U | C1:F | | 1 | 59 | - | 380 | 2105:1952 | 1171 | 32.4% | - | - | - | 1.3 | 12.2 | 5.2 | 5.4 |
| J1:5/3 | Rowner Rd Entry Ahead | U | C1:F | | 1 | 59 | - | 78 | 2105 | 1263 | 6.2% | - | - | - | 0.2 | 9.9 | 0.9 | 0.9 |
| J1:6/1 | Rowner Rd Internal Ahead | U | C1:G | | 1 | 31 | - | 477 | 1991 | 637 | 74.4% | - | - | - | 3.4 | 25.5 | 11.8 | 13.2 |
| J1:6/2 | Rowner Rd Internal Right Ahead | U | C1:G | | 1 | 31 | - | 547 | 2255 | 722 | 74.9% | - | - | - | 5.4 | 36.0 | 12.5 | 14.0 |
| J1:7/1 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 753 | 1800 | 1458 | 51.2% | - | - | - | 0.8 | 3.9 | 2.8 | 3.3 |
| J1:7/2 | Rowner Rd Exit Ahead | U | C1:M | | 1 | 80 | - | 602 | 1965 | 1592 | 37.2% | - | - | - | 0.7 | 4.5 | 4.1 | 4.4 |
| J1:8/1 | Broom Way Entry Ahead Left | U | C1:H | | 1 | 55 | - | 356 | 1900 | 1064 | 33.5% | - | - | - | 1.4 | 14.5 | 5.3 | 5.6 |

| | | | | | | | | | | | | | | | | | | |
|---------|---------------------------------------|---|------|--|---|----|---|------|------|------|--------|------|---|---|------|------|-------|-------|
| J1:8/2 | Broom Way Entry Ahead | U | C1:H | | 1 | 55 | - | 398 | 2105 | 1179 | 33.8% | - | - | - | 1.6 | 14.2 | 6.0 | 6.2 |
| J1:9/1 | Broom Way Internal Ahead | U | C1:I | | 1 | 35 | - | 491 | 2155 | 776 | 63.3% | - | - | - | 3.1 | 23.0 | 12.1 | 13.0 |
| J1:9/2 | Broom Way Internal Right | U | C1:I | | 1 | 35 | - | 0 | 2155 | 776 | 0.0% | - | - | - | 0.0 | 0.0 | 0.0 | 0.0 |
| J1:9/3 | Broom Way Internal Right | U | C1:I | | 1 | 35 | - | 78 | 1800 | 648 | 12.0% | - | - | - | 0.4 | 19.2 | 0.7 | 0.8 |
| J1:10/1 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 478 | 1965 | 1631 | 29.1% | - | - | - | 0.2 | 1.6 | 0.0 | 0.2 |
| J1:10/2 | Broom Way S/B Ped Ahead | U | C1:K | | 1 | 82 | - | 435 | 2105 | 1747 | 24.5% | - | - | - | 0.2 | 1.6 | 0.3 | 0.5 |
| J1:11/1 | Brrom Way Exit | U | - | | - | - | - | 478 | 2000 | 2000 | 23.8% | - | - | - | 0.2 | 1.2 | 0.0 | 0.2 |
| J1:11/2 | Brrom Way Exit | U | - | | - | - | - | 435 | 2000 | 2000 | 21.4% | - | - | - | 0.1 | 1.1 | 0.0 | 0.1 |
| J1:12/1 | Gosport Rd Entry Left | O | - | | - | - | - | 124 | 1940 | 1432 | 8.7% | 124 | 0 | 0 | 0.0 | 1.4 | 0.0 | 0.0 |
| J1:12/2 | Gosport Rd Entry Ahead | O | - | | - | - | - | 1397 | 2500 | 1371 | 101.9% | 1371 | 0 | 0 | 31.1 | 80.1 | 109.2 | 135.5 |
| J1:13/1 | Gosport Rd Internal Ahead | U | - | | - | - | - | 30 | 1896 | 1896 | 1.6% | - | - | - | 0.0 | 1.0 | 0.0 | 0.0 |
| J1:13/2 | Gosport Rd Internal Right Ahead | U | - | | - | - | - | 476 | 2106 | 2106 | 22.6% | - | - | - | 0.1 | 1.1 | 1.2 | 1.3 |
| J1:14/1 | Gosport Rd Exit Ahead | U | - | | - | - | - | 817 | 2015 | 2015 | 40.5% | - | - | - | 0.4 | 1.7 | 10.3 | 10.6 |
| J2:1/1 | Gosport Rd E/B Ped Ahead | U | C2:A | | 1 | 80 | - | 1521 | 2015 | 1632 | 93.2% | - | - | - | 9.3 | 21.9 | 32.5 | 38.7 |
| J2:2/1 | Gosport Rd W/B Ped Ahead | U | C2:B | | 1 | 80 | - | 817 | 2015 | 1632 | 50.1% | - | - | - | 0.7 | 3.1 | 2.1 | 2.6 |
| J2:4/1 | Gosport Rd E/B Exit Ahead | U | - | | - | - | - | 1521 | 2015 | 2015 | 75.5% | - | - | - | 1.5 | 3.6 | 0.0 | 1.5 |

| | | | | | | | | | | | | | | | | | | |
|-------|------------------|---|------|--|---|----|---|---|---|------|------|---|---|---|-----|-----|---|-----|
| J2:P1 | Unnamed Ped Link | - | C2:C | | 1 | 5 | - | 0 | - | 1000 | 0.0% | - | - | - | 0.0 | 0.0 | - | 0.0 |
| J1:P1 | Unnamed Ped Link | - | C1:C | | 1 | 61 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P2 | Unnamed Ped Link | - | C1:E | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P3 | Unnamed Ped Link | - | C1:J | | 1 | 32 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |
| J1:P4 | Unnamed Ped Link | - | C1:L | | 1 | 5 | - | 0 | - | 0 | 0.0% | - | - | - | - | - | - | - |

| | | | | | | |
|----------------------|---------------------------------------|-------|---|-------|----------------|-----|
| C1 - Peel Common Rbt | Stream: 1 PRC for Signalled Lanes (%) | 24.6 | Total Delay for Signalled Lanes (pcuHr) | 13.40 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 2 PRC for Signalled Lanes (%) | 737.1 | Total Delay for Signalled Lanes (pcuHr) | 0.21 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 3 PRC for Signalled Lanes (%) | 20.1 | Total Delay for Signalled Lanes (pcuHr) | 10.27 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 4 PRC for Signalled Lanes (%) | 42.2 | Total Delay for Signalled Lanes (pcuHr) | 6.56 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 5 PRC for Signalled Lanes (%) | 208.9 | Total Delay for Signalled Lanes (pcuHr) | 0.40 | Cycle Time (s) | 100 |
| C1 - Peel Common Rbt | Stream: 6 PRC for Signalled Lanes (%) | 75.9 | Total Delay for Signalled Lanes (pcuHr) | 1.54 | Cycle Time (s) | 100 |
| C2 - Gosport Rd Ped. | PRC for Signalled Lanes (%) | -3.5 | Total Delay for Signalled Lanes (pcuHr) | 9.98 | Cycle Time (s) | 100 |
| | PRC Over All Lanes (%) | -13.2 | Total Delay Over All Lanes(pcuHr) | 75.85 | | |

Scenario 9: '2024 DS2 BASE AM' (FG9: '2024 DS2 BASE AM', Plan 1: 'Stage Plan 1')

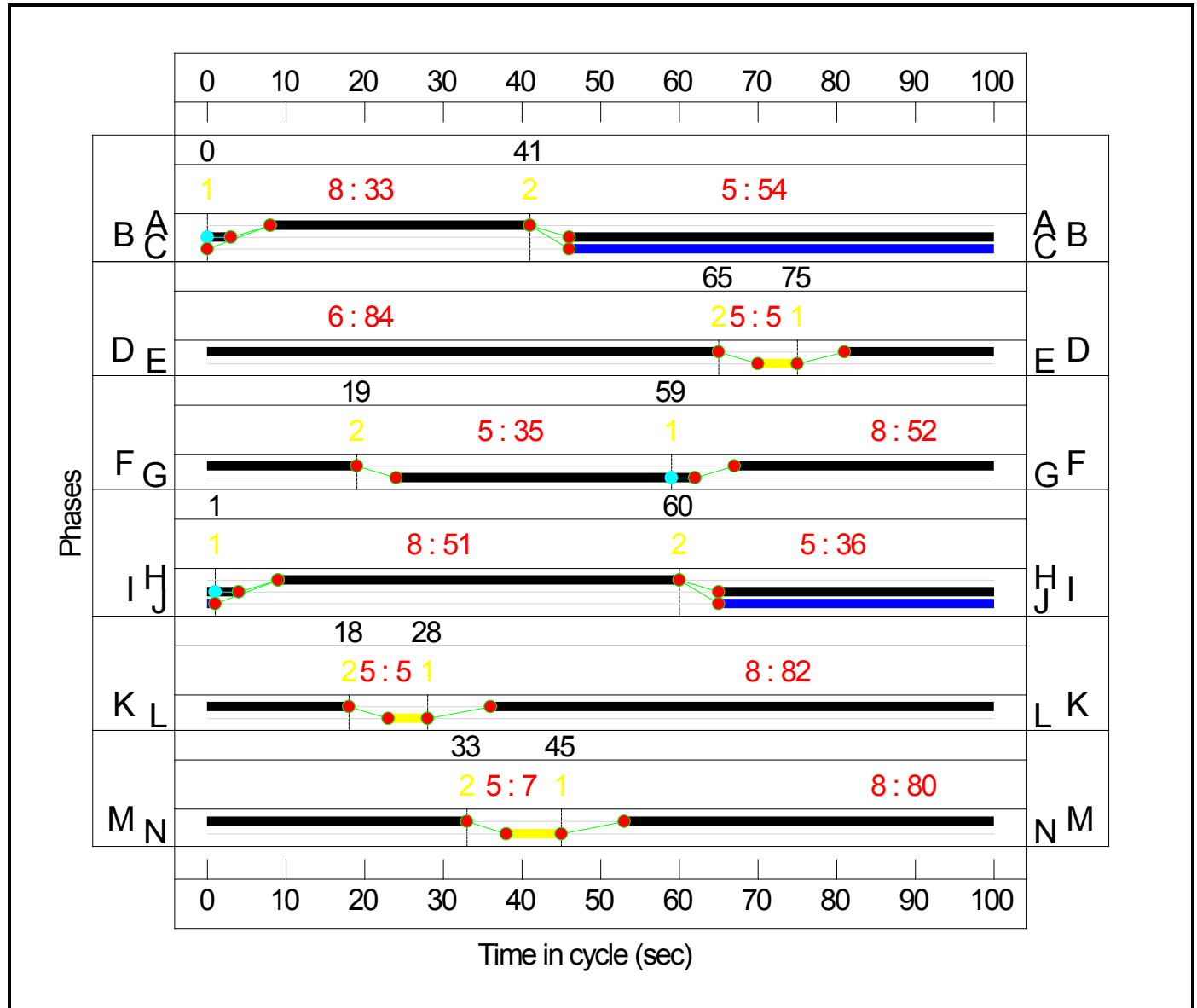
Traffic Flows, Actual

Actual Flow :

| | | Destination | | | | |
|--------|------|-------------|-----|-----|------|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 190 | 381 | 168 | 739 |
| | B | 478 | 0 | 174 | 587 | 1239 |
| | C | 681 | 239 | 0 | 726 | 1646 |
| | D | 242 | 170 | 316 | 0 | 728 |
| | Tot. | 1401 | 599 | 871 | 1481 | 4352 |

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.

