

## A.2. Summary of Demand Model results for Vale of White Horse District

### A.2.1. Cluster 1

#### Morning peak period (07:00-10:00)

| VOWH            | Base Year (BY) |        | Do Minimum (DM) |        | DM-BY  |        | Cluster 1 (C1) |        | C1-DM |       |
|-----------------|----------------|--------|-----------------|--------|--------|--------|----------------|--------|-------|-------|
|                 | Orig.          | Dest.  | Orig.           | Dest.  | Orig.  | Dest.  | Orig.          | Dest.  | Orig. | Dest. |
| Reg car (veh.)  | 45,366         | 46,098 | 72,758          | 72,353 | 27,392 | 26,255 | 77,360         | 75,656 | 4,603 | 3,302 |
| P&R (veh.)      | 551            | 7      | 868             | 10     | 317    | 3      | 972            | 10     | 104   | 0     |
| Bus only (pax)  | 3,065          | 2,143  | 4,378           | 3,178  | 1,313  | 1,035  | 4,799          | 3,276  | 421   | 98    |
| Rail (pax)      | 739            | 638    | 1,927           | 1,442  | 1,188  | 805    | 2,294          | 1,533  | 367   | 91    |
| TOTAL (persons) | 61,118         | 60,411 | 98,207          | 95,072 | 37,090 | 34,661 | 104,863        | 99,389 | 6,656 | 4,317 |

#### Inter Peak period (10:00 – 16:00)

| VOWH            | Base Year (BY) |        | Do Minimum (DM) |         | DM-BY  |        | Cluster 1 (C1) |         | C1-DM |       |
|-----------------|----------------|--------|-----------------|---------|--------|--------|----------------|---------|-------|-------|
|                 | Orig.          | Dest.  | Orig.           | Dest.   | Orig.  | Orig.  | Orig.          | Dest.   | Orig. | Dest. |
| Reg car (veh.)  | 69,702         | 68,233 | 135,765         | 132,239 | 66,063 | 64,006 | 143,433        | 139,614 | 7,668 | 7,375 |
| P&R (veh.)      | 213            | 240    | 268             | 406     | 55     | 166    | 275            | 423     | 7     | 17    |
| Bus only (pax)  | 3,523          | 3,623  | 5,379           | 5,763   | 1,856  | 2,139  | 5,558          | 5,999   | 179   | 237   |
| Rail (pax)      | 561            | 321    | 1,965           | 2,030   | 1,404  | 1,708  | 2,056          | 2,181   | 92    | 151   |
| TOTAL (persons) | 91,446         | 89,500 | 177,345         | 173,538 | 85,899 | 84,038 | 187,209        | 183,164 | 9,864 | 9,626 |

#### Evening peak period (16:00 - 19:00)

| VOWH            | Base Year (BY) |        | Do Minimum (DM) |         | DM-BY  |        | Cluster 1 (C1) |         | C1-DM |       |
|-----------------|----------------|--------|-----------------|---------|--------|--------|----------------|---------|-------|-------|
|                 | Orig.          | Dest.  | Orig.           | Dest.   | Orig.  | Orig.  | Orig.          | Dest.   | Orig. | Dest. |
| Reg car (veh.)  | 50,499         | 51,295 | 82,877          | 83,762  | 32,378 | 32,467 | 87,232         | 88,428  | 4,355 | 4,666 |
| P&R (veh.)      | 31             | 501    | 47              | 749     | 17     | 248    | 48             | 885     | 1     | 135   |
| Bus only (pax)  | 1,763          | 2,415  | 2,594           | 3,526   | 832    | 1,111  | 2,667          | 3,816   | 73    | 290   |
| Rail (pax)      | 828            | 773    | 1,825           | 1,941   | 997    | 1,168  | 1,914          | 2,207   | 89    | 266   |
| TOTAL (persons) | 65,748         | 67,857 | 108,068         | 110,994 | 42,320 | 43,137 | 113,674        | 117,531 | 5,606 | 6,537 |

#### 12 hour-period (07:00 - 19:00)

| VOWH            | Base Year (BY) |         | Do Minimum (DM) |         | DM-BY   |         | Cluster 1 (C1) |         | C1-DM  |        |
|-----------------|----------------|---------|-----------------|---------|---------|---------|----------------|---------|--------|--------|
|                 | Orig.          | Dest.   | Orig.           | Dest.   | Orig.   | Orig.   | Orig.          | Dest.   | Orig.  | Dest.  |
| Reg car (veh.)  | 165,567        | 165,626 | 291,400         | 288,354 | 125,833 | 122,728 | 308,026        | 303,698 | 16,625 | 15,344 |
| P&R (veh.)      | 795            | 748     | 1,184           | 1,165   | 389     | 417     | 1,296          | 1,318   | 112    | 153    |
| Bus only (pax)  | 8,351          | 8,181   | 12,351          | 12,467  | 4,000   | 4,285   | 13,024         | 13,091  | 673    | 625    |
| Rail (pax)      | 2,128          | 1,732   | 5,717           | 5,413   | 3,589   | 3,681   | 6,264          | 5,921   | 548    | 508    |
| TOTAL (persons) | 218,312        | 217,769 | 383,620         | 379,604 | 165,309 | 161,835 | 405,746        | 400,084 | 22,126 | 20,481 |

## A.2.2. Cluster 2

### Morning peak period (07:00-10:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |               | DM-BY         |               | Cluster 2 (C2) |               | C2-DM        |              |
|------------------------|----------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.         | Orig.         | Dest.         | Orig.          | Dest.         | Orig.        | Dest.        |
| Reg car (veh.)         | 45,366         | 46,098        | 72,758          | 72,353        | 27,392        | 26,255        | 75,593         | 74,344        | 2,835        | 1,991        |
| P&R (veh.)             | 551            | 7             | 868             | 10            | 317           | 3             | 890            | 11            | 22           | 1            |
| Bus only (pax)         | 3,065          | 2,143         | 4,378           | 3,178         | 1,313         | 1,035         | 4,597          | 3,226         | 220          | 48           |
| Rail (pax)             | 739            | 638           | 1,927           | 1,442         | 1,188         | 805           | 2,132          | 1,501         | 205          | 59           |
| <b>TOTAL (persons)</b> | <b>61,118</b>  | <b>60,411</b> | <b>98,207</b>   | <b>95,072</b> | <b>37,090</b> | <b>34,661</b> | <b>102,200</b> | <b>97,669</b> | <b>3,993</b> | <b>2,597</b> |

### Inter Peak period (10:00 – 16:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |                | DM-BY         |               | Cluster 2 (C2) |                | C2-DM        |              |
|------------------------|----------------|---------------|-----------------|----------------|---------------|---------------|----------------|----------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.          | Orig.         | Orig.         | Orig.          | Dest.          | Orig.        | Dest.        |
| Reg car (veh.)         | 69,702         | 68,233        | 135,765         | 132,239        | 66,063        | 64,006        | 140,009        | 136,420        | 4,244        | 4,181        |
| P&R (veh.)             | 213            | 240           | 268             | 406            | 55            | 166           | 283            | 413            | 15           | 7            |
| Bus only (pax)         | 3,523          | 3,623         | 5,379           | 5,763          | 1,856         | 2,139         | 5,467          | 5,878          | 88           | 115          |
| Rail (pax)             | 561            | 321           | 1,965           | 2,030          | 1,404         | 1,708         | 2,037          | 2,130          | 73           | 100          |
| <b>TOTAL (persons)</b> | <b>91,446</b>  | <b>89,500</b> | <b>177,345</b>  | <b>173,538</b> | <b>85,899</b> | <b>84,038</b> | <b>182,827</b> | <b>178,986</b> | <b>5,482</b> | <b>5,449</b> |

### Evening peak period (16:00 - 19:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |                | DM-BY         |               | Cluster 2 (C2) |                | C2-DM        |              |
|------------------------|----------------|---------------|-----------------|----------------|---------------|---------------|----------------|----------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.          | Orig.         | Orig.         | Orig.          | Dest.          | Orig.        | Dest.        |
| Reg car (veh.)         | 50,499         | 51,295        | 82,877          | 83,762         | 32,378        | 32,467        | 85,383         | 86,607         | 2,506        | 2,845        |
| P&R (veh.)             | 31             | 501           | 47              | 749            | 17            | 248           | 48             | 763            | 0            | 13           |
| Bus only (pax)         | 1,763          | 2,415         | 2,594           | 3,526          | 832           | 1,111         | 2,631          | 3,683          | 36           | 157          |
| Rail (pax)             | 828            | 773           | 1,825           | 1,941          | 997           | 1,168         | 1,880          | 2,105          | 55           | 164          |
| <b>TOTAL (persons)</b> | <b>65,748</b>  | <b>67,857</b> | <b>108,068</b>  | <b>110,994</b> | <b>42,320</b> | <b>43,137</b> | <b>111,292</b> | <b>114,886</b> | <b>3,224</b> | <b>3,892</b> |

### 12 hour-period (07:00 - 19:00)

| VOWH                   | Base Year (BY) |                | Do Minimum (DM) |                | DM-BY          |                | Cluster 2 (C2) |                | C2-DM         |               |
|------------------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|
|                        | Orig.          | Dest.          | Orig.           | Dest.          | Orig.          | Orig.          | Orig.          | Dest.          | Orig.         | Dest.         |
| Reg car (veh.)         | 165,567        | 165,626        | 291,400         | 288,354        | 125,833        | 122,728        | 300,985        | 297,371        | 9,585         | 9,017         |
| P&R (veh.)             | 795            | 748            | 1,184           | 1,165          | 389            | 417            | 1,221          | 1,186          | 37            | 21            |
| Bus only (pax)         | 8,351          | 8,181          | 12,351          | 12,467         | 4,000          | 4,285          | 12,695         | 12,786         | 343           | 320           |
| Rail (pax)             | 2,128          | 1,732          | 5,717           | 5,413          | 3,589          | 3,681          | 6,050          | 5,736          | 333           | 323           |
| <b>TOTAL (persons)</b> | <b>218,312</b> | <b>217,769</b> | <b>383,620</b>  | <b>379,604</b> | <b>165,309</b> | <b>161,835</b> | <b>396,319</b> | <b>391,541</b> | <b>12,698</b> | <b>11,937</b> |

### A.2.3. Cluster 3

#### Morning peak period (07:00-10:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |               | DM-BY         |               | Cluster 3 (C3) |               | C3-DM        |              |
|------------------------|----------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.         | Orig.         | Dest.         | Orig.          | Dest.         | Orig.        | Dest.        |
| Reg car (veh.)         | 45,366         | 46,098        | 72,758          | 72,353        | 27,392        | 26,255        | 75,827         | 74,291        | 3,069        | 1,938        |
| P&R (veh.)             | 551            | 7             | 868             | 10            | 317           | 3             | 962            | 10            | 94           | 0            |
| Bus only (pax)         | 3,065          | 2,143         | 4,378           | 3,178         | 1,313         | 1,035         | 4,665          | 3,248         | 287          | 70           |
| Rail (pax)             | 739            | 638           | 1,927           | 1,442         | 1,188         | 805           | 2,227          | 1,524         | 300          | 82           |
| <b>TOTAL (persons)</b> | <b>61,118</b>  | <b>60,411</b> | <b>98,207</b>   | <b>95,072</b> | <b>37,090</b> | <b>34,661</b> | <b>102,734</b> | <b>97,647</b> | <b>4,527</b> | <b>2,575</b> |

#### Inter Peak period (10:00 – 16:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |                | DM-BY         |               | Cluster 3 (C3) |                | C3-DM        |              |
|------------------------|----------------|---------------|-----------------|----------------|---------------|---------------|----------------|----------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.          | Orig.         | Orig.         | Orig.          | Dest.          | Orig.        | Dest.        |
| Reg car (veh.)         | 69,702         | 68,233        | 135,765         | 132,239        | 66,063        | 64,006        | 140,937        | 137,212        | 5,172        | 4,973        |
| P&R (veh.)             | 213            | 240           | 268             | 406            | 55            | 166           | 269            | 409            | 1            | 3            |
| Bus only (pax)         | 3,523          | 3,623         | 5,379           | 5,763          | 1,856         | 2,139         | 5,512          | 5,940          | 133          | 177          |
| Rail (pax)             | 561            | 321           | 1,965           | 2,030          | 1,404         | 1,708         | 2,052          | 2,157          | 87           | 127          |
| <b>TOTAL (persons)</b> | <b>91,446</b>  | <b>89,500</b> | <b>177,345</b>  | <b>173,538</b> | <b>85,899</b> | <b>84,038</b> | <b>184,032</b> | <b>180,062</b> | <b>6,687</b> | <b>6,524</b> |

#### Evening peak period (16:00 - 19:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |                | DM-BY         |               | Cluster 3 (C3) |                | C3-DM        |              |
|------------------------|----------------|---------------|-----------------|----------------|---------------|---------------|----------------|----------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.          | Orig.         | Orig.         | Orig.          | Dest.          | Orig.        | Dest.        |
| Reg car (veh.)         | 50,499         | 51,295        | 82,877          | 83,762         | 32,378        | 32,467        | 85,555         | 86,996         | 2,678        | 3,234        |
| P&R (veh.)             | 31             | 501           | 47              | 749            | 17            | 248           | 47             | 807            | 0            | 58           |
| Bus only (pax)         | 1,763          | 2,415         | 2,594           | 3,526          | 832           | 1,111         | 2,657          | 3,739          | 63           | 213          |
| Rail (pax)             | 828            | 773           | 1,825           | 1,941          | 997           | 1,168         | 1,901          | 2,161          | 76           | 220          |
| <b>TOTAL (persons)</b> | <b>65,748</b>  | <b>67,857</b> | <b>108,068</b>  | <b>110,994</b> | <b>42,320</b> | <b>43,137</b> | <b>111,554</b> | <b>115,533</b> | <b>3,486</b> | <b>4,539</b> |

#### 12 hour-period (07:00 - 19:00)

| VOWH                   | Base Year (BY) |                | Do Minimum (DM) |                | DM-BY          |                | Cluster 3 (C3) |                | C3-DM         |               |
|------------------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|
|                        | Orig.          | Dest.          | Orig.           | Dest.          | Orig.          | Orig.          | Orig.          | Dest.          | Orig.         | Dest.         |
| Reg car (veh.)         | 165,567        | 165,626        | 291,400         | 288,354        | 125,833        | 122,728        | 302,320        | 298,499        | 10,920        | 10,145        |
| P&R (veh.)             | 795            | 748            | 1,184           | 1,165          | 389            | 417            | 1,279          | 1,226          | 95            | 61            |
| Bus only (pax)         | 8,351          | 8,181          | 12,351          | 12,467         | 4,000          | 4,285          | 12,834         | 12,927         | 483           | 460           |
| Rail (pax)             | 2,128          | 1,732          | 5,717           | 5,413          | 3,589          | 3,681          | 6,179          | 5,842          | 462           | 429           |
| <b>TOTAL (persons)</b> | <b>218,312</b> | <b>217,769</b> | <b>383,620</b>  | <b>379,604</b> | <b>165,309</b> | <b>161,835</b> | <b>398,319</b> | <b>393,242</b> | <b>14,699</b> | <b>13,638</b> |

## A.2.4. Cluster 4

### Morning peak period (07:00-10:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |               | DM-BY         |               | Cluster 4 (C4) |               | C4-DM        |              |
|------------------------|----------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.         | Orig.         | Dest.         | Orig.          | Dest.         | Orig.        | Dest.        |
| Reg car (veh.)         | 45,366         | 46,098        | 72,758          | 72,353        | 27,392        | 26,255        | 74,350         | 73,341        | 1,592        | 988          |
| P&R (veh.)             | 551            | 7             | 868             | 10            | 317           | 3             | 880            | 10            | 12           | 0            |
| Bus only (pax)         | 3,065          | 2,143         | 4,378           | 3,178         | 1,313         | 1,035         | 4,568          | 3,228         | 190          | 50           |
| Rail (pax)             | 739            | 638           | 1,927           | 1,442         | 1,188         | 805           | 2,032          | 1,480         | 105          | 38           |
| <b>TOTAL (persons)</b> | <b>61,118</b>  | <b>60,411</b> | <b>98,207</b>   | <b>95,072</b> | <b>37,090</b> | <b>34,661</b> | <b>100,505</b> | <b>96,395</b> | <b>2,298</b> | <b>1,323</b> |

### Inter Peak period (10:00 – 16:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |                | DM-BY         |               | Cluster 4 (C4) |                | C4-DM        |              |
|------------------------|----------------|---------------|-----------------|----------------|---------------|---------------|----------------|----------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.          | Orig.         | Orig.         | Orig.          | Dest.          | Orig.        | Dest.        |
| Reg car (veh.)         | 69,702         | 68,233        | 135,765         | 132,239        | 66,063        | 64,006        | 138,148        | 134,617        | 2,383        | 2,378        |
| P&R (veh.)             | 213            | 240           | 268             | 406            | 55            | 166           | 269            | 408            | 1            | 2            |
| Bus only (pax)         | 3,523          | 3,623         | 5,379           | 5,763          | 1,856         | 2,139         | 5,446          | 5,859          | 67           | 96           |
| Rail (pax)             | 561            | 321           | 1,965           | 2,030          | 1,404         | 1,708         | 2,011          | 2,103          | 46           | 73           |
| <b>TOTAL (persons)</b> | <b>91,446</b>  | <b>89,500</b> | <b>177,345</b>  | <b>173,538</b> | <b>85,899</b> | <b>84,038</b> | <b>180,439</b> | <b>176,682</b> | <b>3,094</b> | <b>3,144</b> |

### Evening peak period (16:00 - 19:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |                | DM-BY         |               | Cluster 4 (C4) |                | C4-DM        |              |
|------------------------|----------------|---------------|-----------------|----------------|---------------|---------------|----------------|----------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.          | Orig.         | Orig.         | Orig.          | Dest.          | Orig.        | Dest.        |
| Reg car (veh.)         | 50,499         | 51,295        | 82,877          | 83,762         | 32,378        | 32,467        | 84,222         | 85,525         | 1,345        | 1,763        |
| P&R (veh.)             | 31             | 501           | 47              | 749            | 17            | 248           | 47             | 756            | 0            | 7            |
| Bus only (pax)         | 1,763          | 2,415         | 2,594           | 3,526          | 832           | 1,111         | 2,648          | 3,680          | 54           | 154          |
| Rail (pax)             | 828            | 773           | 1,825           | 1,941          | 997           | 1,168         | 1,859          | 2,032          | 34           | 91           |
| <b>TOTAL (persons)</b> | <b>65,748</b>  | <b>67,857</b> | <b>108,068</b>  | <b>110,994</b> | <b>42,320</b> | <b>43,137</b> | <b>109,837</b> | <b>113,449</b> | <b>1,769</b> | <b>2,455</b> |

### 12 hour-period (07:00 - 19:00)

| VOWH                   | Base Year (BY) |                | Do Minimum (DM) |                | DM-BY          |                | Cluster 4 (C4) |                | C4-DM        |              |
|------------------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|
|                        | Orig.          | Dest.          | Orig.           | Dest.          | Orig.          | Orig.          | Orig.          | Dest.          | Orig.        | Dest.        |
| Reg car (veh.)         | 165,567        | 165,626        | 291,400         | 288,354        | 125,833        | 122,728        | 296,721        | 293,483        | 5,321        | 5,129        |
| P&R (veh.)             | 795            | 748            | 1,184           | 1,165          | 389            | 417            | 1,197          | 1,174          | 13           | 9            |
| Bus only (pax)         | 8,351          | 8,181          | 12,351          | 12,467         | 4,000          | 4,285          | 12,662         | 12,767         | 311          | 300          |
| Rail (pax)             | 2,128          | 1,732          | 5,717           | 5,413          | 3,589          | 3,681          | 5,902          | 5,615          | 185          | 202          |
| <b>TOTAL (persons)</b> | <b>218,312</b> | <b>217,769</b> | <b>383,620</b>  | <b>379,604</b> | <b>165,309</b> | <b>161,835</b> | <b>390,781</b> | <b>386,526</b> | <b>7,161</b> | <b>6,922</b> |

## A.2.5. Cluster 5

### Morning peak period (07:00-10:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |               | DM-BY         |               | Cluster 5 (C5) |               | C5-DM        |              |
|------------------------|----------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.         | Orig.         | Dest.         | Orig.          | Dest.         | Orig.        | Dest.        |
| Reg car (veh.)         | 45,366         | 46,098        | 72,758          | 72,353        | 27,392        | 26,255        | 76,039         | 74,369        | 3,281        | 2,016        |
| P&R (veh.)             | 551            | 7             | 868             | 10            | 317           | 3             | 895            | 10            | 27           | 0            |
| Bus only (pax)         | 3,065          | 2,143         | 4,378           | 3,178         | 1,313         | 1,035         | 4,644          | 3,223         | 266          | 45           |
| Rail (pax)             | 739            | 638           | 1,927           | 1,442         | 1,188         | 805           | 2,295          | 1,540         | 368          | 98           |
| <b>TOTAL (persons)</b> | <b>61,118</b>  | <b>60,411</b> | <b>98,207</b>   | <b>95,072</b> | <b>37,090</b> | <b>34,661</b> | <b>102,972</b> | <b>97,734</b> | <b>4,765</b> | <b>2,662</b> |

### Inter Peak period (10:00 – 16:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |                | DM-BY         |               | Cluster 5 (C5) |                | C5-DM        |              |
|------------------------|----------------|---------------|-----------------|----------------|---------------|---------------|----------------|----------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.          | Orig.         | Orig.         | Orig.          | Dest.          | Orig.        | Dest.        |
| Reg car (veh.)         | 69,702         | 68,233        | 135,765         | 132,239        | 66,063        | 64,006        | 140,616        | 136,996        | 4,851        | 4,757        |
| P&R (veh.)             | 213            | 240           | 268             | 406            | 55            | 166           | 283            | 410            | 15           | 4            |
| Bus only (pax)         | 3,523          | 3,623         | 5,379           | 5,763          | 1,856         | 2,139         | 5,508          | 5,932          | 129          | 169          |
| Rail (pax)             | 561            | 321           | 1,965           | 2,030          | 1,404         | 1,708         | 2,091          | 2,213          | 126          | 183          |
| <b>TOTAL (persons)</b> | <b>91,446</b>  | <b>89,500</b> | <b>177,345</b>  | <b>173,538</b> | <b>85,899</b> | <b>84,038</b> | <b>183,681</b> | <b>179,842</b> | <b>6,336</b> | <b>6,304</b> |

### Evening peak period (16:00 - 19:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |                | DM-BY         |               | Cluster 5 (C5) |                | C5-DM        |              |
|------------------------|----------------|---------------|-----------------|----------------|---------------|---------------|----------------|----------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.          | Orig.         | Orig.         | Orig.          | Dest.          | Orig.        | Dest.        |
| Reg car (veh.)         | 50,499         | 51,295        | 82,877          | 83,762         | 32,378        | 32,467        | 85,699         | 87,269         | 2,822        | 3,507        |
| P&R (veh.)             | 31             | 501           | 47              | 749            | 17            | 248           | 48             | 836            | 1            | 87           |
| Bus only (pax)         | 1,763          | 2,415         | 2,594           | 3,526          | 832           | 1,111         | 2,631          | 3,733          | 37           | 207          |
| Rail (pax)             | 828            | 773           | 1,825           | 1,941          | 997           | 1,168         | 1,926          | 2,247          | 101          | 306          |
| <b>TOTAL (persons)</b> | <b>65,748</b>  | <b>67,857</b> | <b>108,068</b>  | <b>110,994</b> | <b>42,320</b> | <b>43,137</b> | <b>111,733</b> | <b>115,987</b> | <b>3,665</b> | <b>4,993</b> |

### 12 hour-period (07:00 - 19:00)

| VOWH                   | Base Year (BY) |                | Do Minimum (DM) |                | DM-BY          |                | Cluster 5 (C5) |                | C5-DM         |               |
|------------------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|
|                        | Orig.          | Dest.          | Orig.           | Dest.          | Orig.          | Orig.          | Orig.          | Dest.          | Orig.         | Dest.         |
| Reg car (veh.)         | 165,567        | 165,626        | 291,400         | 288,354        | 125,833        | 122,728        | 302,354        | 298,634        | 10,954        | 10,280        |
| P&R (veh.)             | 795            | 748            | 1,184           | 1,165          | 389            | 417            | 1,227          | 1,256          | 43            | 91            |
| Bus only (pax)         | 8,351          | 8,181          | 12,351          | 12,467         | 4,000          | 4,285          | 12,783         | 12,889         | 432           | 422           |
| Rail (pax)             | 2,128          | 1,732          | 5,717           | 5,413          | 3,589          | 3,681          | 6,312          | 6,000          | 595           | 587           |
| <b>TOTAL (persons)</b> | <b>218,312</b> | <b>217,769</b> | <b>383,620</b>  | <b>379,604</b> | <b>165,309</b> | <b>161,835</b> | <b>398,386</b> | <b>393,564</b> | <b>14,766</b> | <b>13,960</b> |

## A.2.6. Cluster 6

### Morning peak period (07:00-10:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |               | DM-BY         |               | Cluster 6 (C6) |               | C6-DM        |              |
|------------------------|----------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.         | Orig.         | Dest.         | Orig.          | Dest.         | Orig.        | Dest.        |
| Reg car (veh.)         | 45,366         | 46,098        | 72,758          | 72,353        | 27,392        | 26,255        | 75,704         | 74,268        | 2,946        | 1,915        |
| P&R (veh.)             | 551            | 7             | 868             | 10            | 317           | 3             | 881            | 10            | 13           | 0            |
| Bus only (pax)         | 3,065          | 2,143         | 4,378           | 3,178         | 1,313         | 1,035         | 4,639          | 3,253         | 261          | 75           |
| Rail (pax)             | 739            | 638           | 1,927           | 1,442         | 1,188         | 805           | 2,193          | 1,511         | 266          | 69           |
| <b>TOTAL (persons)</b> | <b>61,118</b>  | <b>60,411</b> | <b>98,207</b>   | <b>95,072</b> | <b>37,090</b> | <b>34,661</b> | <b>102,431</b> | <b>97,609</b> | <b>4,224</b> | <b>2,537</b> |

### Inter Peak period (10:00 – 16:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |                | DM-BY         |               | Cluster 6 (C6) |                | C6-DM        |              |
|------------------------|----------------|---------------|-----------------|----------------|---------------|---------------|----------------|----------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.          | Orig.         | Orig.         | Orig.          | Dest.          | Orig.        | Dest.        |
| Reg car (veh.)         | 69,702         | 68,233        | 135,765         | 132,239        | 66,063        | 64,006        | 140,700        | 137,073        | 4,935        | 4,834        |
| P&R (veh.)             | 213            | 240           | 268             | 406            | 55            | 166           | 270            | 406            | 2            | 0            |
| Bus only (pax)         | 3,523          | 3,623         | 5,379           | 5,763          | 1,856         | 2,139         | 5,492          | 5,909          | 113          | 146          |
| Rail (pax)             | 561            | 321           | 1,965           | 2,030          | 1,404         | 1,708         | 2,032          | 2,135          | 67           | 105          |
| <b>TOTAL (persons)</b> | <b>91,446</b>  | <b>89,500</b> | <b>177,345</b>  | <b>173,538</b> | <b>85,899</b> | <b>84,038</b> | <b>183,696</b> | <b>179,832</b> | <b>6,351</b> | <b>6,294</b> |

### Evening peak period (16:00 - 19:00)

| VOWH                   | Base Year (BY) |               | Do Minimum (DM) |                | DM-BY         |               | Cluster 6 (C6) |                | C6-DM        |              |
|------------------------|----------------|---------------|-----------------|----------------|---------------|---------------|----------------|----------------|--------------|--------------|
|                        | Orig.          | Dest.         | Orig.           | Dest.          | Orig.         | Orig.         | Orig.          | Dest.          | Orig.        | Dest.        |
| Reg car (veh.)         | 50,499         | 51,295        | 82,877          | 83,762         | 32,378        | 32,467        | 85,551         | 86,894         | 2,674        | 3,132        |
| P&R (veh.)             | 31             | 501           | 47              | 749            | 17            | 248           | 48             | 755            | 1            | 6            |
| Bus only (pax)         | 1,763          | 2,415         | 2,594           | 3,526          | 832           | 1,111         | 2,653          | 3,714          | 59           | 188          |
| Rail (pax)             | 828            | 773           | 1,825           | 1,941          | 997           | 1,168         | 1,886          | 2,123          | 61           | 182          |
| <b>TOTAL (persons)</b> | <b>65,748</b>  | <b>67,857</b> | <b>108,068</b>  | <b>110,994</b> | <b>42,320</b> | <b>43,137</b> | <b>111,531</b> | <b>115,286</b> | <b>3,463</b> | <b>4,292</b> |

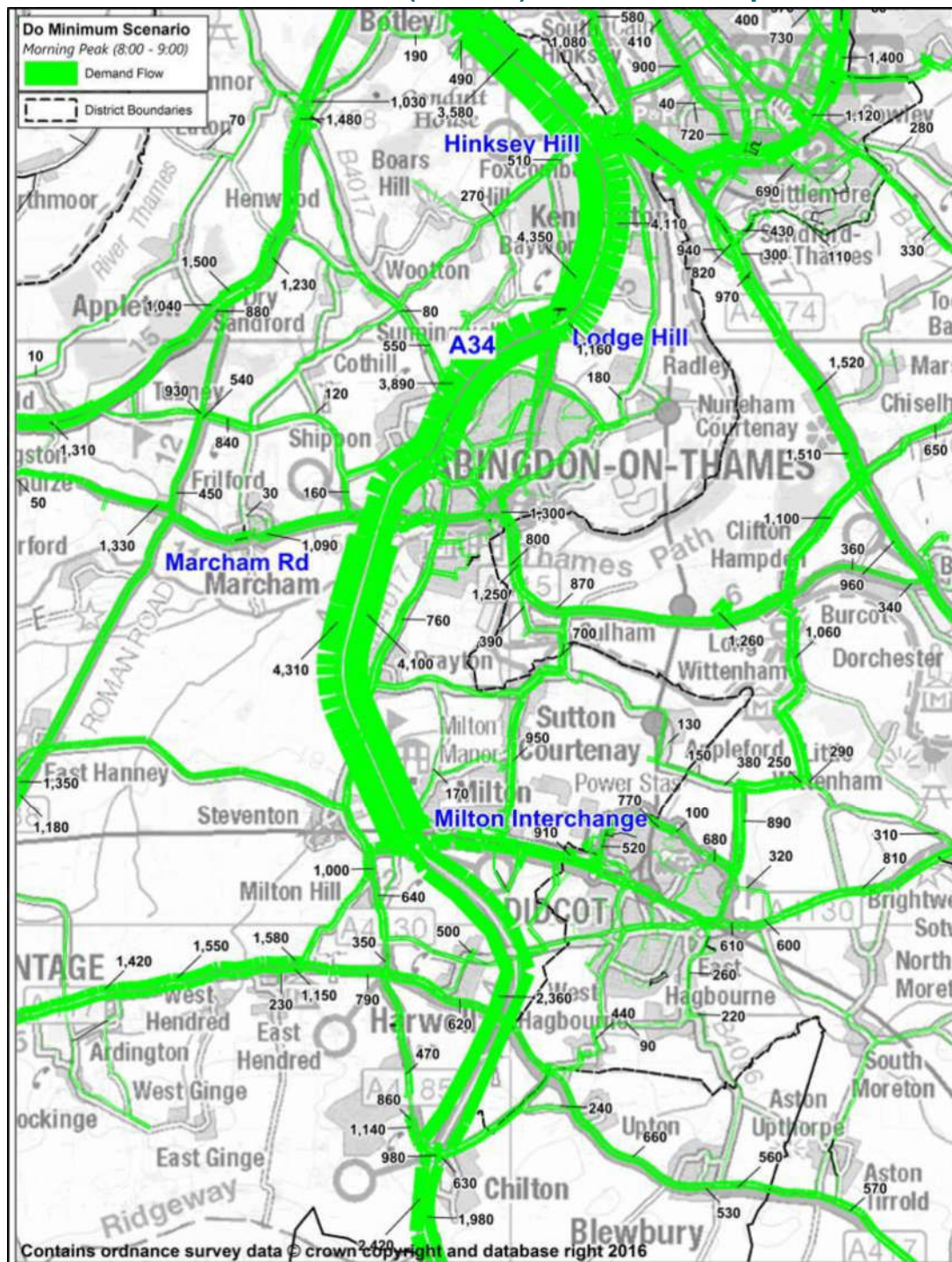
### 12 hour-period (07:00 - 19:00)

| VOWH                   | Base Year (BY) |                | Do Minimum (DM) |                | DM-BY          |                | Cluster 6 (C6) |                | C6-DM         |               |
|------------------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|
|                        | Orig.          | Dest.          | Orig.           | Dest.          | Orig.          | Orig.          | Orig.          | Dest.          | Orig.         | Dest.         |
| Reg car (veh.)         | 165,567        | 165,626        | 291,400         | 288,354        | 125,833        | 122,728        | 301,956        | 298,236        | 10,556        | 9,882         |
| P&R (veh.)             | 795            | 748            | 1,184           | 1,165          | 389            | 417            | 1,198          | 1,170          | 14            | 5             |
| Bus only (pax)         | 8,351          | 8,181          | 12,351          | 12,467         | 4,000          | 4,285          | 12,784         | 12,876         | 433           | 409           |
| Rail (pax)             | 2,128          | 1,732          | 5,717           | 5,413          | 3,589          | 3,681          | 6,111          | 5,769          | 394           | 356           |
| <b>TOTAL (persons)</b> | <b>218,312</b> | <b>217,769</b> | <b>383,620</b>  | <b>379,604</b> | <b>165,309</b> | <b>161,835</b> | <b>397,658</b> | <b>392,727</b> | <b>14,038</b> | <b>13,123</b> |

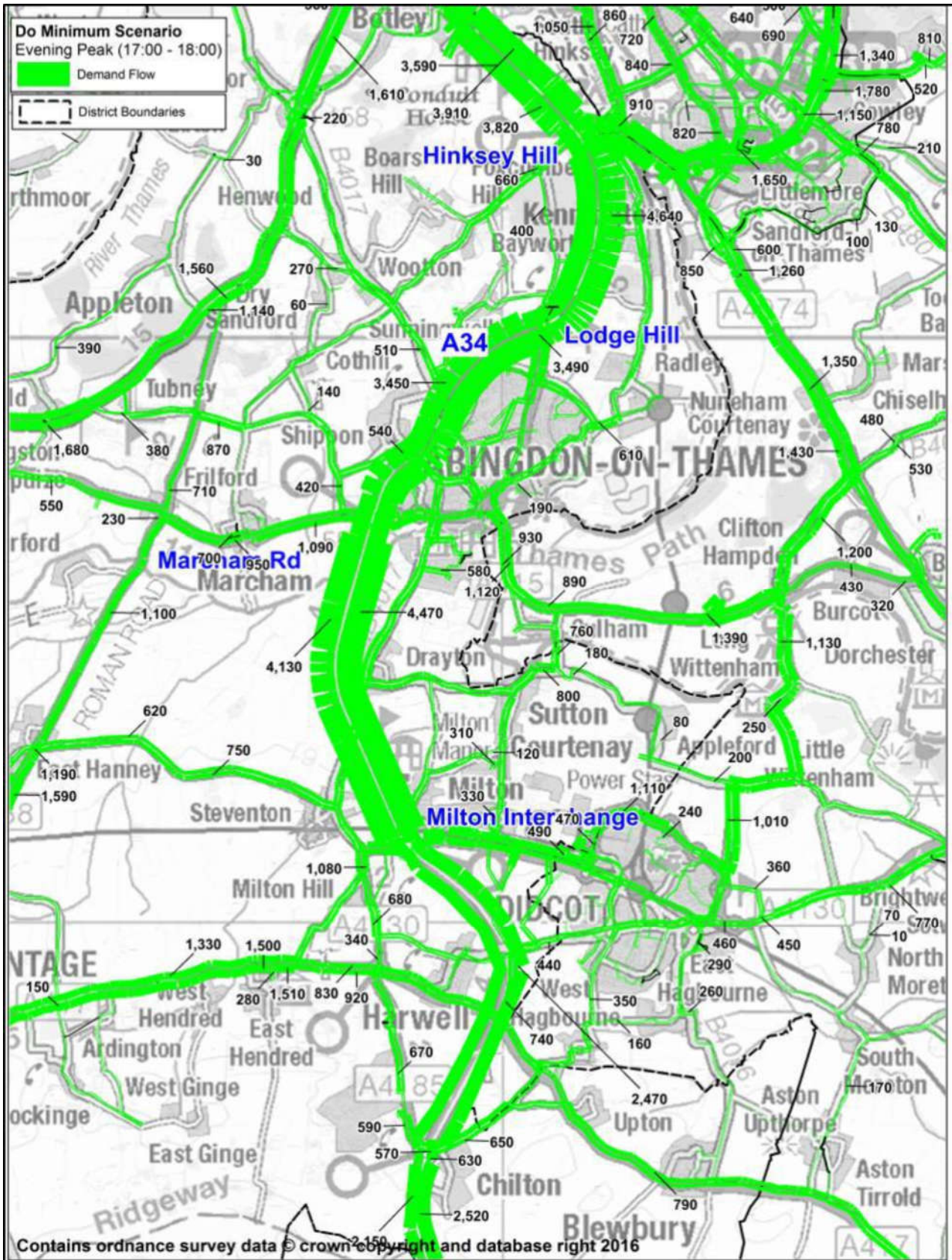
# Appendix B. Do-minimum Flow and Capacity Plots

## B.1. A34

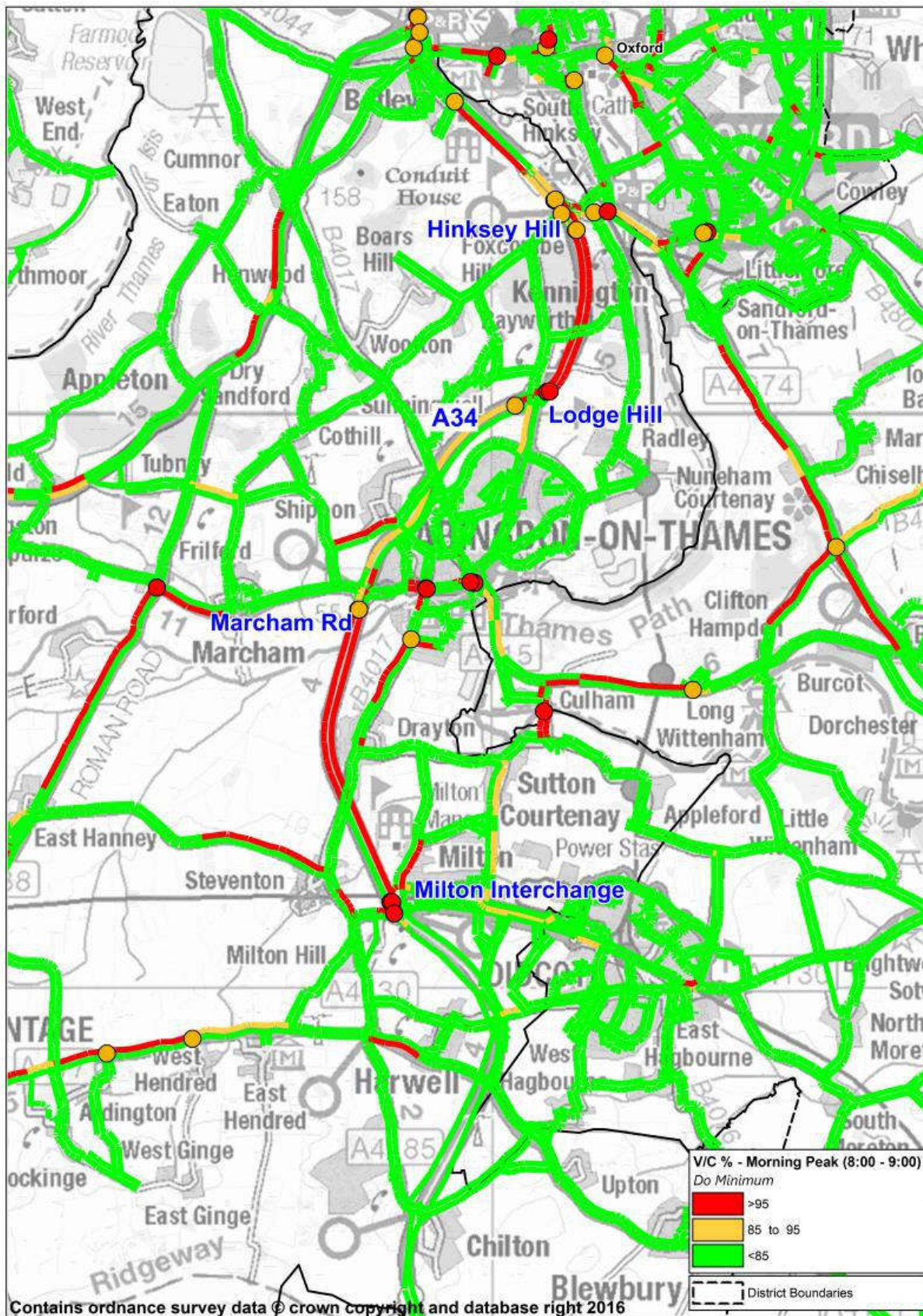
### B.1.1. A34 - Demand flow (PCU/hr) – 2031 DM AM peak hour



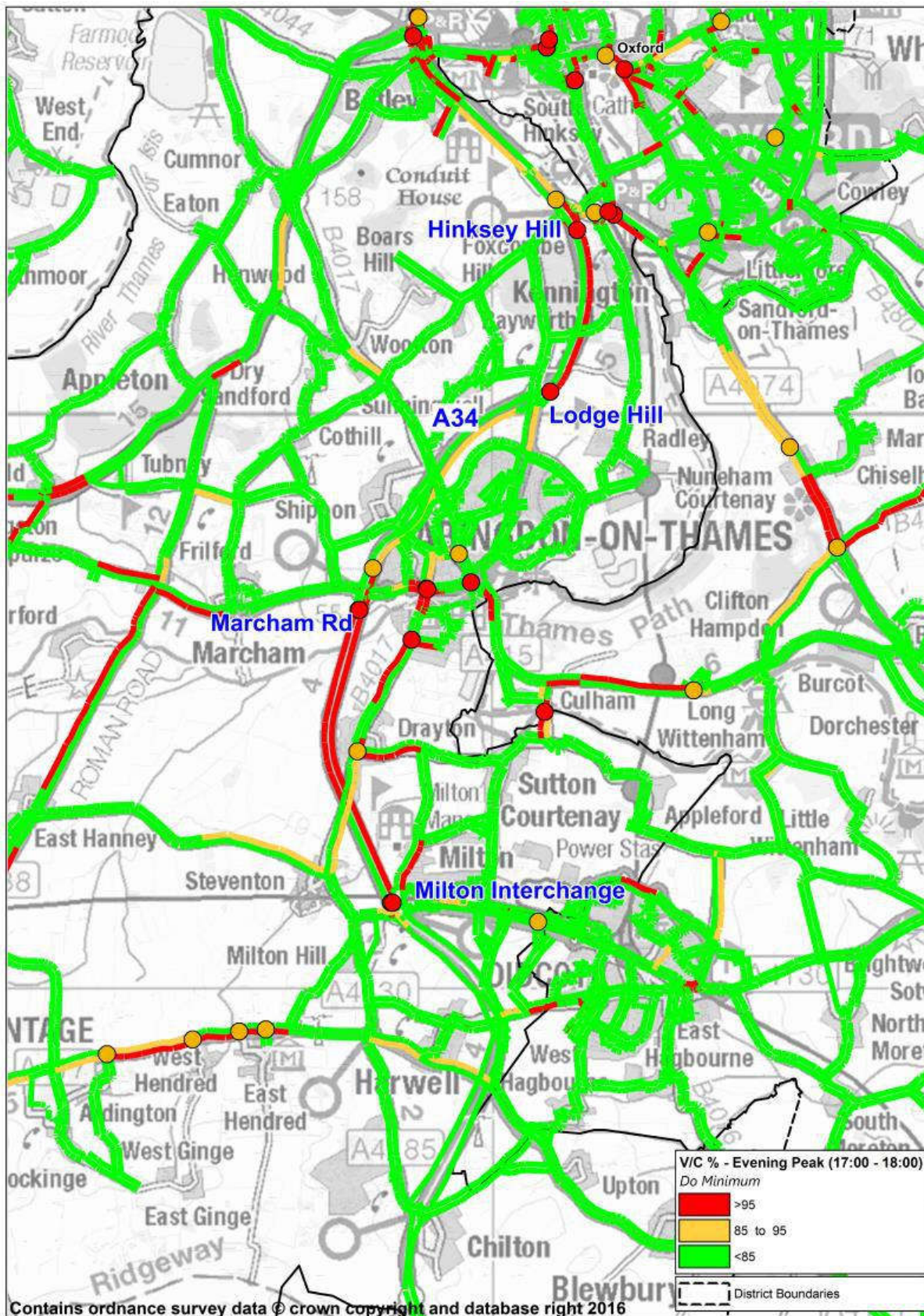
#### B.1.2. A34 - Demand flow (PCU/hr) – 2031 DM PM peak hour



### B.1.3. A34 - Volume-capacity ratio (%ge) – 2031 DM AM peak hour

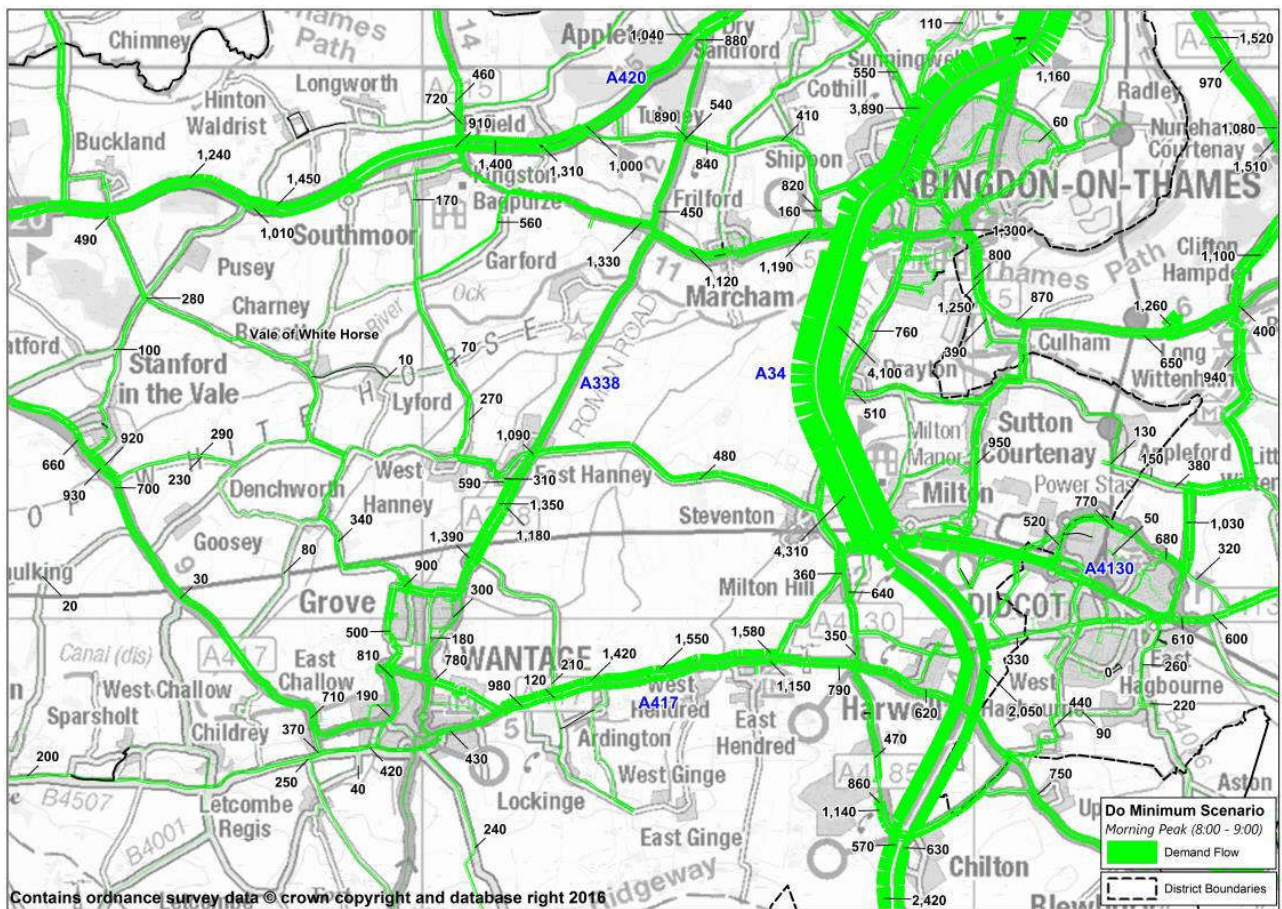


#### B.1.4. A34 - Volume-capacity ratio (%ge) – 2031 DM PM peak hour



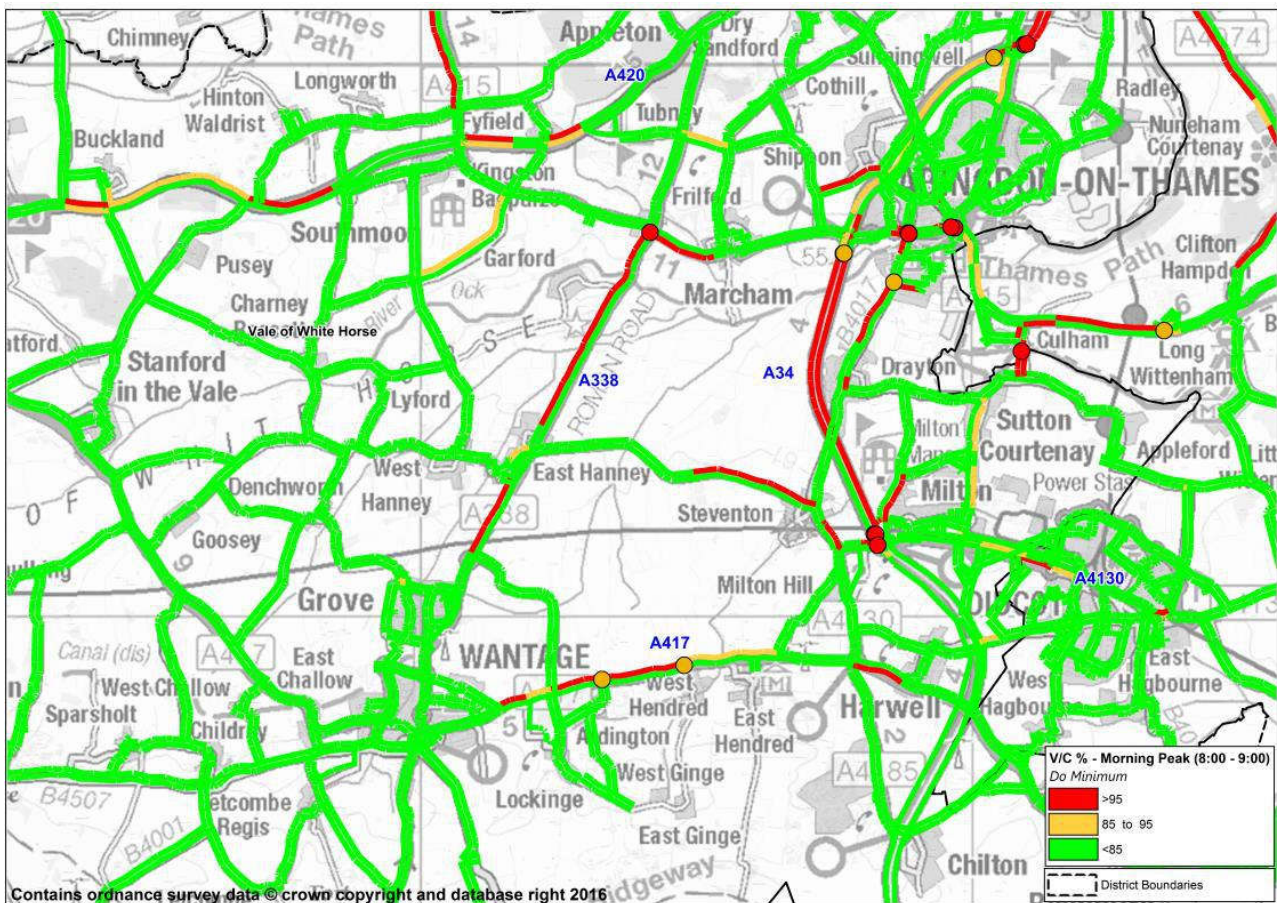
## B.2. A417 and A338

### B.2.1. A417 and A338 - Demand flow (PCU/hr) – 2031 DM AM peak hour

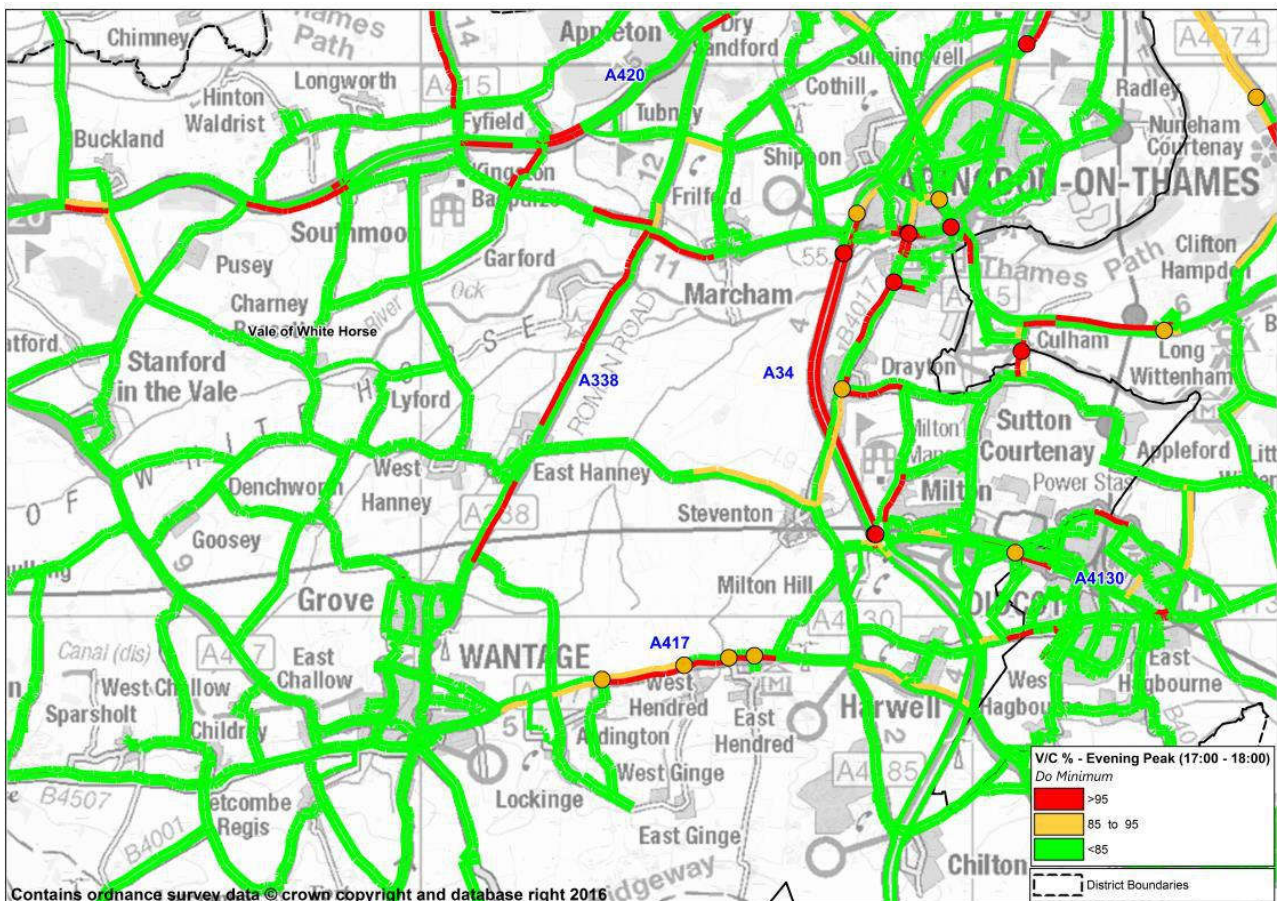


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### B.2.3. A417 and A338 - Volume-capacity ratio (%ge) – 2031 DM AM peak hour

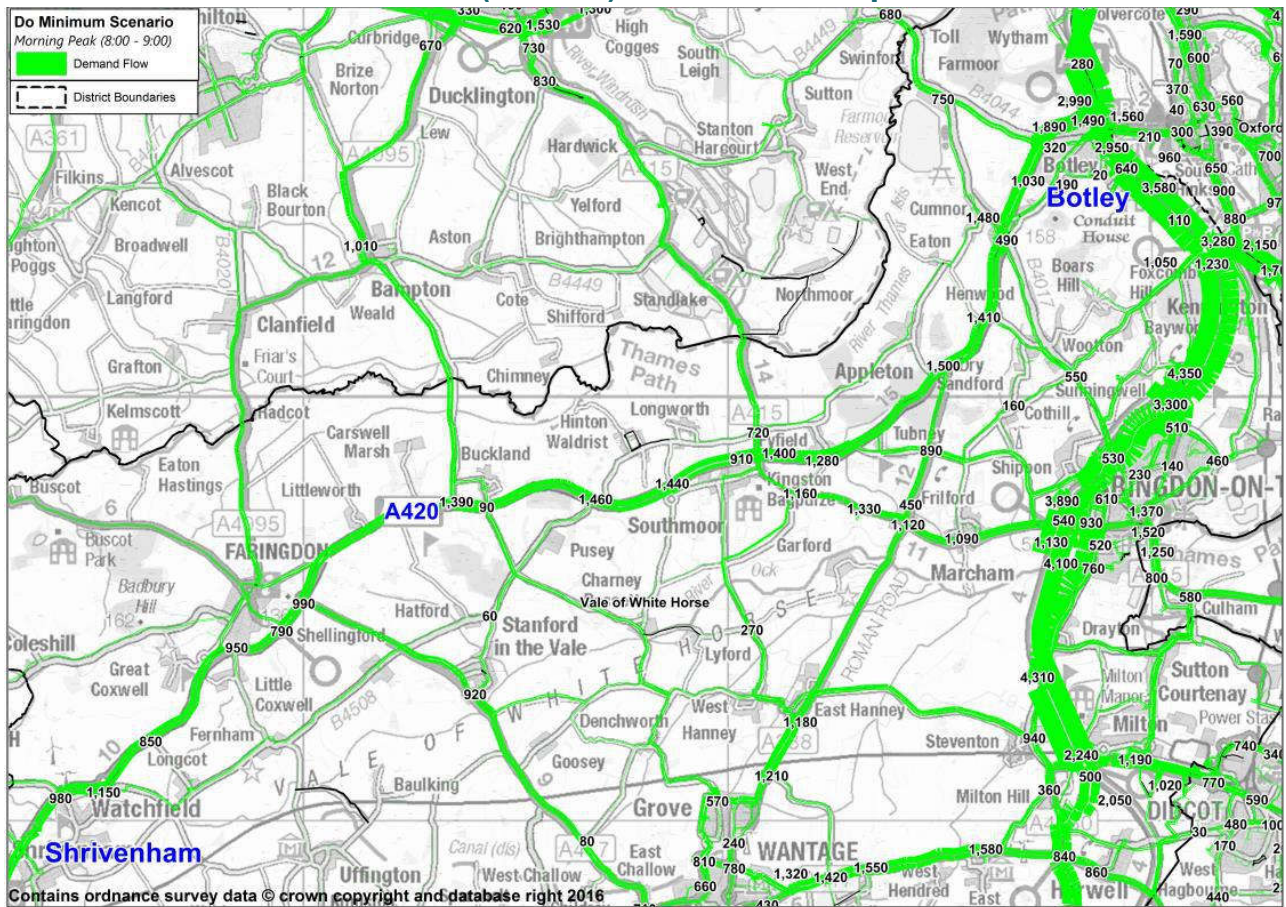


#### B.2.4. A417 and A338 - Volume-capacity ratio (%ge) – 2031 DM PM peak hour

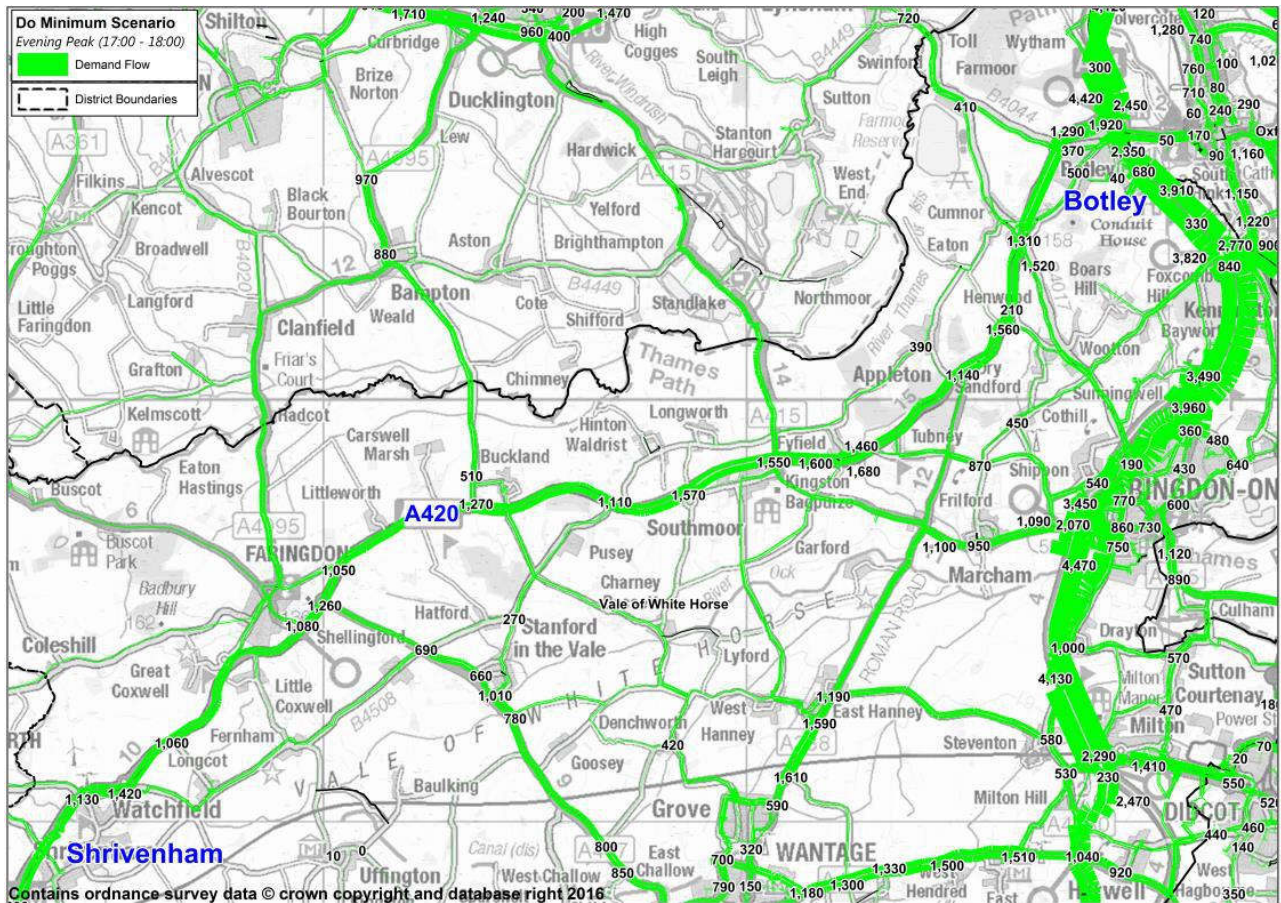


## B.3. A420

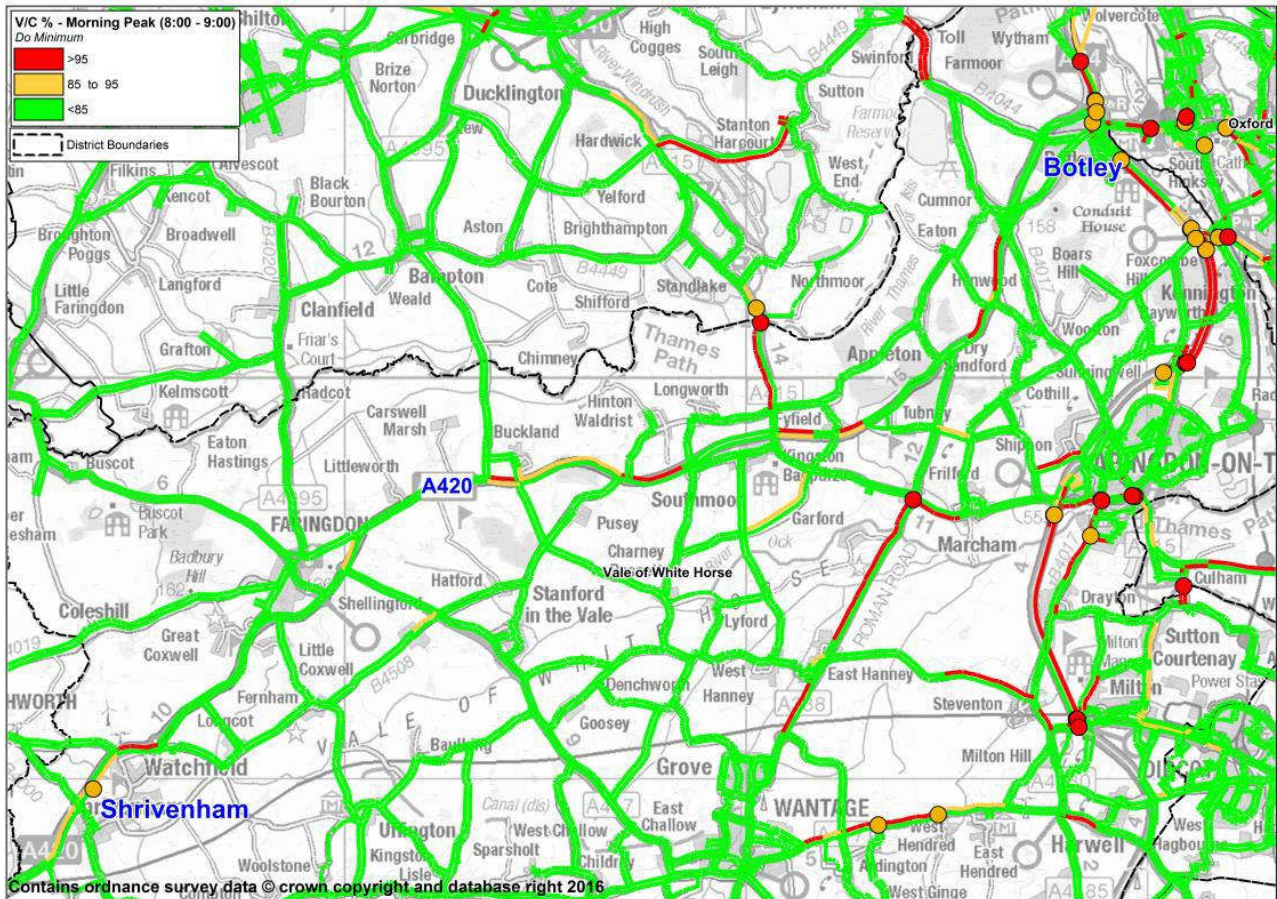
### B.3.1. A420 - Demand flow (PCU/hr) – 2031 DM AM peak hour



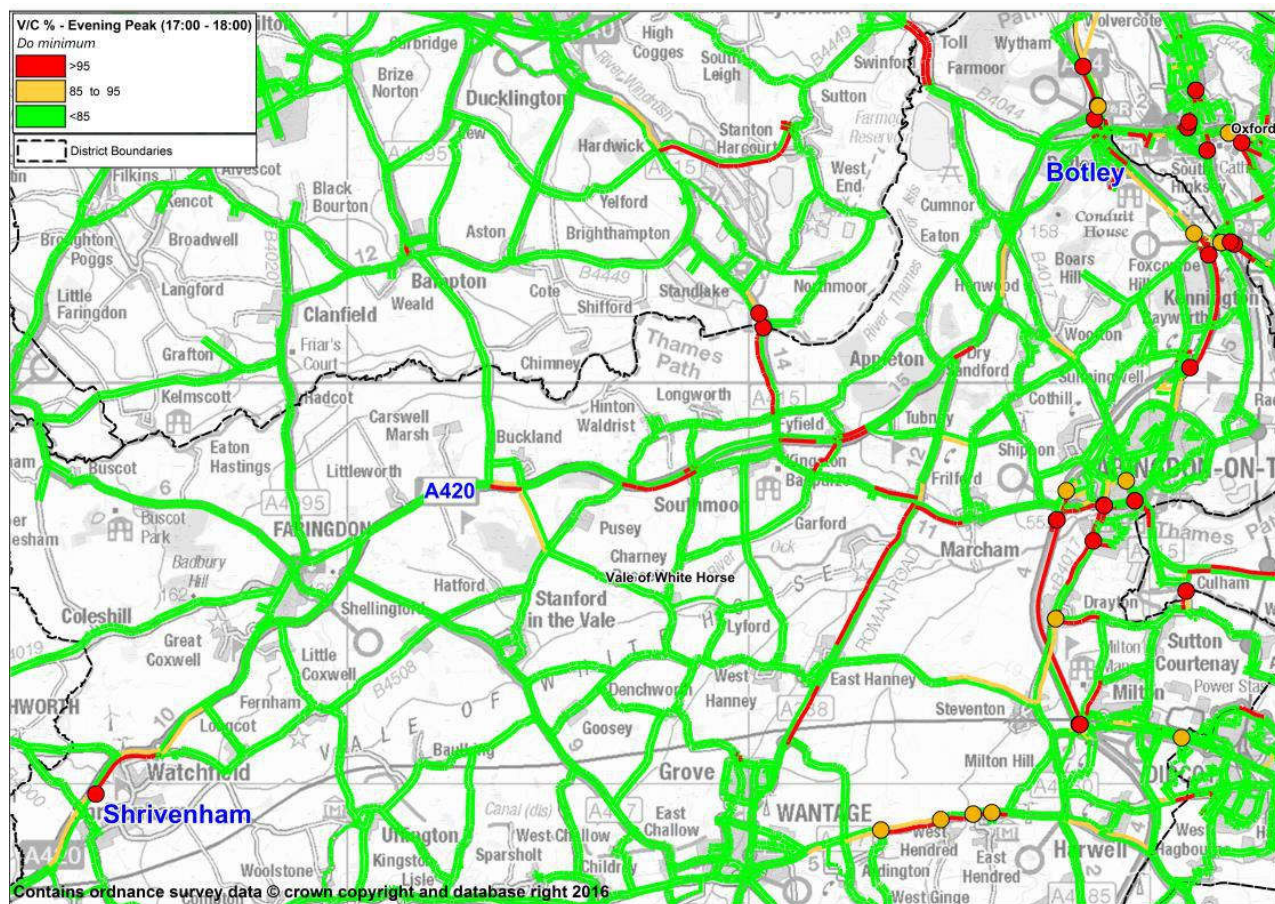
### B.3.2. A420 - Demand flow (PCU/hr) – 2031 DM PM peak hour



### B.3.3. A420 - Volume-capacity ratio (%ge) – 2031 DM AM peak hour

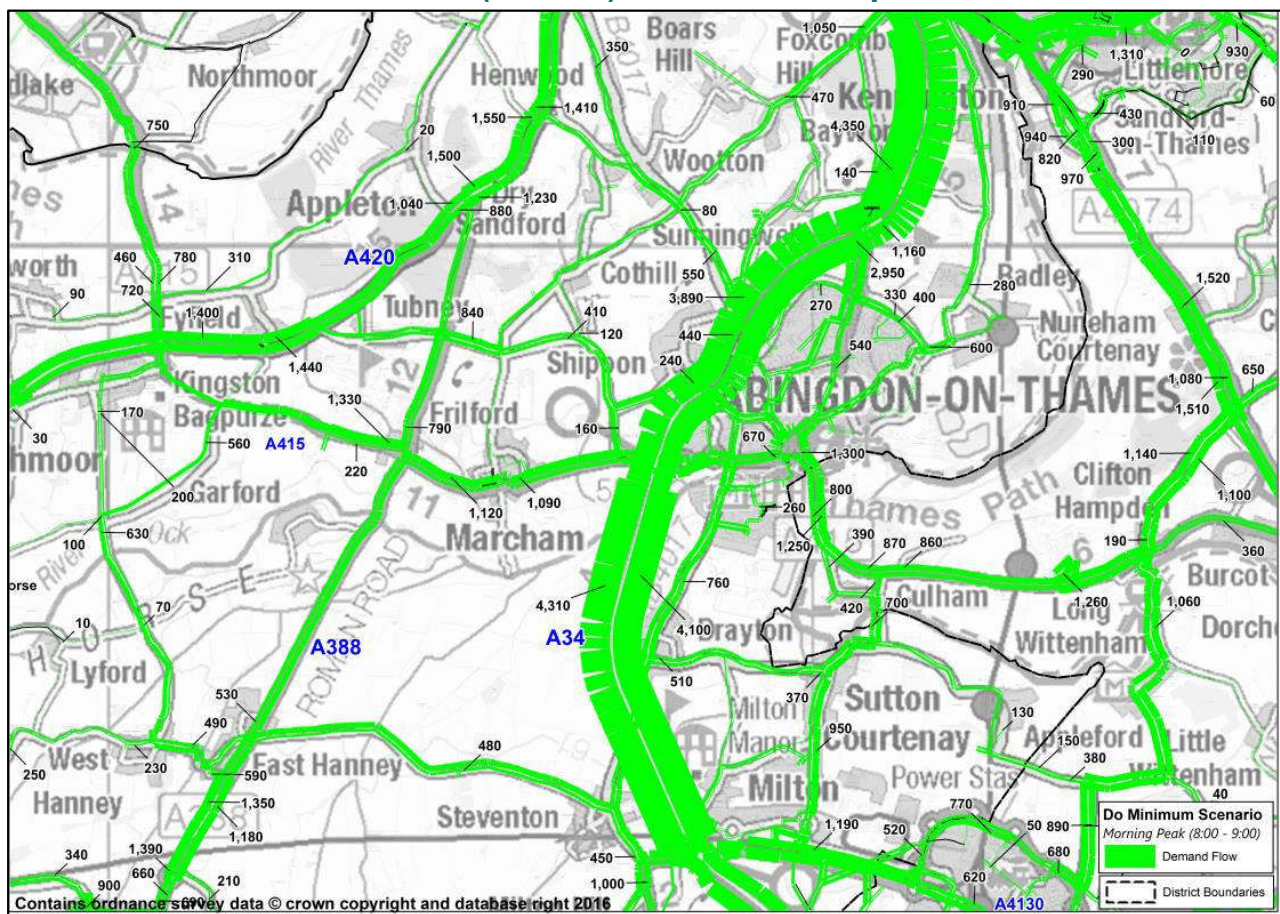


### B.3.4. A420 - Volume-capacity ratio (%ge) – 2031 DM PM peak hour

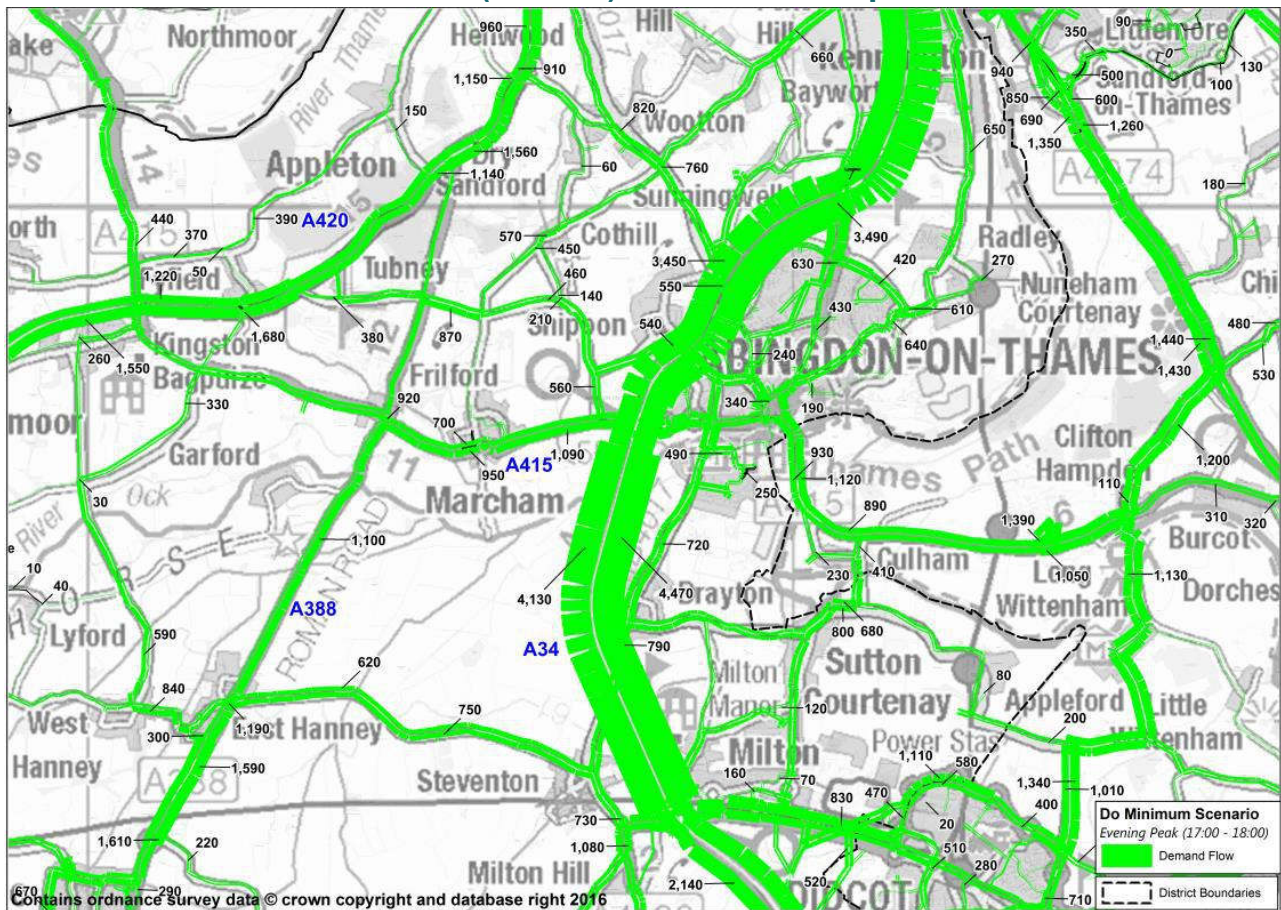


## B.4. A415

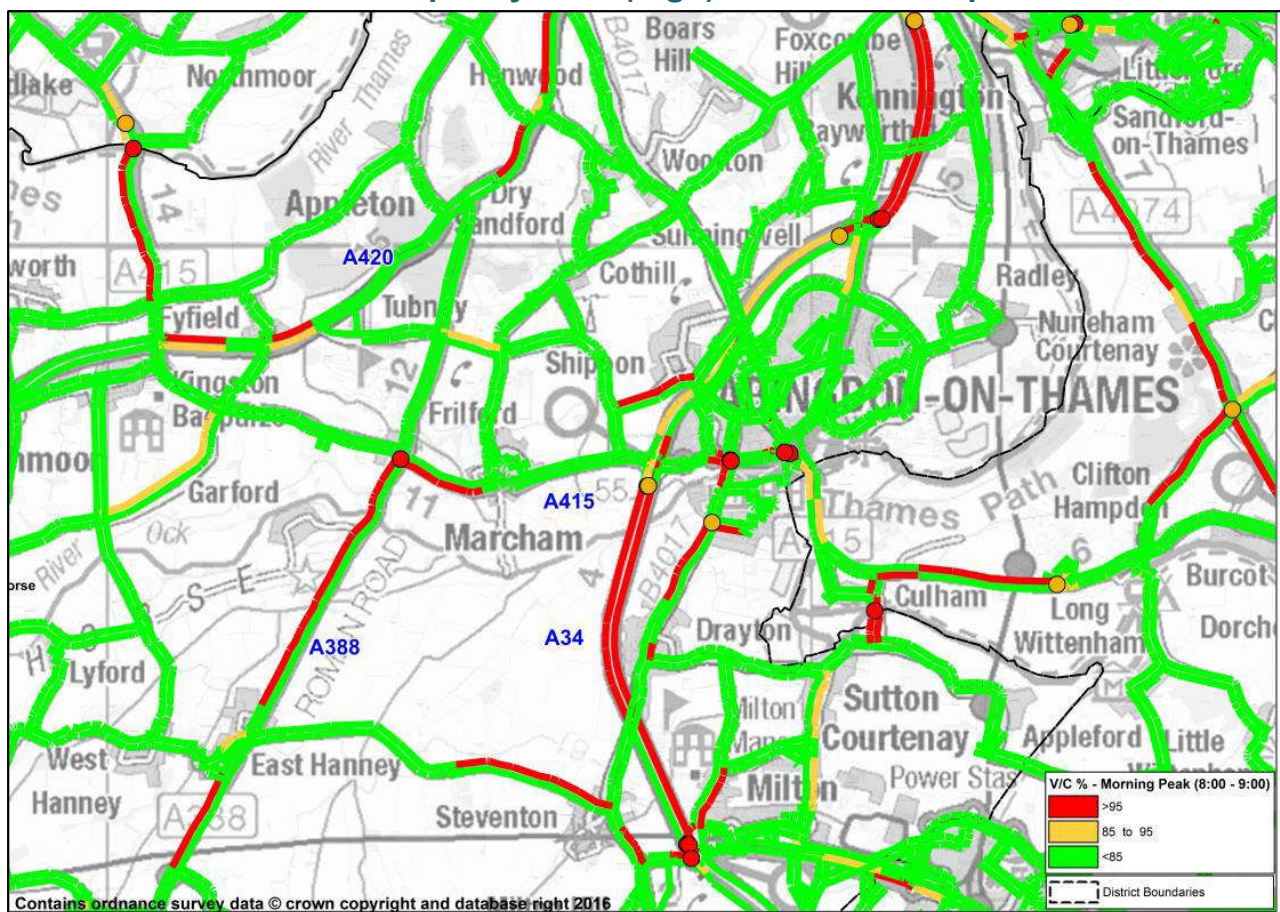
### B.4.1. A415 - Demand flow (PCU/hr) – 2031 DM AM peak hour



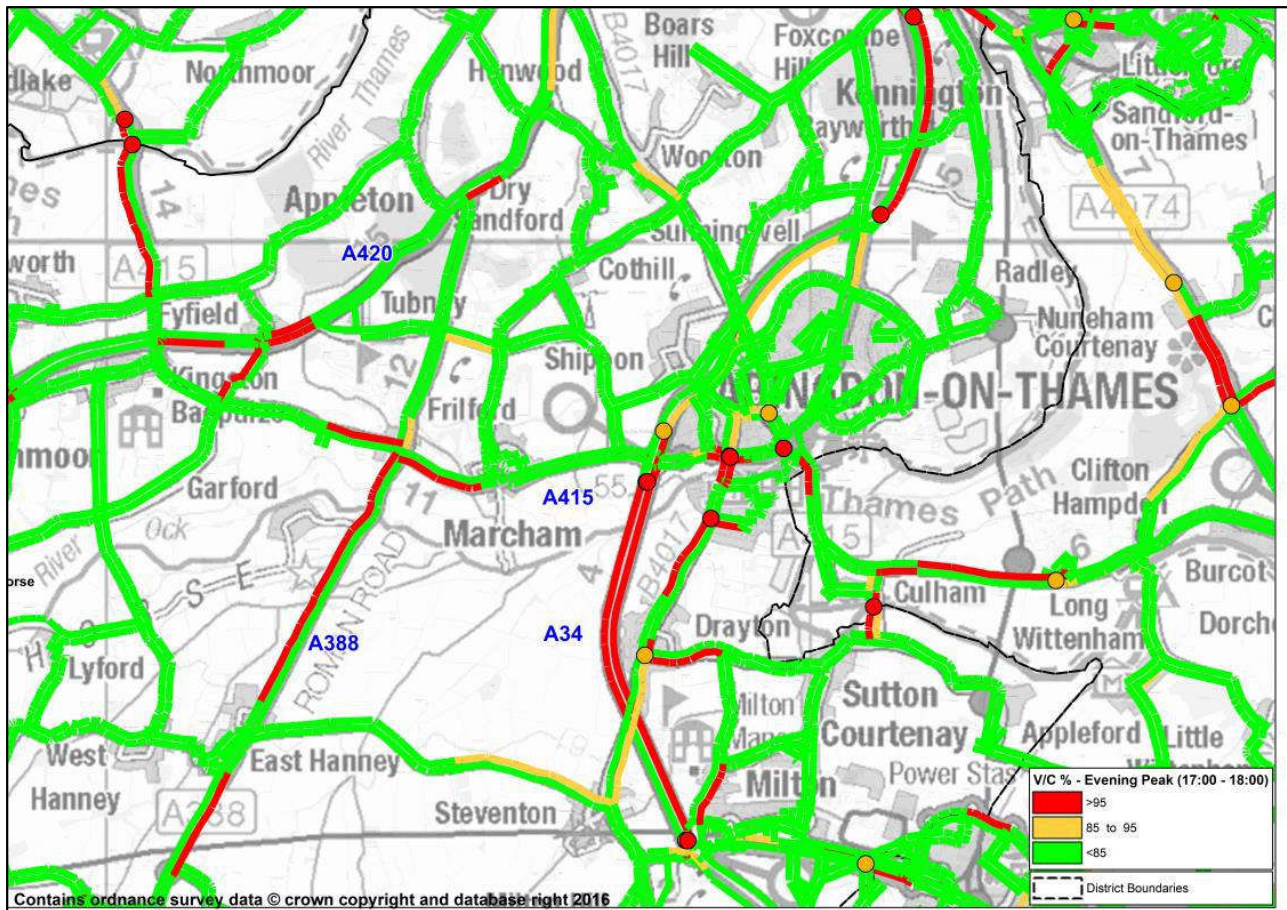
## B.4.2. A415 - Demand flow (PCU/hr) – 2031 DM PM peak hour



### B.4.3. A415 - Volume-capacity ratio (%ge) – 2031 DM AM peak hour

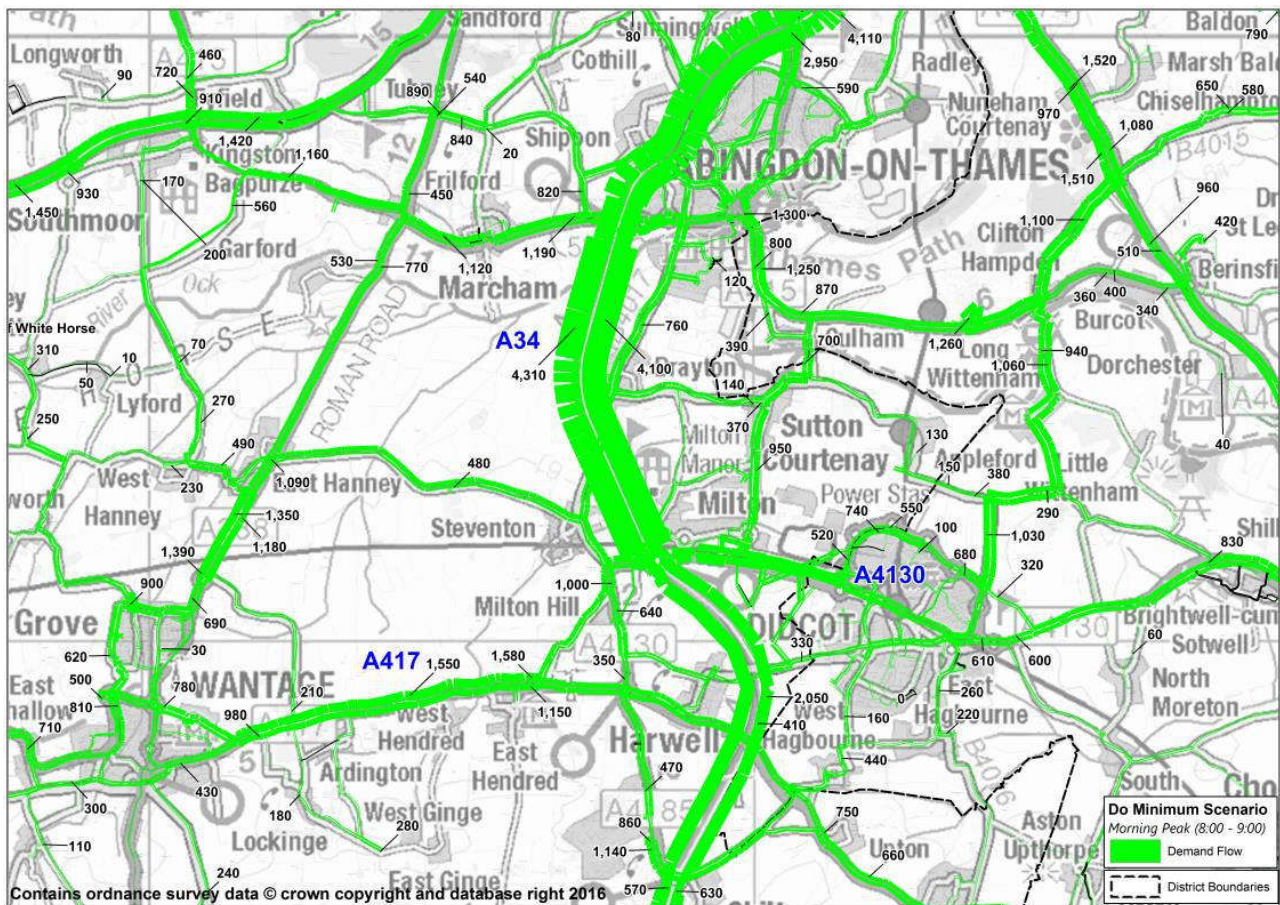


#### B.4.4. A415 - Volume-capacity ratio (%ge) – 2031 DM PM peak hour

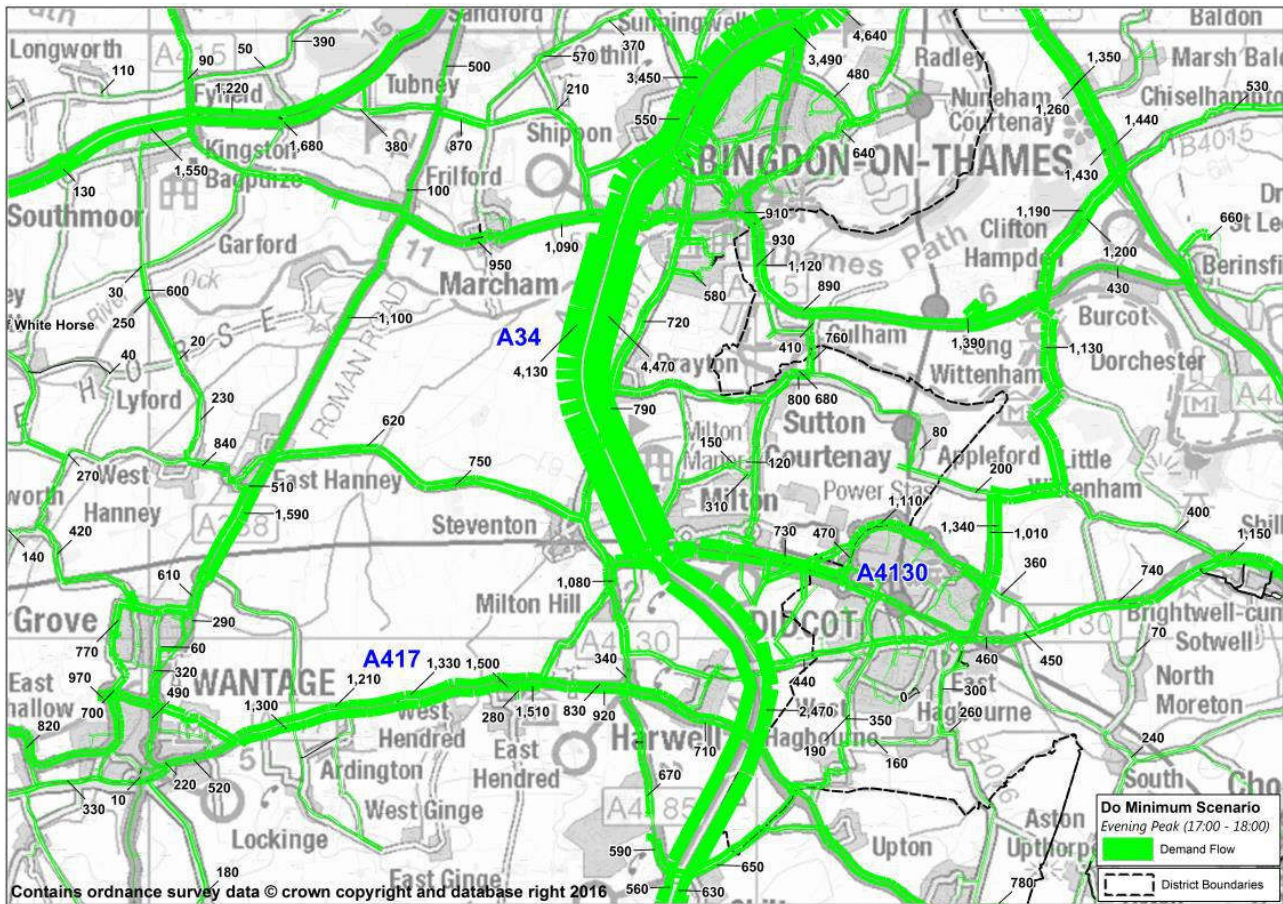


## B.5. A4130

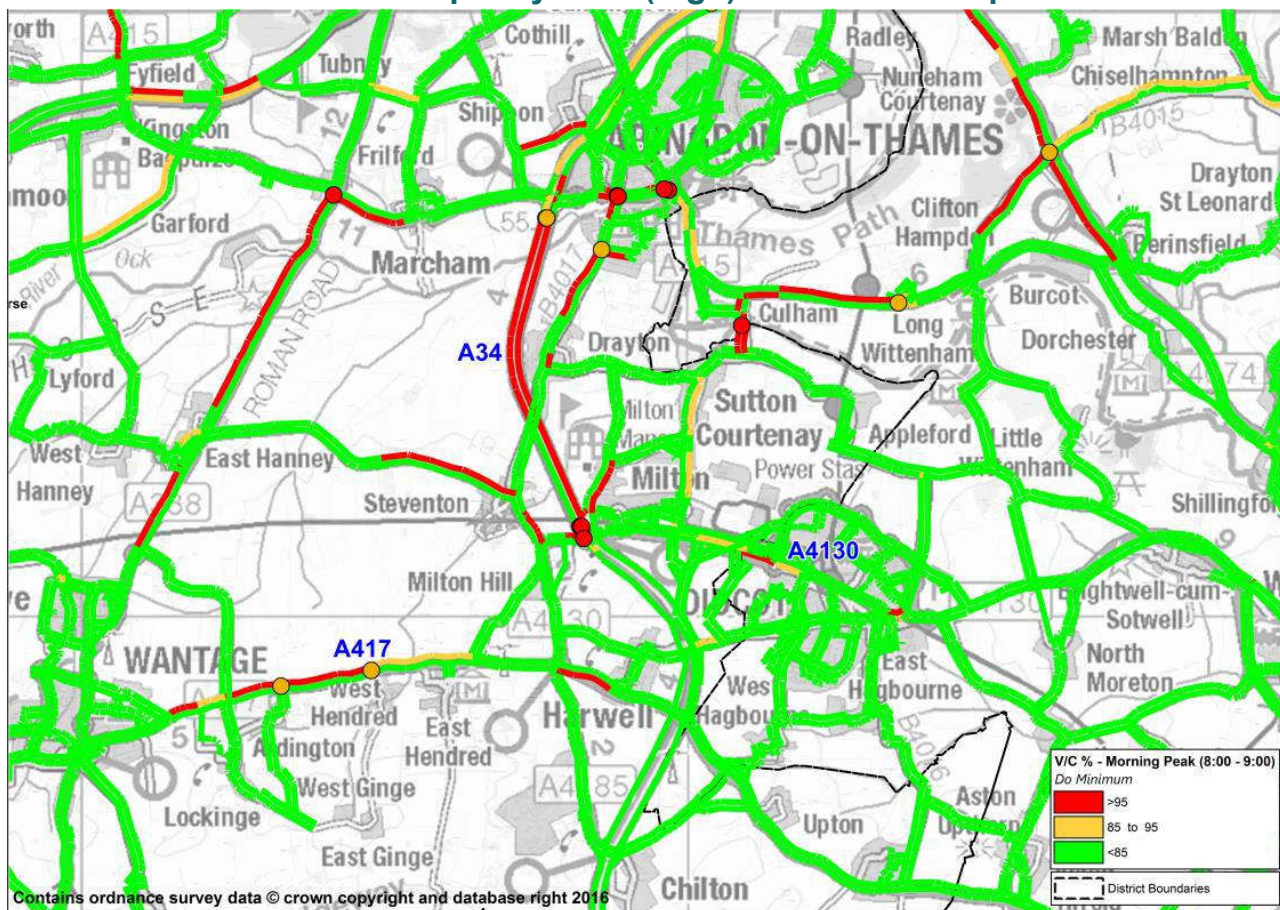
### B.5.1. A4130 - Demand flow (PCU/hr) – 2031 DM AM peak hour



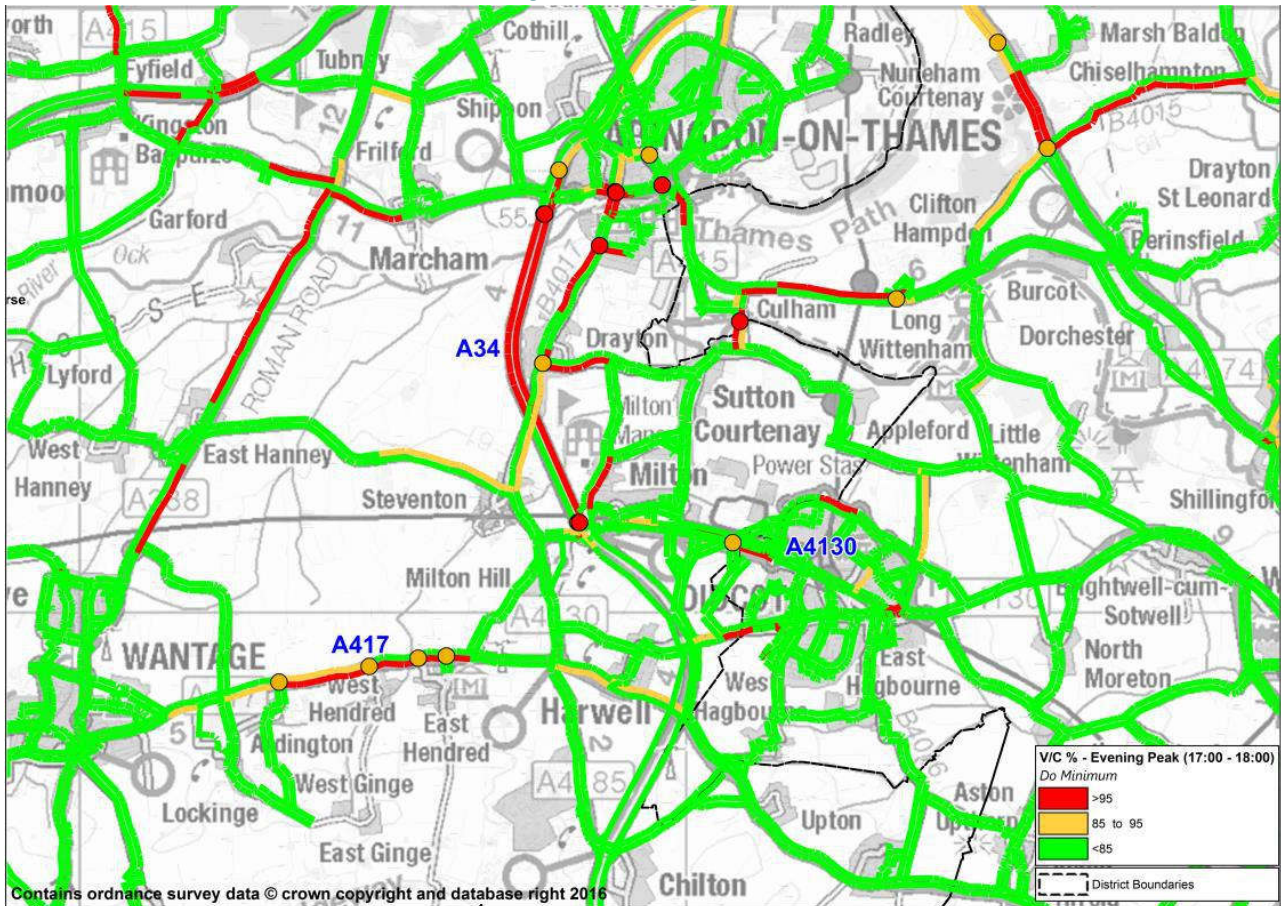
## B.5.2. A4130 - Demand flow (PCU/hr) – 2031 DM PM peak hour



### B.5.3. A4130 - Volume-capacity ratio (%ge) – 2031 DM AM peak hour

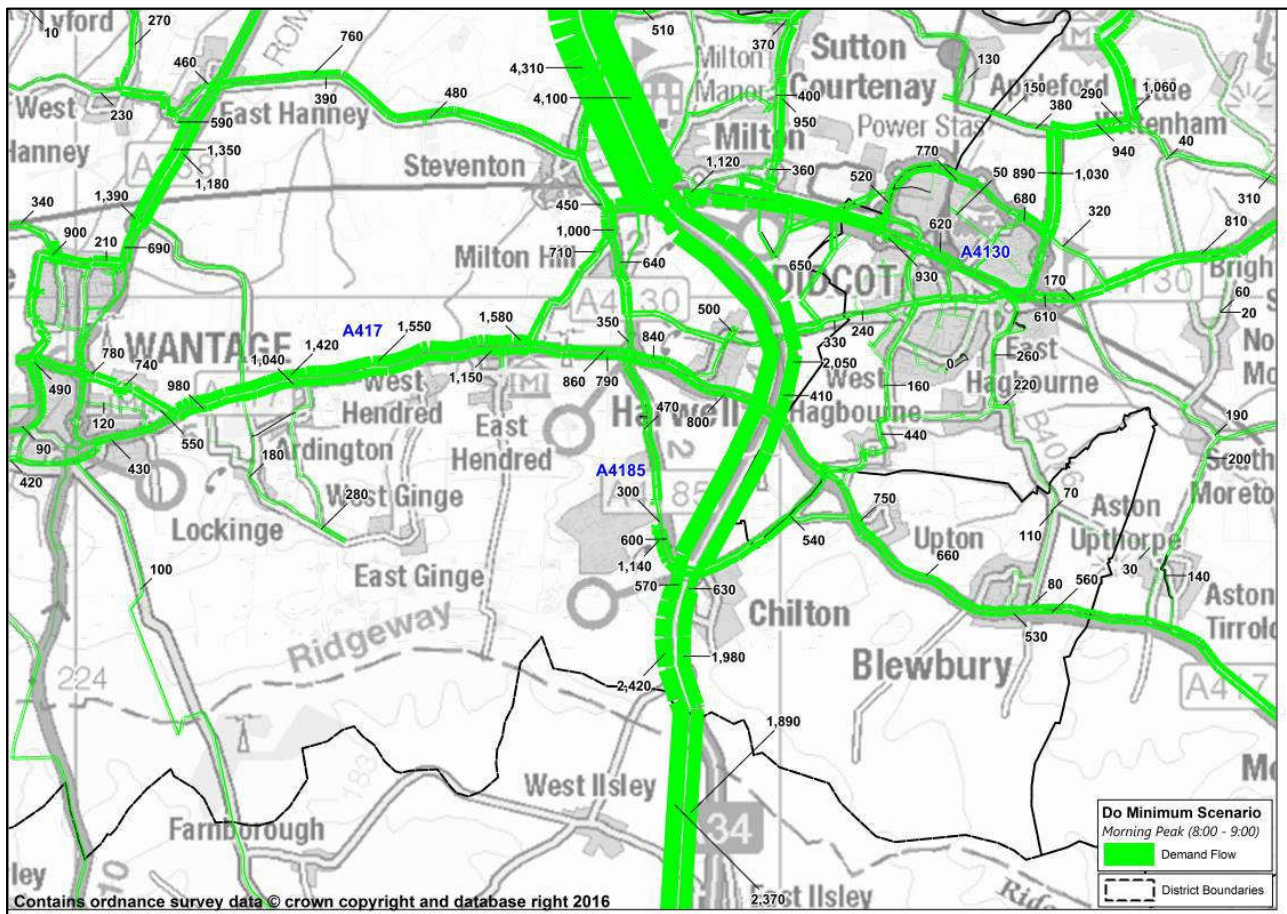


#### B.5.4. A4130 - Volume-capacity ratio (%ge) – 2031 DM PM peak hour

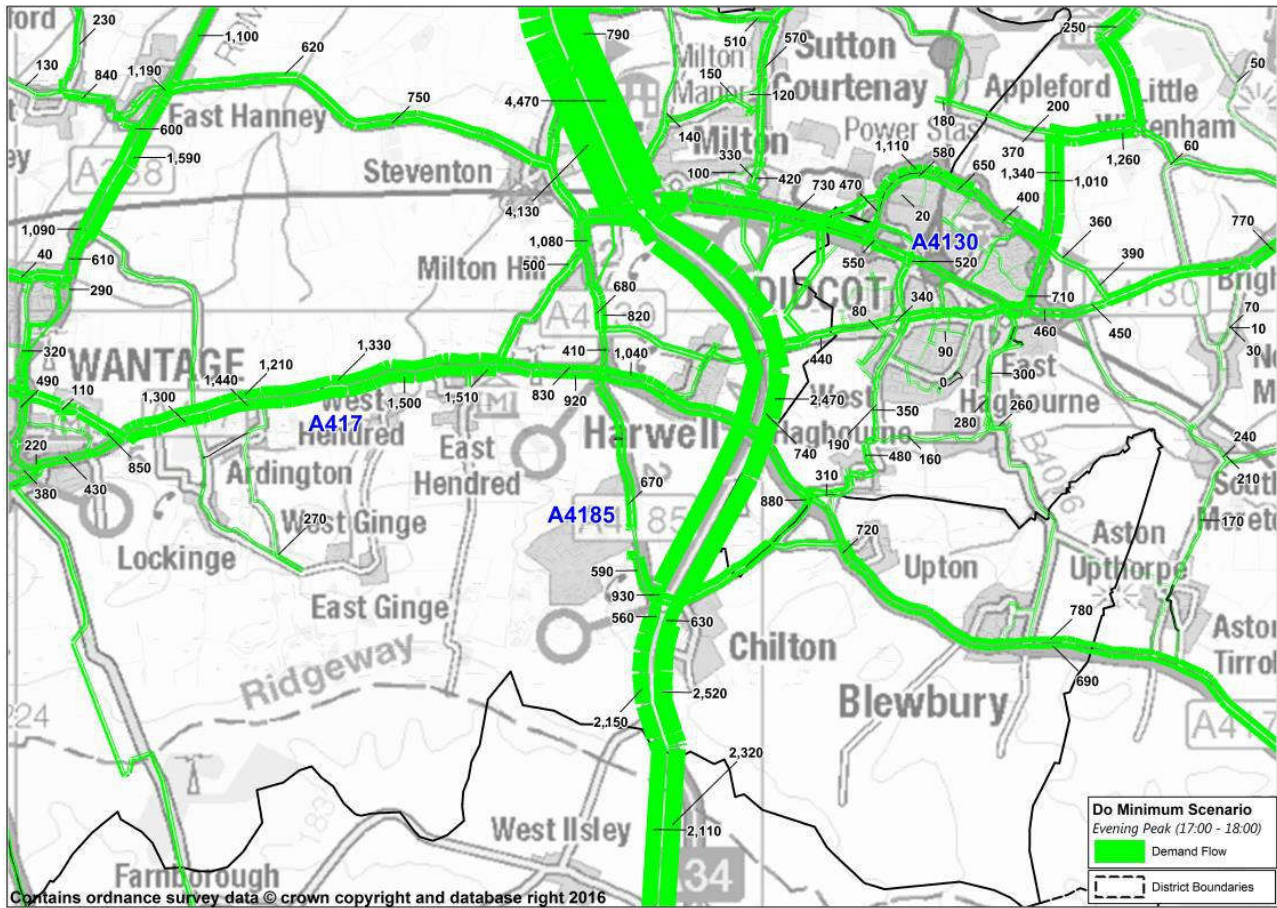


## B.6. A4185

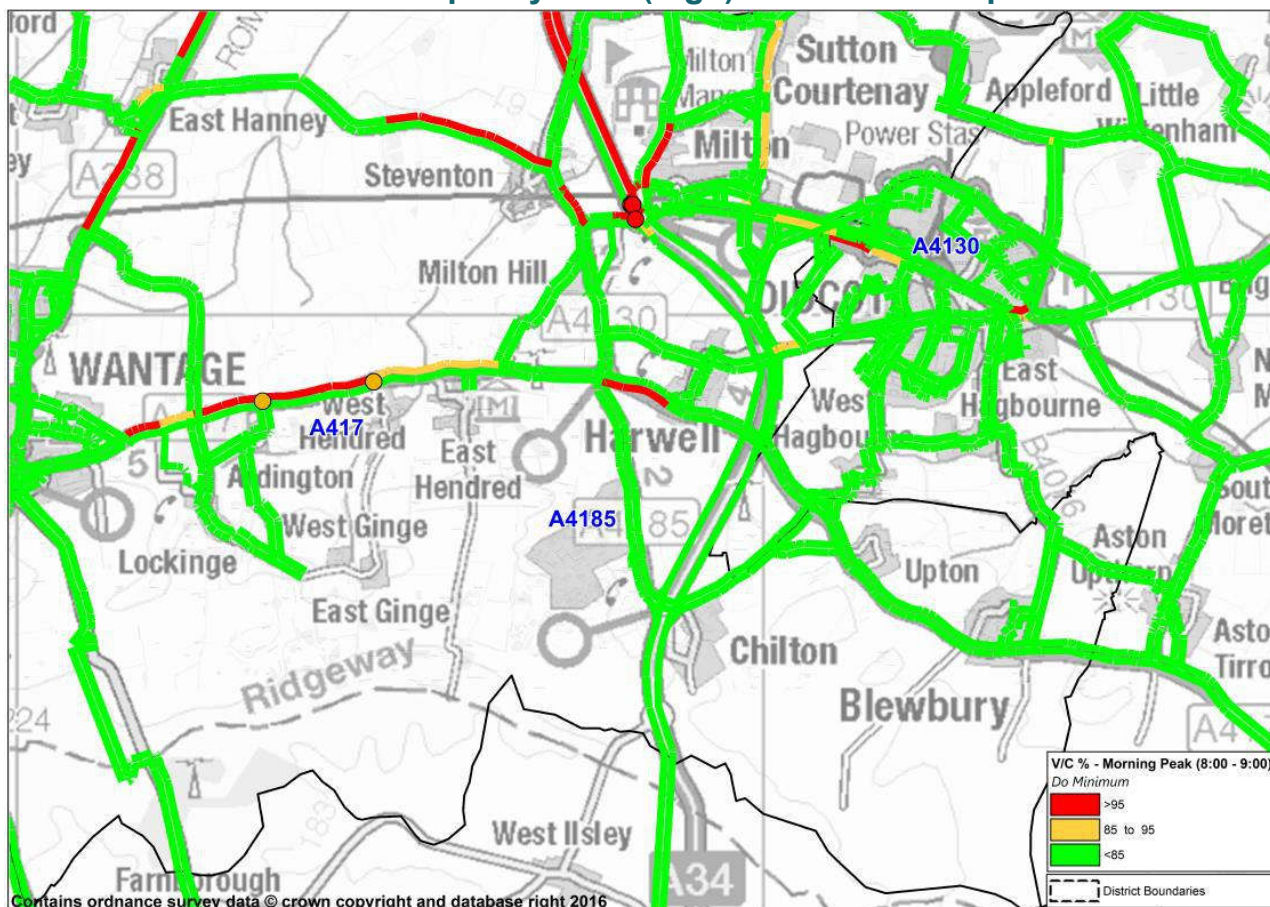
#### B.6.1. A4185 - Demand flow (PCU/hr) – 2031 DM AM peak hour



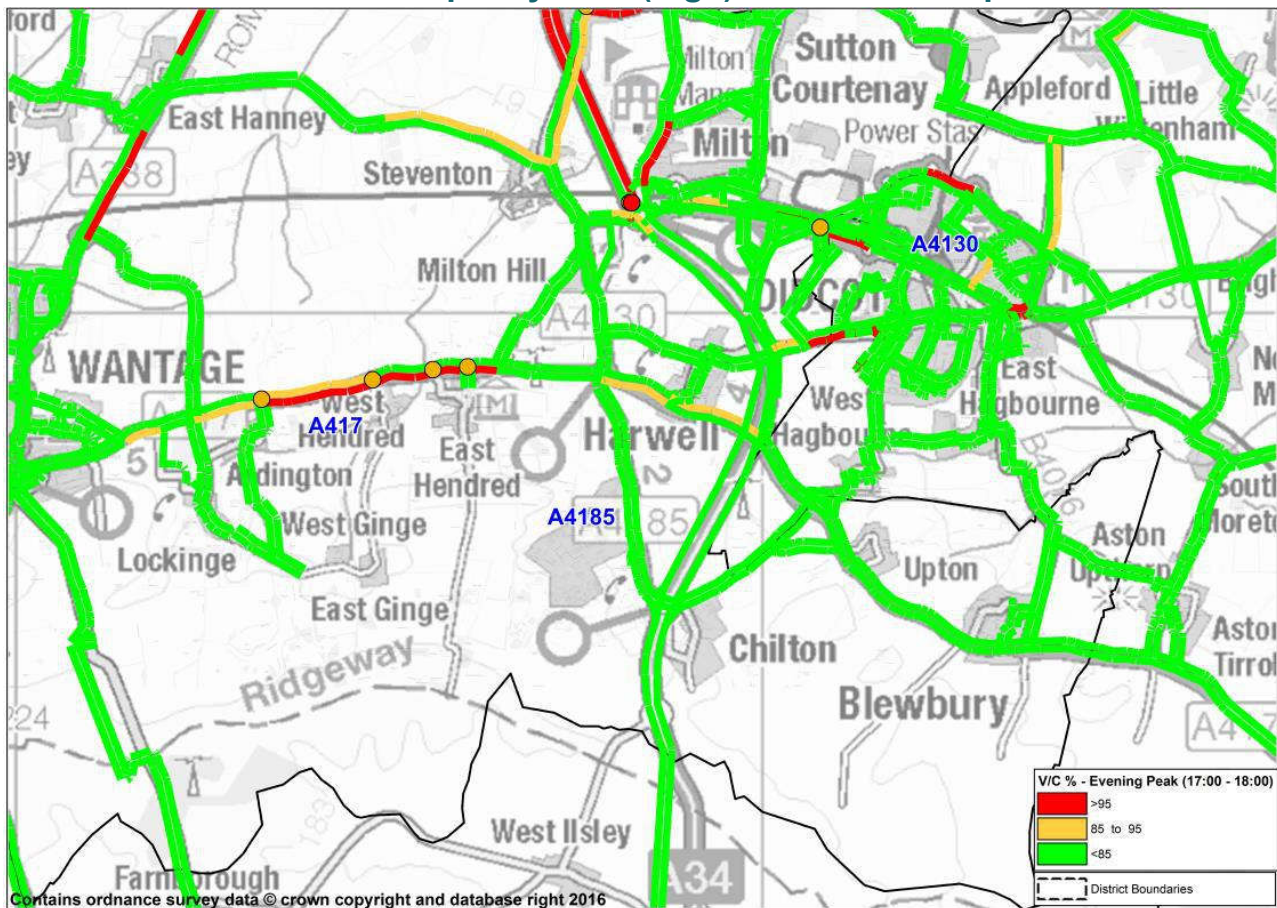
## B.6.2. A4185 - Demand flow (PCU/hr) – 2031 DM PM peak hour



### B.6.3. A4185 - Volume-capacity ratio (%ge) – 2031 DM AM peak hour



#### B.6.4. A4185 - Volume-capacity ratio (%ge) – 2031 DM PM peak hour



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