

Appendix J Summary of Traffic Changes Arising from Reduced Area ORR CAZ D in 2020 (FINAL 23/05/18)

1. This note provides a summary of the modelled forecast changes in all day (weekday 0700-1900 and estimated AADT¹) traffic flows arising with the implementation of a Clean Air Zone covering Leeds within a reduced area of the Outer Ring Road and applying to cars, LGVs and HGVs (taxis are not modelled separately within the Leeds Transport Model and buses are modelled as a fixed demand based on existing routes).
2. Since the original analysis a number of elements within the transport modelling have been refined or updated to reflect the latest information. Specifically this includes:
 - Updating traffic growth from Temprow NTEM 7.0 to 7.2
 - Use of local vehicle fleet proportions rather than national
 - Use of updated behavioural change assumptions
 - Use of an updated transport model network
 - Use of the 'car' version of the LTM
3. The principal assumptions are shown below:
 - Cars, LGVs and HGV included
 - Daily charges of £12.50 (car, LGV) and £100 (HGV) for non-compliant vehicles
 - No suppression of non-compliant LGV and HGV trips
 - Full modelled demand response for car trips
 - Assumed compliance levels (%):

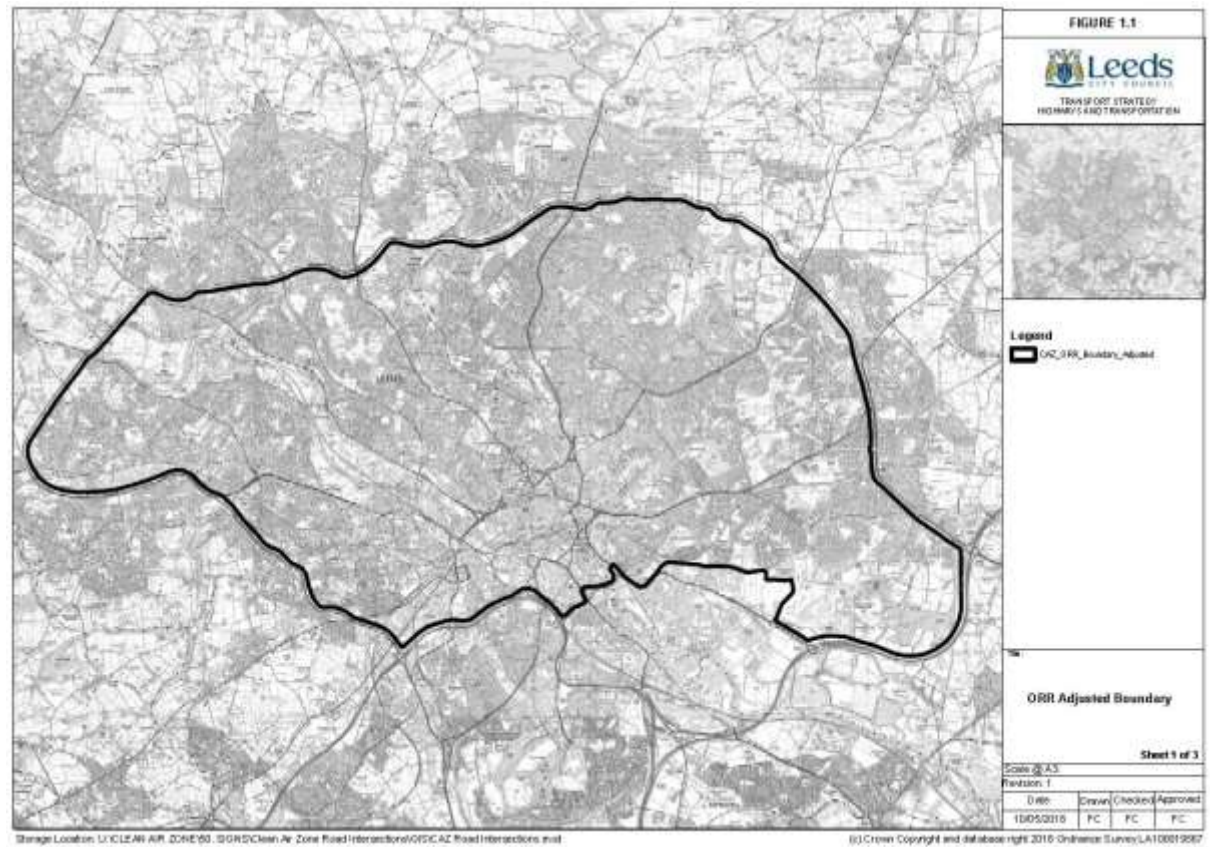
Table 1

| 2020 | Car | LGV | HGV |
|-------------|-------|-------|-------|
| Within CAZ | 89.85 | 86.19 | 94.27 |
| Outside CAZ | 71.82 | 61.64 | 66.30 |

4. The proposed boundary is shown in Figure 1. In figures and tables this boundary is referred to as ORR1. The boundary has been defined as (clockwise from Colton): M1, A63, A61, M621, A6110, A647 and A6120. These roads are deemed the most appropriate diversion route for non-compliant vehicles and are therefore excluded from the CAZ. Within the Aire Valley the boundary has been adjusted to exclude the Enterprise Zone from the CAZ.

¹ Annual Average Daily Traffic
Leeds City Council

Figure 1 – Reduced Area ORR CAZ Boundary (ORR1)



- Throughout this report the analysis is presented in various ways. Tables and graphs either contain direct outputs from the transport model or adjusted outputs that reflect existing traffic levels and how well the model reproduces them. The former are all labelled as Modelled the latter as Forecast. When it comes to understanding the percentage changes in traffic levels the Forecast data is regarded as being more robust. Both the Modelled and Forecast data are based on AADT estimates, with local factors applied to both traffic counts and model outputs to generate these. In addition, network plots of changes in modelled flows are also included – these are based on modelled 12 hour weekday flows.

Impact in 2020 on Implementation of CAZ

Review of roads with increased traffic

6. The following plots show the modelled changes in flows from a 2020 Do Minimum situation. All changes in cars, LGVs and HGVs are in vehicles.
7. The impact of the ORR CAZ D has a relatively small effect upon total traffic levels. Figure 1 shows the roads where an increase of 250 or more vehicles is forecast in either direction of travel over the 12 hour weekday.
8. Roads outside the CAZ that are attracting diverted traffic include the western outer ring road (A6120, A647, A6110); the M621, and the M1 and A6120 east of Leeds.
9. There is also a modelled change in traffic within Leeds, reflecting an apparent transfer of traffic from the A65 to the parallel Burley Rd. Given that this is located completely within the proposed CAZ boundary it is considered that this reflects the impact of small changes in journey time and is unlikely to occur in practise.
10. Only the western outer ring road is affected by a greater increase than 500 vehicles (1 way) - see Figure 3.

Figure 2 – Total traffic – increase of 250 or more vehicles (12 hour)

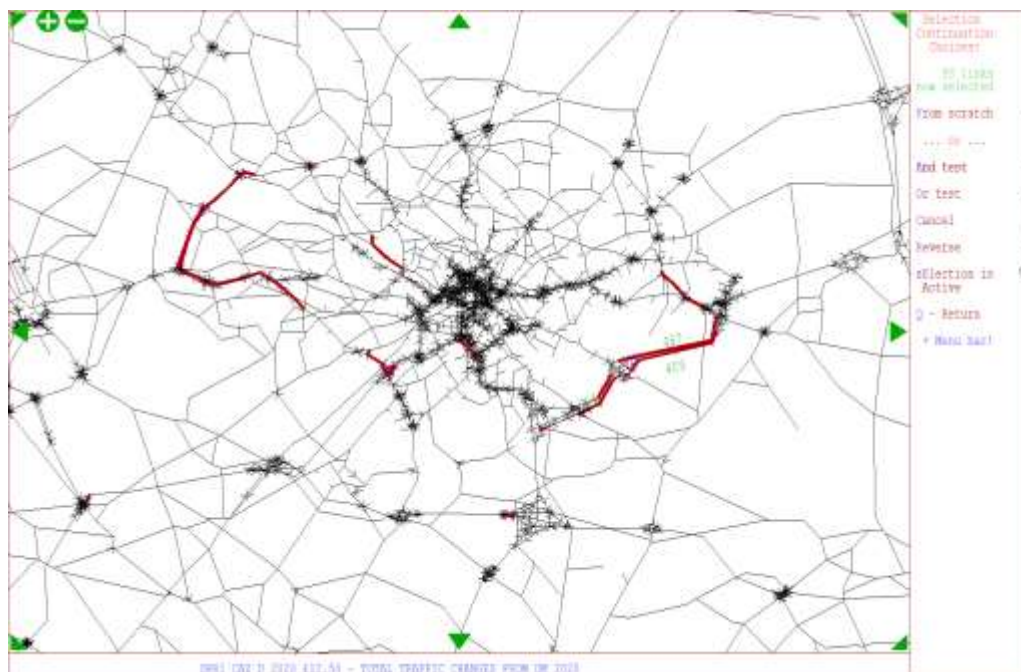
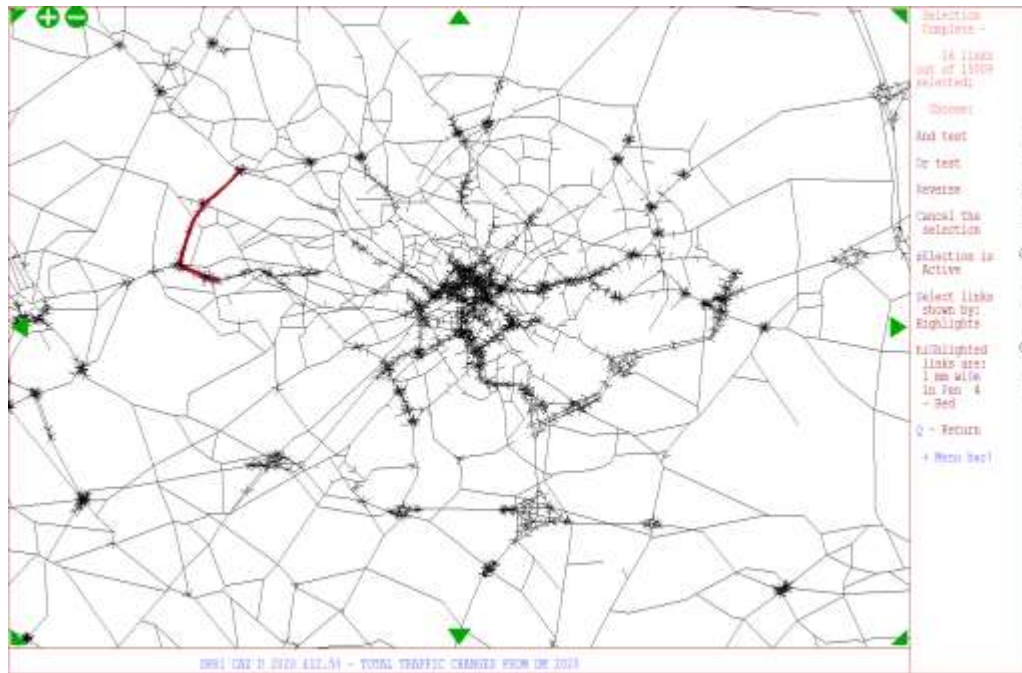
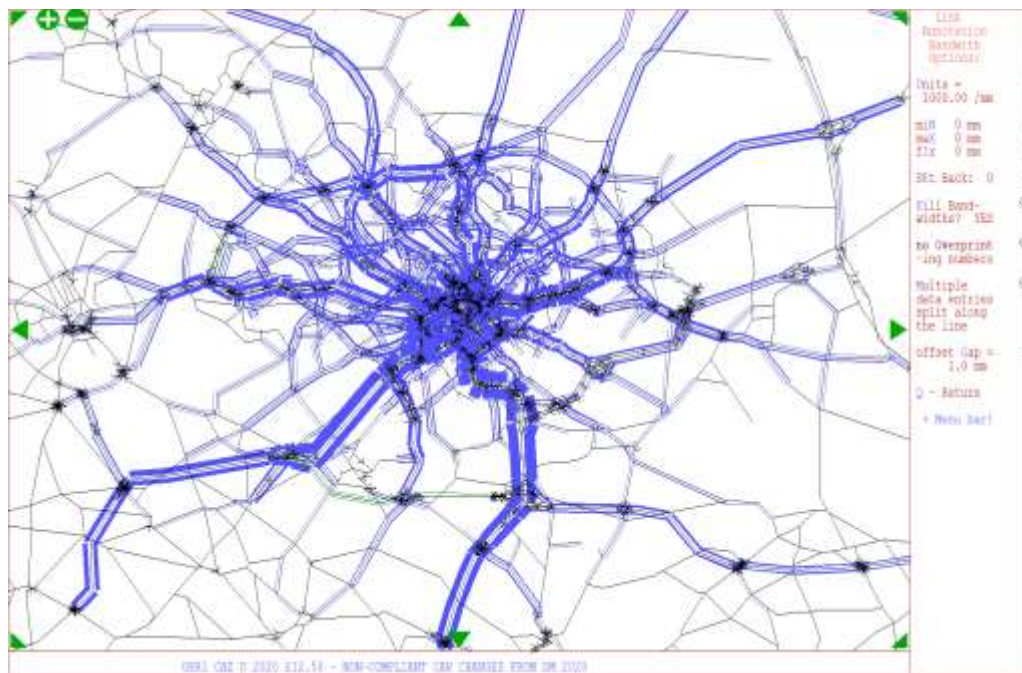


Figure 3 – Total traffic – increase of 500 or more vehicles (12 hour)



11. As Figure 4 demonstrates, the bulk of the changes reflect a reduction in non-compliant vehicle usage with the small increases on the M62 and western outer ring road showing up as green links.

Figure 4 – Non-compliant Cars – changes from DM 2020 (12 hour)



Note: Green = increase, blue = decrease

12. Figures 5-7 show the links where the greatest increases in non-compliant vehicles are forecast.

Figure 5 – Non-compliant car – increase of 100 or more vehicles (12 hour)

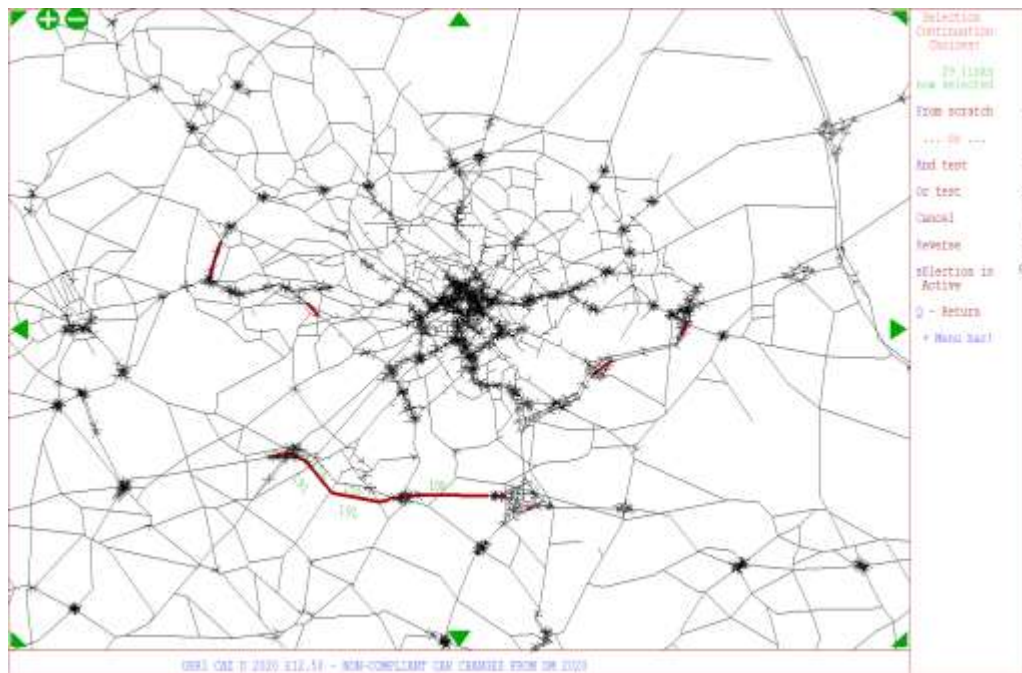


Figure 6 – Non-compliant LGV - increase of 50 or more vehicles (12 hour)

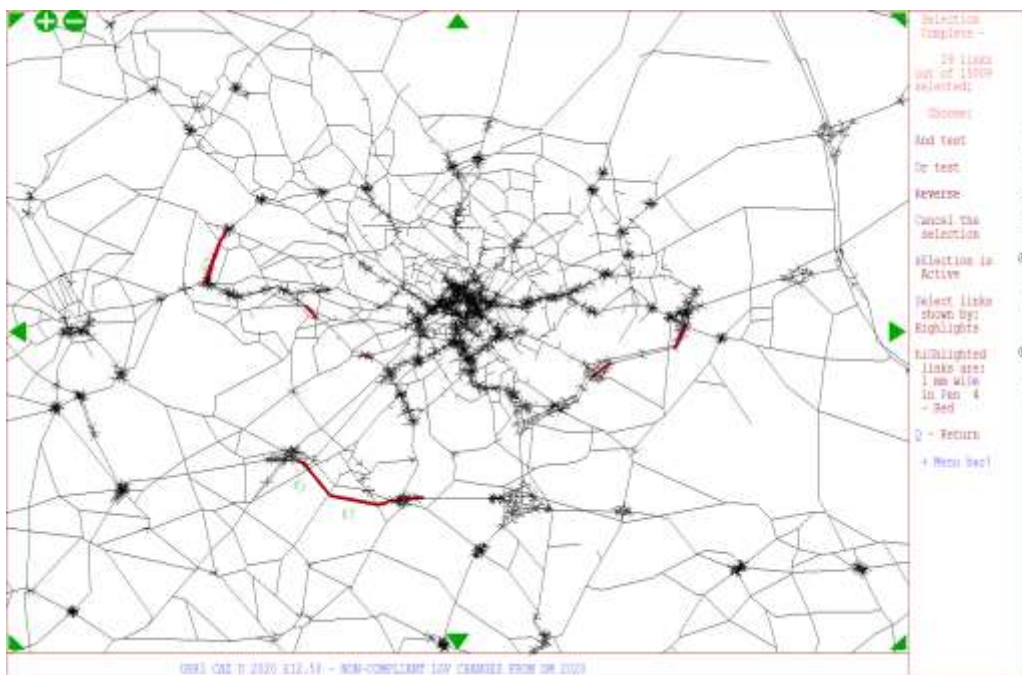
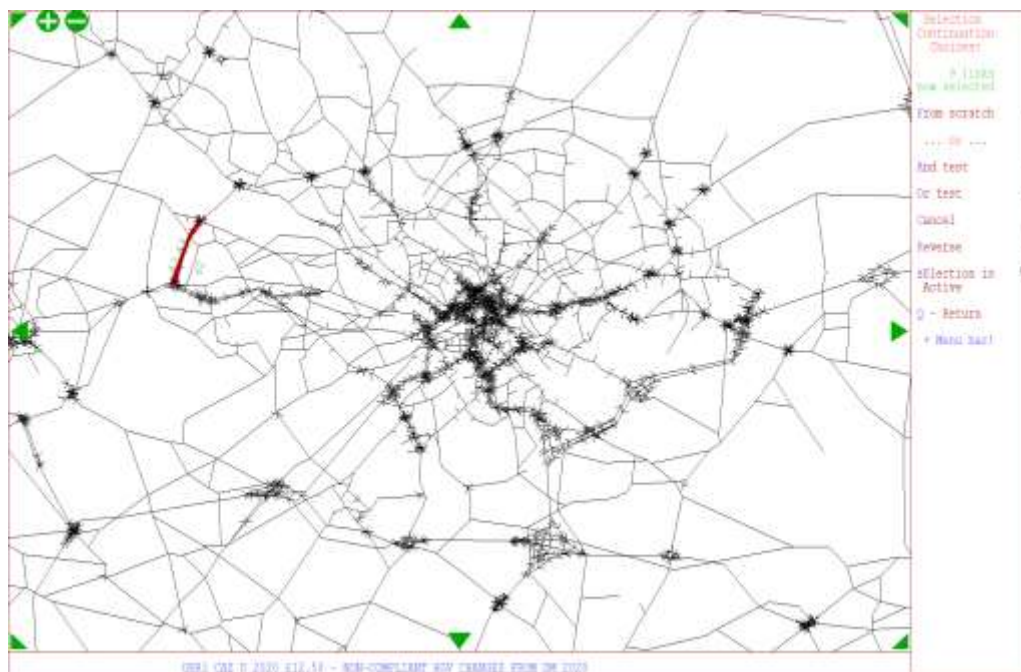


Figure 7 – Non-compliant HGV – increase of 25 or more vehicles (12 hour)

13. It is clear, therefore, that the significant issues with displaced traffic that apply with an IRR CAZ do not apply when the boundary is extended out to the outer ring road. In addition, the reassignment forecast with the wider ORR CAZ that affected Gildersome La and the M62 is not apparent with the reduced area.
14. As a comparator with the IRR CAZ C, Table 2 shows the impact of the ORR1 CAZ D on the minor roads to the north and west of the city centre affected by the former. This has utilised observed traffic levels together with the forecasts changes in the model to arrive at an estimated change in overall traffic arising from the CAZ.

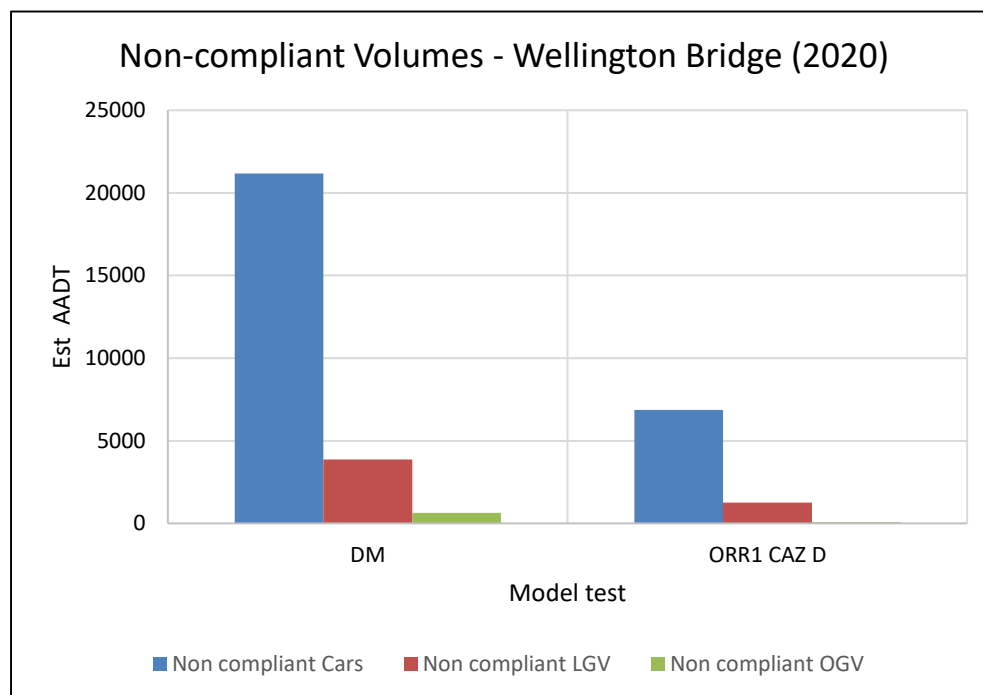
Table 2 – Forecast Change in Traffic Levels on Routes affected by an IRR CAZ C

| Road | Observed | Modelled AADT | | | Estimated 2020 AADT | | | %age change |
|------------------|---------------|---------------|---------|----------|---------------------|----------|--------|-------------|
| | Est AADT 2015 | Base 2015 | DM 2020 | CAZ 2020 | DM 2020 | CAZ 2020 | Change | |
| Torre Rd | 7000 | 4072 | 4229 | 4235 | 7157 | 7163 | 6 | 0% |
| Lincoln Green Rd | 9900 | 6671 | 7388 | 7350 | 10617 | 10579 | -38 | 0% |
| Woodhouse St | 8400 | 8404 | 8706 | 8698 | 8702 | 8694 | -8 | 0% |
| Hyde Park Rd | 5800 | 8092 | 8176 | 8246 | 5884 | 5954 | 70 | 1% |
| Woodsley Rd | 5800 | 6661 | 6800 | 6843 | 5939 | 5982 | 43 | 1% |
| Canal Rd | 13100 | 18324 | 19186 | 19193 | 13962 | 13969 | 7 | 0% |
| Town St | 10300 | 12621 | 13437 | 13383 | 11116 | 11062 | -54 | 0% |
| Upper Wortley Rd | 10700 | 13389 | 13721 | 13793 | 11032 | 11104 | 72 | 1% |

15. Forecast changes in LGV and HGV flows on these roads are equally minimal – see Appendix A.
16. In contrast, the fact that traffic is not being diverted off the inner ring road onto these minor roads means that the reduction in non-compliant vehicles is significantly less and therefore the effect upon air quality is also likely to be much more limited.

17. Figure 8 shows the modelled changes in non-compliant LGV and HGV on the inner ring road at Wellington Bridge. The ORR CAZ B delivers a substantial reduction in non-compliant HGVs of around 85%. There is no real change in non-compliant LGVs.

Figure 8 – Modelled Levels of Non-compliant Vehicles – Leeds IRR



18. Table 3 shows the modelled changes in traffic on the Leeds routes affected by diverted traffic under the ORR1 CAZ D.
19. Comprehensive up to date classified counts are not available to assess the current levels of LGVs and HGVs on these routes, however, the use of a number of historic counts from 2015 has enabled a broad brush assessment of the forecast changes. The overall flow changes are marginal, the greatest increasing being just 5% on the A6120 west of Leeds.
20. Overall LGV and HGV levels are forecast to rise by 7% and 22% respectively on this same section of the A6120 outer ring road at Farsley – Tables 4 and 5. This is linked to a marked rise in non-compliant HGVs and to a lesser extent LGVs (Appendix A) alongside a smaller increase in compliant vehicles. Elsewhere the level of non-compliant vehicles is forecast to fall but this is balanced by an increase in compliant HGVs.

Table 3 – Forecast Change in Traffic Levels on Routes with Diverted Traffic under ORR1 CAZ D

| Road | Observed | Modelled AADT | | | Estimated 2020 AADT | | | Change | %age change |
|-------------------------|---------------|---------------|---------|----------|---------------------|----------|------|--------|-------------|
| | Est AADT 2015 | Base 2015 | DM 2020 | CAZ 2020 | DM 2020 | CAZ 2020 | | | |
| A6120 Ring Rd Farsley | 23013 | 21846 | 22995 | 24290 | 24162 | 25457 | 1295 | | 5% |
| A6110 Ring Rd Farnley | 29300 | 21833 | 24057 | 24819 | 31524 | 32286 | 762 | | 2% |
| M621 Jn 3-4 | 77513 | 67401 | 73981 | 74336 | 84093 | 84448 | 355 | | 0% |
| M1 Jn 45-46 | 94125 | 83398 | 93082 | 94080 | 103809 | 104807 | 998 | | 1% |
| A6120 Ring Rd Austhorpe | 39402 | 36843 | 35135 | 35672 | 37694 | 38231 | 537 | | 1% |

Table 4 – Forecast Change in LGVs on Routes with Diverted Traffic under ORR1 CAZ D

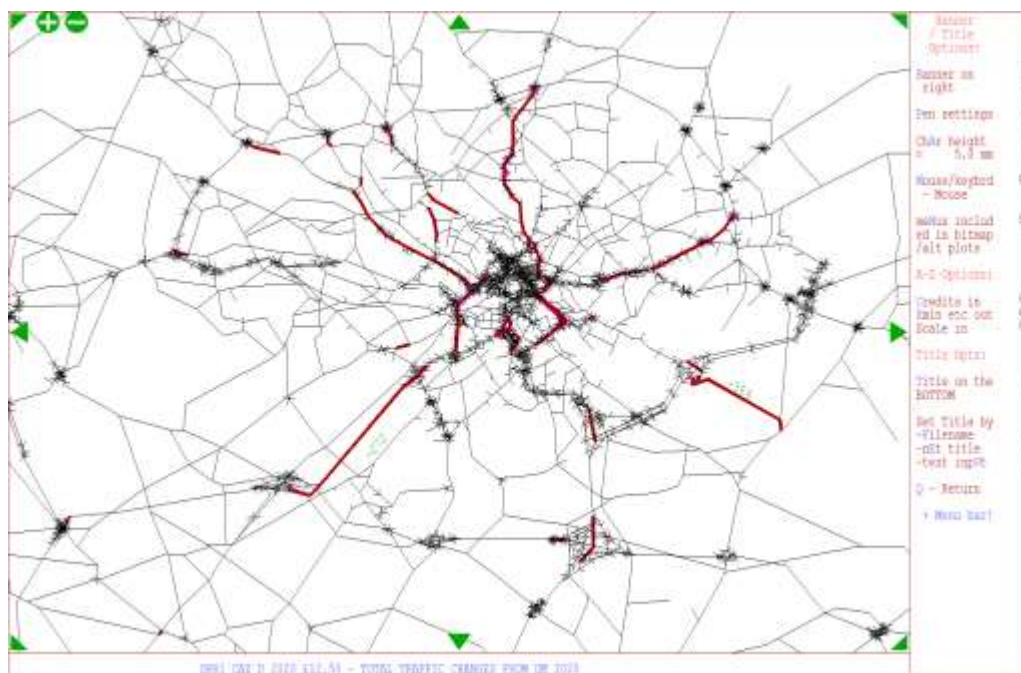
| Road | Observed | Modelled AADT | | | Estimated 2020 AADT | | | |
|-------------------------|---------------|---------------|---------|----------|---------------------|----------|--------|----|
| | Est AADT 2015 | Base 2015 | DM 2020 | CAZ 2020 | DM 2020 | CAZ 2020 | Change | |
| A6120 Ring Rd Farsley | 3738 | 1881 | 2076 | 2337 | 3933 | 4194 | 261 | 7% |
| A6110 Ring Rd Farnley | 4697 | 2253 | 2600 | 2852 | 5044 | 5296 | 252 | 5% |
| M621 Jn 3-4 | 11326 | 9161 | 10288 | 10386 | 12453 | 12551 | 98 | 1% |
| M1 Jn 45-46 | 14651 | 9652 | 11199 | 11566 | 16198 | 16565 | 367 | 2% |
| A6120 Ring Rd Austhorpe | 4566 | 3960 | 4038 | 4198 | 4644 | 4804 | 160 | 3% |

Table 5 – Forecast Change in HGVs on Routes with Diverted Traffic under ORR1 CAZ D

| Road | Observed | Modelled AADT | | | Estimated 2020 AADT | | | |
|-------------------------|---------------|---------------|---------|----------|---------------------|----------|--------|-----|
| | Est AADT 2015 | Base 2015 | DM 2020 | CAZ 2020 | DM 2020 | CAZ 2020 | Change | |
| A6120 Ring Rd Farsley | 579 | 285 | 279 | 405 | 573 | 699 | 126 | 22% |
| A6110 Ring Rd Farnley | 1118 | 1124 | 1164 | 1235 | 1158 | 1229 | 71 | 6% |
| M621 Jn 3-4 | 5554 | 3857 | 4019 | 4016 | 5716 | 5713 | -3 | 0% |
| M1 Jn 45-46 | 8709 | 6399 | 6684 | 6729 | 8994 | 9039 | 45 | 1% |
| A6120 Ring Rd Austhorpe | 908 | 1036 | 1025 | 1061 | 897 | 933 | 36 | 4% |

Review of roads with reduced traffic

21. Figure 9 shows the parts of the highway network where the total volume of traffic is forecast to fall by 250 or more vehicles per 12 hour weekday with a reduced area ORR CAZ D. The reductions cover routes where through traffic is able to divert to avoid the CAZ: the A65, A660, A61 (N), A64, inner ring road and routes through the city centre alongside the M621 to the south west.
22. The scale of change on most of these roads is relatively modest, with falls typically less than 600 vehicles per day (2 way 12 hr). The higher reductions occurring on the A65 and western section of the inner ring road, although as mentioned earlier it is considered that the apparent transfer of some traffic from the A65 to the parallel Burley Rd is unlikely to occur.

Figure 9 – Total traffic – decrease of 250 or more vehicles (12 hour)

23. The reductions in traffic on the inner ring road are only around 1-2% overall (Table 6), rising to 3% for HGVs. However this masks a substantial fall in non-compliant vehicles of 40-70% cars and LGVs and up to 85% HGVs (see Appendix A). The lower reductions apply to the M621, reflecting its position as a boundary route to the CAZ.

Table 6 – Forecast Change in Traffic Levels on Leeds IRR under ORR1 CAZ D

| Road | Observed | Modelled AADT | | | Estimated 2020 AADT | | | %age change |
|----------------------|---------------|---------------|---------|----------|---------------------|----------|--------|-------------|
| | Est AADT 2015 | Base 2015 | DM 2020 | CAZ 2020 | DM 2020 | CAZ 2020 | Change | |
| IRR Lovell Park Br | 44200 | 44122 | 48948 | 48516 | 49026 | 48594 | -432 | -1% |
| IRR Woodhouse tunnel | 71000 | 70067 | 74271 | 73851 | 75204 | 74784 | -420 | -1% |
| IRR Wellington Br | 86700 | 85627 | 88249 | 87521 | 89322 | 88594 | -728 | -1% |
| A643 Ingram | 53300 | 54434 | 57524 | 56788 | 56390 | 55654 | -736 | -1% |
| M621 Jn 2 - 2a | 70000 | 69108 | 74824 | 74713 | 75716 | 75605 | -111 | 0% |
| M621 Jn 2a - 3 | n/a | 84041 | 90612 | 90449 | 90612 | 90449 | -163 | 0% |
| M621 Jn 3 - 4 | 69100 | 67401 | 73981 | 74336 | 75680 | 76035 | 355 | 0% |
| John Smeaton Viaduct | 30100 | 32488 | 35059 | 34538 | 32671 | 32150 | -521 | -2% |
| IRR East Street | 28700 | 29468 | 32492 | 31718 | 31724 | 30950 | -774 | -2% |

Conclusions

24. In summary, a reduced area ORR CAZ D would avoid the significant level of traffic re-assignment associated with an IRR CAZ, in particular there would be no diversion of non-compliant vehicles from the IRR onto unsuitable minor roads to the north and west of the city centre.
25. Outside the ORR, there is no evidence of any significant traffic diversion, however, the boundary routes of the A6120, A6110, M621 and the M1 are forecast to attract some additional traffic.
26. The changes on most of these routes are small, however, the A6120 at Farsley is forecast to attract an additional 5% traffic including an increase of 22% in HGVs primarily due to an increase in non-compliant vehicles.

APPENDIX A**Table A1 – Forecast Changes in LGV volumes – minor roads to N and W of city centre**

| Road | Observed | Modelled AADT | | | Estimated 2020 AADT | | | |
|------------------|---------------|---------------|---------|----------|---------------------|----------|--------|-----|
| | Est AADT 2015 | Base 2015 | DM 2020 | CAZ 2020 | DM 2020 | CAZ 2020 | Change | |
| Torre Rd | 590 | 242 | 280 | 278 | 628 | 626 | -2 | 0% |
| Lincoln Green Rd | 770 | 478 | 557 | 558 | 849 | 850 | 1 | 0% |
| Woodhouse St | 820 | 785 | 905 | 897 | 940 | 932 | -8 | -1% |
| Hyde Park Rd | 500 | 532 | 601 | 593 | 569 | 561 | -8 | -1% |
| Woodsley Rd | 370 | 450 | 506 | 500 | 426 | 420 | -6 | -1% |
| Canal Rd | 980 | 1481 | 1665 | 1675 | 1164 | 1174 | 10 | 1% |
| Town St | 890 | 1030 | 1186 | 1184 | 1046 | 1044 | -2 | 0% |
| Upper Wortley Rd | 1030 | 1415 | 1636 | 1612 | 1251 | 1227 | -24 | -2% |

Note: 2015 observed AADT estimated from 2017 MCC

Table A2 – Forecast Changes in HGV volumes – minor roads to N and W of city centre

| Road | Observed | Modelled AADT | | | Estimated 2020 AADT | | | |
|------------------|---------------|---------------|---------|----------|---------------------|----------|--------|-----|
| | Est AADT 2015 | Base 2015 | DM 2020 | CAZ 2020 | DM 2020 | CAZ 2020 | Change | |
| Torre Rd | 170 | 20 | 21 | 21 | 171 | 171 | 0 | 0% |
| Lincoln Green Rd | 170 | 47 | 54 | 54 | 177 | 177 | 0 | 0% |
| Woodhouse St | 140 | 113 | 120 | 119 | 147 | 146 | -1 | -1% |
| Hyde Park Rd | 100 | 90 | 95 | 96 | 105 | 106 | 1 | 1% |
| Woodsley Rd | 80 | 124 | 128 | 128 | 84 | 84 | 0 | 0% |
| Canal Rd | 310 | 448 | 462 | 462 | 324 | 324 | 0 | 0% |
| Town St | 220 | 297 | 316 | 314 | 239 | 237 | -2 | -1% |
| Upper Wortley Rd | 290 | 344 | 357 | 357 | 303 | 303 | 0 | 0% |

Note: 2015 observed AADT estimated from 2017 MCC

Table A3 – Forecast Changes in LGV volumes – routes attracting more traffic

| Road | Observed | Modelled AADT | | | Estimated 2020 AADT | | | |
|-------------------------|---------------|---------------|---------|----------|---------------------|----------|--------|----|
| | Est AADT 2015 | Base 2015 | DM 2020 | CAZ 2020 | DM 2020 | CAZ 2020 | Change | |
| A6120 Ring Rd Farsley | 3738 | 1881 | 2076 | 2337 | 3933 | 4194 | 261 | 7% |
| A6110 Ring Rd Farnley | 4697 | 2253 | 2600 | 2852 | 5044 | 5296 | 252 | 5% |
| M621 Jn 3-4 | 11326 | 9161 | 10288 | 10386 | 12453 | 12551 | 98 | 1% |
| M1 Jn 45-46 | 14651 | 9652 | 11199 | 11566 | 16198 | 16565 | 367 | 2% |
| A6120 Ring Rd Austhorpe | 4566 | 3960 | 4038 | 4198 | 4644 | 4804 | 160 | 3% |

Note: 2015 observed AADT estimated from 2015 MCC

Table A4 – Forecast Changes in HGV volumes – routes attracting more traffic

| Road | Observed | Modelled AADT | | | Estimated 2020 AADT | | | |
|-------------------------|---------------|---------------|---------|----------|---------------------|----------|--------|-----|
| | Est AADT 2015 | Base 2015 | DM 2020 | CAZ 2020 | DM 2020 | CAZ 2020 | Change | |
| A6120 Ring Rd Farsley | 579 | 285 | 279 | 405 | 573 | 699 | 126 | 22% |
| A6110 Ring Rd Farnley | 1118 | 1124 | 1164 | 1235 | 1158 | 1229 | 71 | 6% |
| M621 Jn 3-4 | 5554 | 3857 | 4019 | 4016 | 5716 | 5713 | -3 | 0% |
| M1 Jn 45-46 | 8709 | 6399 | 6684 | 6729 | 8994 | 9039 | 45 | 1% |
| A6120 Ring Rd Austhorpe | 908 | 1036 | 1025 | 1061 | 897 | 933 | 36 | 4% |

Note: 2015 observed AADT estimated from 2015 MCC

Table A5 – Modelled changes in traffic volumes – routes attracting more traffic

| 2020 estimated AADT with ORR CAZ D revised boundary | | | | | | | | | | | | | | |
|---|-------------|-------|-----------|------|------|-------|---------------|------|-----|-------|-------|------|--|--|
| Road | | | Compliant | | | | Non compliant | | | | Total | | | |
| | Anode Bnode | AADT | Cars | LGV | OGV | Cars | LGV | OGV | PSV | Cars | LGV | OGV | | |
| A6120 Ring Rd Farsley | | 24290 | 15422 | 1416 | 214 | 6126 | 921 | 191 | 0 | 21548 | 2337 | 405 | | |
| A6110 Ring Rd Farnley | | 24819 | 14825 | 1830 | 886 | 5627 | 1022 | 349 | 280 | 20452 | 2852 | 1235 | | |
| M621 Jn 3-4 | | 74336 | 49729 | 8144 | 3367 | 10205 | 2242 | 649 | 0 | 59934 | 10386 | 4016 | | |
| M1 Jn 45-46 | | 94080 | 56347 | 7372 | 4534 | 19438 | 4194 | 2195 | 0 | 75785 | 11566 | 6729 | | |
| A6120 Ring Rd Austhorpe | | 35672 | 24071 | 3128 | 818 | 5832 | 1070 | 243 | 510 | 29903 | 4198 | 1061 | | |
| Change from 2020 DM | | | | | | | | | | | | | | |
| Road | | | Compliant | | | | Non compliant | | | | Total | | | |
| | Anode Bnode | AADT | Cars | LGV | OGV | Cars | LGV | OGV | PSV | Cars | LGV | OGV | | |
| A6120 Ring Rd Farsley | | 1295 | 601 | 137 | 29 | 307 | 124 | 97 | 0 | 908 | 261 | 126 | | |
| A6110 Ring Rd Farnley | | 762 | 452 | 227 | 114 | -13 | 25 | -43 | 0 | 439 | 252 | 71 | | |
| M621 Jn 3-4 | | 355 | 6718 | 1776 | 702 | -6458 | -1678 | -705 | 0 | 260 | 98 | -3 | | |
| M1 Jn 45-46 | | 998 | 2109 | 436 | 102 | -1523 | -69 | -57 | 0 | 586 | 367 | 45 | | |
| A6120 Ring Rd Austhorpe | | 537 | 2750 | 620 | 138 | -2409 | -460 | -102 | 0 | 341 | 160 | 36 | | |
| Percentage change from 2020 DM | | | | | | | | | | | | | | |
| Road | | | Compliant | | | | Non compliant | | | | Total | | | |
| | Anode Bnode | AADT | Cars | LGV | OGV | Cars | LGV | OGV | PSV | Cars | LGV | OGV | | |
| A6120 Ring Rd Farsley | | 6% | 4% | 11% | 16% | 5% | 16% | 103% | 0% | 4% | 13% | 45% | | |
| A6110 Ring Rd Farnley | | 3% | 3% | 14% | 15% | 0% | 3% | -11% | 0% | 2% | 10% | 6% | | |
| M621 Jn 3-4 | | 0% | 16% | 28% | 26% | -39% | -43% | -52% | 0% | 0% | 1% | 0% | | |
| M1 Jn 45-46 | | 1% | 4% | 6% | 2% | -7% | -2% | -3% | 0% | 1% | 3% | 1% | | |
| A6120 Ring Rd Austhorpe | | 2% | 13% | 25% | 20% | -29% | -30% | -30% | 0% | 1% | 4% | 4% | | |

Note: Model flow validation is variable across these routes and the results must be taken as indicative only.

Table A6 – Modelled changes in traffic volumes – city centre cordons

| Two way flow changes from DM 2020 | | | | | | | | | | | | |
|-----------------------------------|--|---------|-----------|--------|--------|---------------|---------|--------|--------|---------|--------|--------|
| | | | Compliant | | | Non compliant | | | | Total | | |
| Summary | | AADT | Cars | LGV | OGV | Cars | LGV | OGV | PSV | Cars | LGV | OGV |
| Cordon on approaches to IRR | | | | | | | | | | | | |
| DM 2020 | | 646,940 | 393,096 | 43,022 | 12,824 | 154,342 | 26,809 | 6,519 | 10,328 | 547,438 | 69,831 | 19,343 |
| ORR1 CAZ D 2020 | | 643,315 | 479,941 | 57,232 | 16,740 | 64,578 | 12,030 | 2,464 | 10,330 | 544,519 | 69,262 | 19,204 |
| IRR Cordon Changes | | -3,625 | 86,845 | 14,210 | 3,916 | -89,764 | -14,779 | -4,055 | 2 | -2,919 | -569 | -139 |
| Percentage change | | -0.6% | 22.1% | 33.0% | 30.5% | -58.2% | -55.1% | -62.2% | 0.0% | -0.5% | -0.8% | -0.7% |
| Cordon within IRR | | | | | | | | | | | | |
| DM 2020 | | 325,954 | 199,475 | 19,656 | 4,597 | 78,100 | 12,253 | 2,334 | 9,539 | 277,575 | 31,909 | 6,931 |
| ORR1 CAZ D 2020 | | 322,999 | 249,042 | 27,250 | 6,404 | 26,226 | 4,161 | 376 | 9,540 | 275,268 | 31,411 | 6,780 |
| Within IRR Changes | | -2,955 | 49,566 | 7,594 | 1,807 | -51,873 | -8,092 | -1,958 | 1 | -2,307 | -498 | -151 |
| Percentage change | | -0.9% | 24.8% | 38.6% | 39.3% | -66.4% | -66.0% | -83.9% | 0.0% | -0.8% | -1.6% | -2.2% |

Table A7 – Modelled changes in traffic volumes – IRR

| 2020 estimated AADT with ORR CAZ D revised boundary | | | | | | | | | | | | |
|---|-------------|-------|-----------|------|------|---------------|-------|------|------|-------|-------|------|
| Road | Anode Bnode | AADT | Compliant | | | Non compliant | | | | Total | | |
| | | | Cars | LGV | OGV | Cars | LGV | OGV | PSV | Cars | LGV | OGV |
| IRR Lovell Park Br | | 48516 | 38335 | 4449 | 936 | 4064 | 683 | 49 | 0 | 42399 | 5132 | 985 |
| IRR Woodhouse tunnel | | 73851 | 58153 | 7143 | 1279 | 6122 | 1085 | 69 | 0 | 64275 | 8228 | 1348 |
| IRR Wellington Br | | 87521 | 67864 | 8569 | 1751 | 6868 | 1266 | 90 | 1113 | 74732 | 9835 | 1841 |
| A643 Ingram | | 56788 | 43492 | 6330 | 1920 | 4056 | 893 | 97 | 0 | 47548 | 7223 | 2017 |
| M621 Jn 2 - 2a | | 74713 | 51611 | 6760 | 3161 | 10216 | 2028 | 708 | 229 | 61827 | 8788 | 3869 |
| M621 Jn 2a - 3 | | 90449 | 62347 | 8865 | 3847 | 11880 | 2488 | 793 | 229 | 74227 | 11353 | 4640 |
| M621 Jn 3 - 4 | | 74336 | 49729 | 8144 | 3367 | 10205 | 2242 | 649 | 0 | 59934 | 10386 | 4016 |
| John Smeaton Viaduct | | 34538 | 25603 | 3002 | 1168 | 3438 | 935 | 392 | 0 | 29041 | 3937 | 1560 |
| IRR East Street | | 31718 | 25764 | 2386 | 513 | 2570 | 357 | 26 | 102 | 28334 | 2743 | 539 |
| Change from 2020 DM | | | | | | | | | | | | |
| Road | Anode Bnode | AADT | Compliant | | | Non compliant | | | | Total | | |
| | | | Cars | LGV | OGV | Cars | LGV | OGV | PSV | Cars | LGV | OGV |
| IRR Lovell Park Br | | -432 | 7780 | 1223 | 263 | -8058 | -1347 | -293 | 0 | -278 | -124 | -30 |
| IRR Woodhouse tunnel | | -420 | 11912 | 1977 | 360 | -12122 | -2149 | -398 | 0 | -210 | -172 | -38 |
| IRR Wellington Br | | -728 | 13908 | 2361 | 483 | -14313 | -2613 | -554 | 0 | -405 | -252 | -71 |
| A643 Ingram | | -736 | 8965 | 1758 | 545 | -9459 | -1944 | -601 | 0 | -494 | -186 | -56 |
| M621 Jn 2 - 2a | | -111 | 7084 | 1359 | 580 | -7206 | -1324 | -604 | 0 | -122 | 35 | -24 |
| M621 Jn 2a - 3 | | -163 | 8817 | 1910 | 775 | -9064 | -1832 | -769 | 0 | -247 | 78 | 6 |
| M621 Jn 3 - 4 | | 355 | 6718 | 1776 | 702 | -6458 | -1678 | -705 | 0 | 260 | 98 | -3 |
| John Smeaton Viaduct | | -521 | 4309 | 609 | 153 | -4900 | -568 | -124 | 0 | -591 | 41 | 29 |
| IRR East Street | | -774 | 4912 | 693 | 138 | -5633 | -719 | -165 | 0 | -721 | -26 | -27 |
| Percentage change from 2020 DM | | | | | | | | | | | | |
| Road | Anode Bnode | AADT | Compliant | | | Non compliant | | | | Total | | |
| | | | Cars | LGV | OGV | Cars | LGV | OGV | PSV | Cars | LGV | OGV |
| IRR Lovell Park Br | | -1% | 25% | 38% | 39% | -66% | -66% | -86% | 0% | -1% | -2% | -3% |
| IRR Woodhouse tunnel | | -1% | 26% | 38% | 39% | -66% | -66% | -85% | 0% | 0% | -2% | -3% |
| IRR Wellington Br | | -1% | 26% | 38% | 38% | -68% | -67% | -86% | 0% | -1% | -2% | -4% |
| A643 Ingram | | -1% | 26% | 38% | 40% | -70% | -69% | -86% | 0% | -1% | -3% | -3% |
| M621 Jn 2 - 2a | | 0% | 16% | 25% | 22% | -41% | -39% | -46% | 0% | 0% | 0% | -1% |
| M621 Jn 2a - 3 | | 0% | 16% | 27% | 25% | -43% | -42% | -49% | 0% | 0% | 1% | 0% |
| M621 Jn 3 - 4 | | 0% | 16% | 28% | 26% | -39% | -43% | -52% | 0% | 0% | 1% | 0% |
| John Smeaton Viaduct | | -1% | 20% | 25% | 15% | -59% | -38% | -24% | 0% | -2% | 1% | 2% |
| IRR East Street | | -2% | 24% | 41% | 37% | -69% | -67% | -86% | 0% | -2% | -1% | -5% |

Note: Model flow validation is variable across these routes and the results must be taken as indicative only.