| | |
|---|---|
| **Client** | Highways England |
| **Project** | A2 Bean and Ebbsfleet Junction Improvements |
| **Document title** | RTF18 Sensitivity Test |
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# Executive Summary


A2 Bean and Ebbsfleet (A2BE) Junctions Improvement core scenario[1] forecasts were based on Road Traffic Forecasts 2015 (RTF15). The Road Traffic Forecasts 2018 (RTF18) release has brought in significant changes to growth rates of Light Goods Vehicles (LGVs) and Heavy Goods Vehicles (HGVs). Hence Highways England instructed Atkins to carry out a sensitivity test by incorporating the changes in growth rates of LGVs & HGVs for the core scenario. This has shown the following.

Scaling of the core scenario demand to RTF18 resulted in a reduction of LGV trips of around 6% in the 2023 and 19% by 2051. Similarly scaling of HGV demand resulted in a reduction of trips of around 5% in 2023 and 13% by 2051. This results in reduced traffic flows across the network with an associated reduction in delays in both the Do Minimum (DM), without Scheme, and Do Something (DS), with Scheme, scenarios

A TUBA economic assessment has been undertaken to identify the impacts of this reduction on the overall economic benefits of the scheme. The results compared to the Core Scenario are presented below.


| | Core Scenario | RTF18 Sensitivity Test |
|---|---|---|
| Present Value Benefits (PVB) (£m) | 143.82 | 80.17 |
| Present Value Costs (PVC) (£m) | 61.76 | 61.76 |
| Net Present Value (NPV) (£m) | 82.06 | 18.40 |
| **Initial BCR** | **2.33** | **1.30** |
| Adjusted PVB (£m) | 159.79 | 89.75 |
| Adjusted NPV (£m) | 98.03 | 27.99 |
| **Adjusted BCR** | **2.59** | **1.45** |

[1] A2BE Traffic Forecasting Package - HE543917-ATK-HTA-XX-RP-TR-000016

This highlights that the overall Present Value of benefits (PVB) reduces to £80.2 million compared to the £143.8 million forecasts in the core scenario. This reduces the overall initial Benefit to Cost (BCR) ratio to 1.30 and an adjusted BCR of 1.45.

Whilst the impacts of the RTF18 forecasts have reduced the level of economic benefits it is important to recognise the following with regards to the additional increases to the Benefit to Cost Ratio, which include:

***Updated Carbon Calculations* -** Following a Highways England update to advice in the calculation of emissions, for all scheme assessments, the carbon calculations were revised in December 2018 to include all roads in the traffic model. This reduced the carbon disbenefit of the scheme from -£2.37 million to -£0.14 million. Based on a proportional change in TUBA user benefits due to RTF18 this would result in disbenefit of around -£0.08 million to the RTF18 economic benefits.

**De-signalisation of Bean South Roundabout** - The de-signalisation of the Bean South Roundabout has been shown to increase TUBA benefits, compared to the Core Scenario, by £12 million based on the RTF18 scenario.

Based on the additional benefits highlighted above an adjustment has been undertaken to understand the incremental impacts on the BCR against the RTF18 sensitivity test.

The Table below highlights that the RTF18 adjusted BCR's would increase from around 1.45 to 1.67.

| | Core Scenario | RTF18 Core Scenario* |
|---|---|---|
| Present Value Benefits (PVB) (£m) | 143.82 | 93.50 |
| Present Value Costs (PVC) (£m) | 61.76 | 61.76 |
| Net Present Value (NPV) (£m) | 82.06 | 31.74 |
| **Initial BCR** | **2.33** | **1.51** |
| Adjusted PVB (£m) | 159.79 | 103.09 |
| Adjusted NPV (£m) | 98.03 | 41.33 |
| **Adjusted BCR** | **2.59** | **1.67** |

*including revised carbon calculation and de-signalisation of Bean South Roundabout.

It is noted that this calculation excludes the impact of the saving of approximately £3.85m associated with the detailed modification proposed to Bean North roundabout (MOD-1).

# 1. Introduction

A2 Bean and Ebbsfleet (A2BE) Junctions Improvement core scenario[2] forecasts were based on Road Traffic Forecasts 2015 (RTF15) as this was the guidance at the time of undertaking the scheme assessment. The Road Traffic Forecasts 2018 (RTF18) release, post scheme assessment, has brought in changes to growth rates of Light Goods Vehicles (LGVs) and Heavy Goods Vehicles (HGVs). Hence Highways England instructed Atkins to carry out a sensitivity test by incorporating the changes in growth rates of LGVs & HGVs for the core scenario.

This technical note outlines the methodology adopted for carrying out the RTF18 sensitivity test on the A2 Bean and Ebbsfleet (A2BE) Junctions Improvement core scenario. This note also presents the Benefit Cost Ratio (BCR) as an outcome of a Transport User Benefit Appraisal (TUBA).

# 2. 2018 Road Traffic Forecast (RTF)

## 2.1. Introduction

RTF18 present the latest forecasts for traffic demand, congestion and emissions in England and Wales up to the year 2050. These are produced using the Department for Transport's National Transport Model (NTM).

The forecasts provide the Department's strategic view of future road travel demand under a number of plausible scenarios that reflect the uncertainty in the key drivers of road traffic demand. The forecasts have been disaggregated by vehicle type, road type and region.

## 2.2. RTF18 vs RTF15

The current A2BE Do-Minimum (DM) and Do-Something (DS) LGV and HGV demand matrix growth, in the core scenario, is based on RTF15.

In order to assess the impact of the latest RTF18 traffic growth forecasts for LGV and HGV demand matrices, a comparison of the growth from the model base year between RTF15 and RTF18 for the South East Region has been carried out and is reported in Table 2-1. The LGV trend is shown in Figure 2-1 and the HGV trend is shown in Figure 2-2. It should be noted that RTF15 has 2040 as the final year. Therefore, the years from 2041 to 2051 have been extrapolated.

From the table and figures presented it can be seen that the RTF18 predicts a lower growth rate for both LGV and HGVs than the RTF15 forecasts. RTF15 predicts 87% growth in LGV traffic from 2016 to 2050, whereas RTF18 predicts 50% growth in LGV traffic for the same period. For HGV trips RTF15 predicts a 36% growth in traffic from 2016 to 2050, whereas RTF18 predicts 19% growth for the same period.

To account for the differential growth rates predicted by RTF15 and RTF18, scaling factors have been derived to adjust the LGV and HGV growth to a RTF18 level. These scaling factors are presented in Table 2-1.

[2] A2BE Traffic Forecasting Package - HE543917-ATK-HTA-XX-RP-TR-000016

**Table 2-1 2015 and 2018 LGV and HGV Traffic- Billion Vehicle miles (bvm)**

| RTF year | 2015 | 2016 | 2020 | 2023 | 2025 | 2026 | 2030 | 2031 | 2035 | 2038 | 2040 | 2045 | 2050 | 2051 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LGV | | | | | | | | | | | | | | |
| 2015 RTF | 7.42 | 7.62 | 8.45 | 9.06 | 9.48 | 9.67 | 10.45 | 10.63 | 11.33 | 11.86 | 12.21 | 13.26 | 14.22 | 14.41 |
| 2018 RTF | 7.84 | 8.00 | 8.65 | 8.92 | 9.11 | 9.21 | 9.61 | 9.75 | 10.29 | 10.69 | 10.96 | 11.52 | 11.96 | 12.18 |
| % increase from the model base year (2016) | | | | | | | | | | | | | | |
| 2015 RTF | | 1.00 | 1.11 | 1.19 | 1.24 | 1.27 | 1.37 | 1.39 | 1.49 | 1.56 | 1.60 | 1.74 | 1.87 | 1.89 |
| 2018 RTF | | 1.00 | 1.08 | 1.12 | 1.14 | 1.15 | 1.20 | 1.22 | 1.29 | 1.34 | 1.37 | 1.44 | 1.50 | 1.52 |
| LGV Scaling Factor | | 1.00 | 0.9758 | 0.9380 | 0.9154 | 0.9069 | 0.8759 | 0.8735 | 0.8648 | 0.8588 | 0.8551 | 0.8278 | 0.8016 | 0.8050 |
| HGV | | | | | | | | | | | | | | |
| 2015 RTF | 2.52 | 2.55 | 2.66 | 2.74 | 2.79 | 2.81 | 2.92 | 2.95 | 3.06 | 3.15 | 3.21 | 3.34 | 3.47 | 3.50 |
| 2018 RTF | 2.43 | 2.44 | 2.47 | 2.50 | 2.51 | 2.53 | 2.57 | 2.59 | 2.66 | 2.71 | 2.74 | 2.83 | 2.91 | 2.93 |
| % increase from the model base year (2016) | | | | | | | | | | | | | | |
| 2015 RTF | | 1.00 | 1.04 | 1.07 | 1.09 | 1.10 | 1.14 | 1.16 | 1.20 | 1.24 | 1.26 | 1.31 | 1.36 | 1.37 |
| 2018 RTF | | 1.00 | 1.01 | 1.02 | 1.03 | 1.03 | 1.05 | 1.06 | 1.09 | 1.11 | 1.12 | 1.16 | 1.19 | 1.20 |
| HGV Scaling Factor | | 1.00 | 0.9691 | 0.9524 | 0.9417 | 0.9374 | 0.9209 | 0.9178 | 0.9058 | 0.8970 | 0.8915 | 0.8851 | 0.8750 | 0.8737 |

**Figure 2-1 2015 and 2018 RTF - LGV Growth**

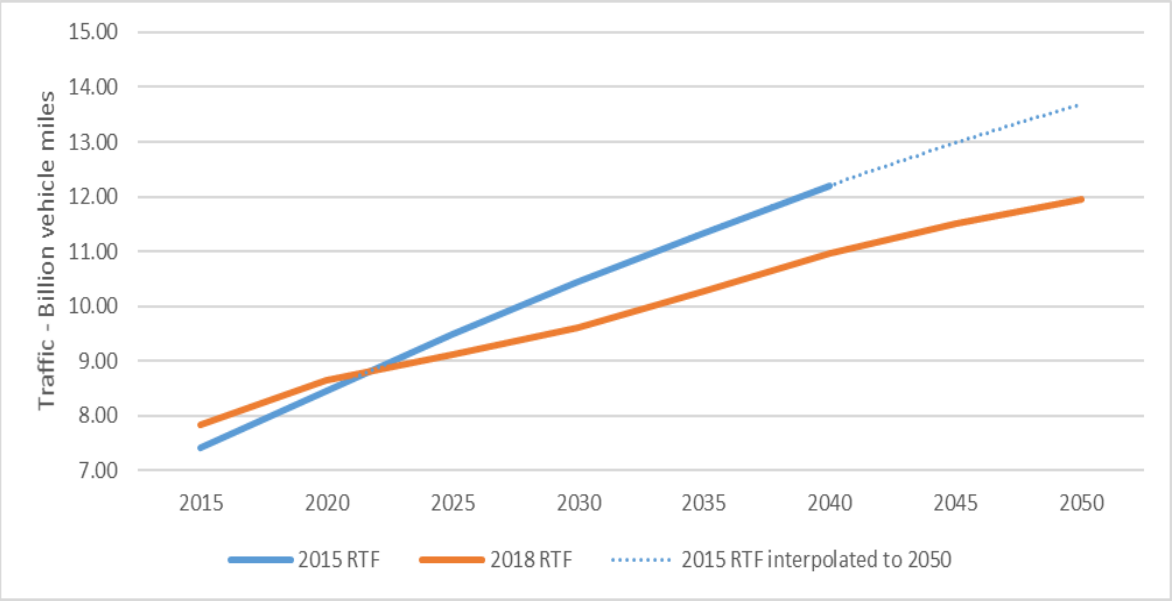
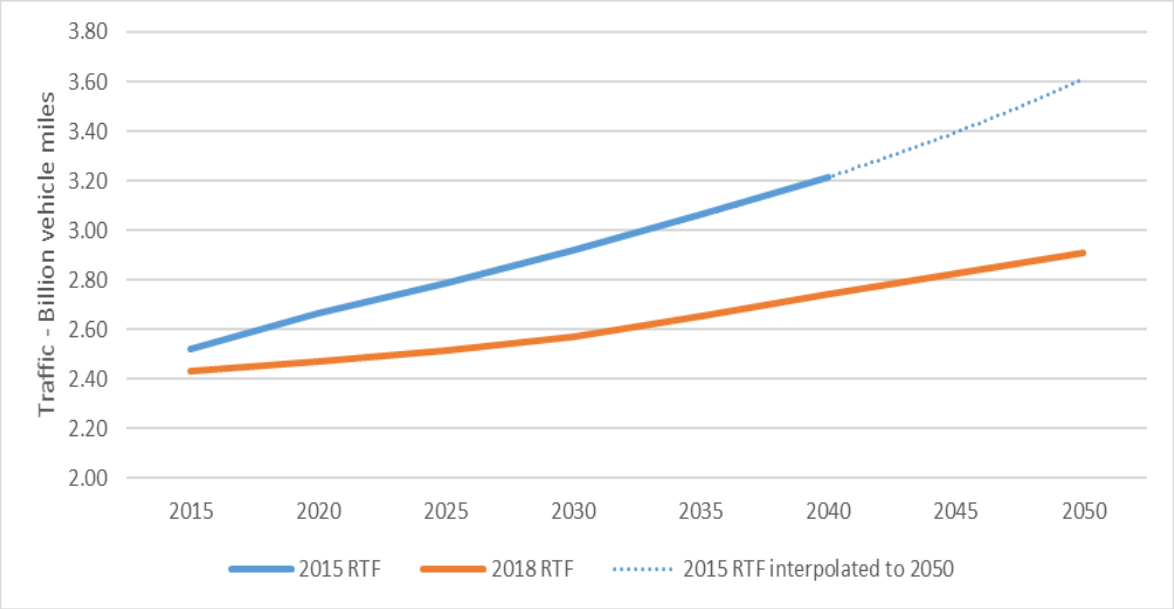



**Figure 2-2 2015 and 2018 RTF - HGV Growth**



# 3. Scheme Effect on Traffic Flows

The total flow differences between the Core Scenario and the RTF18 models for both the scheme opening year (2023) and scheme design year (2038) are presented in Figure 3-1 to Figure 3-12. These highlight that there is a reduction in flow across the network with significant reductions along the M25 and A2. There is no significant re-routing observed across the model years and time periods.

**Figure 3-1 Flow Difference between A2BE RTF18 vs A2BE Core - 2023 DM AM (PCUs/hr)**

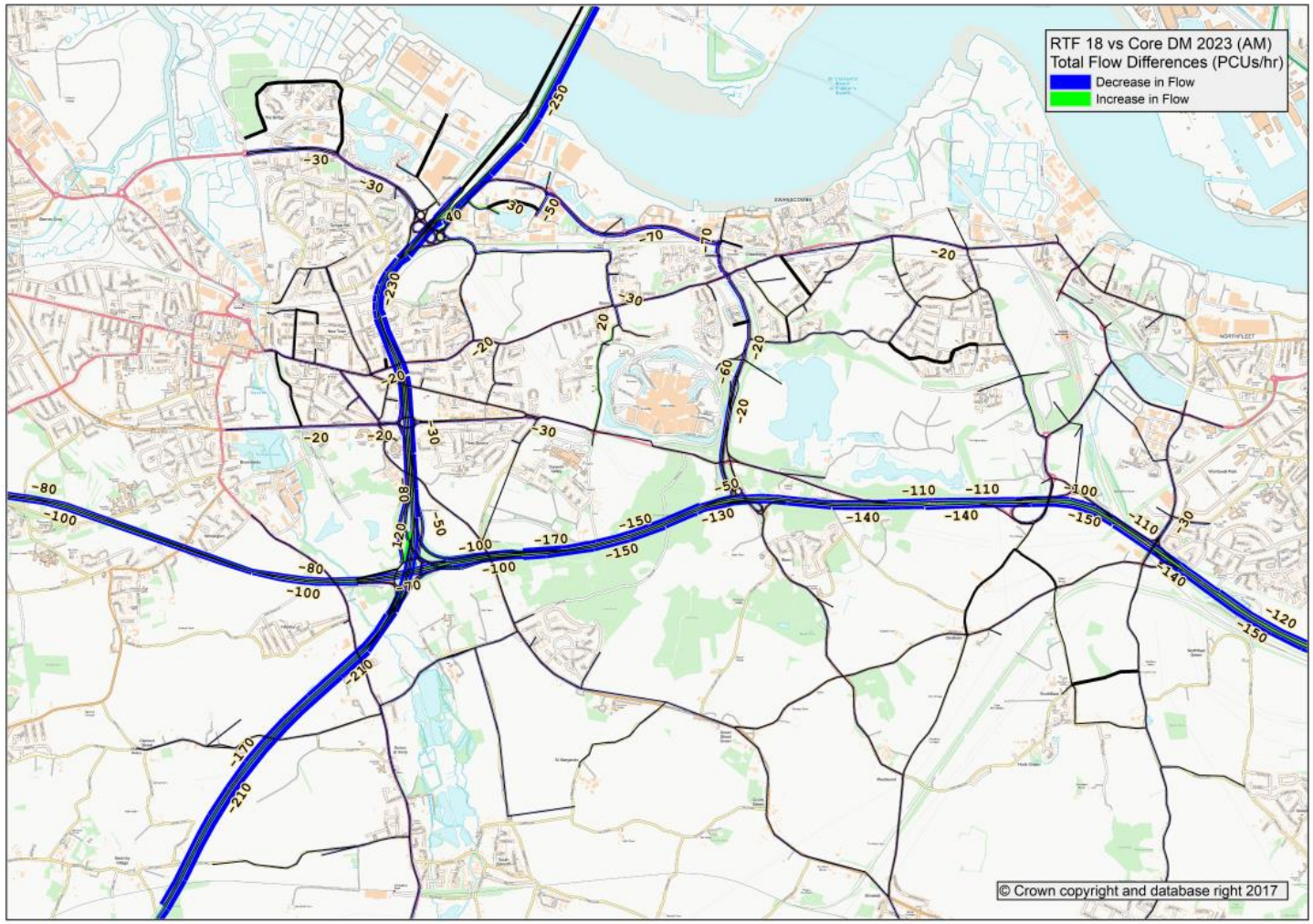


**Figure 3-2 Flow Difference between A2BE RTF18 vs A2BE Core - 2023 DM IP (PCUs/hr)**

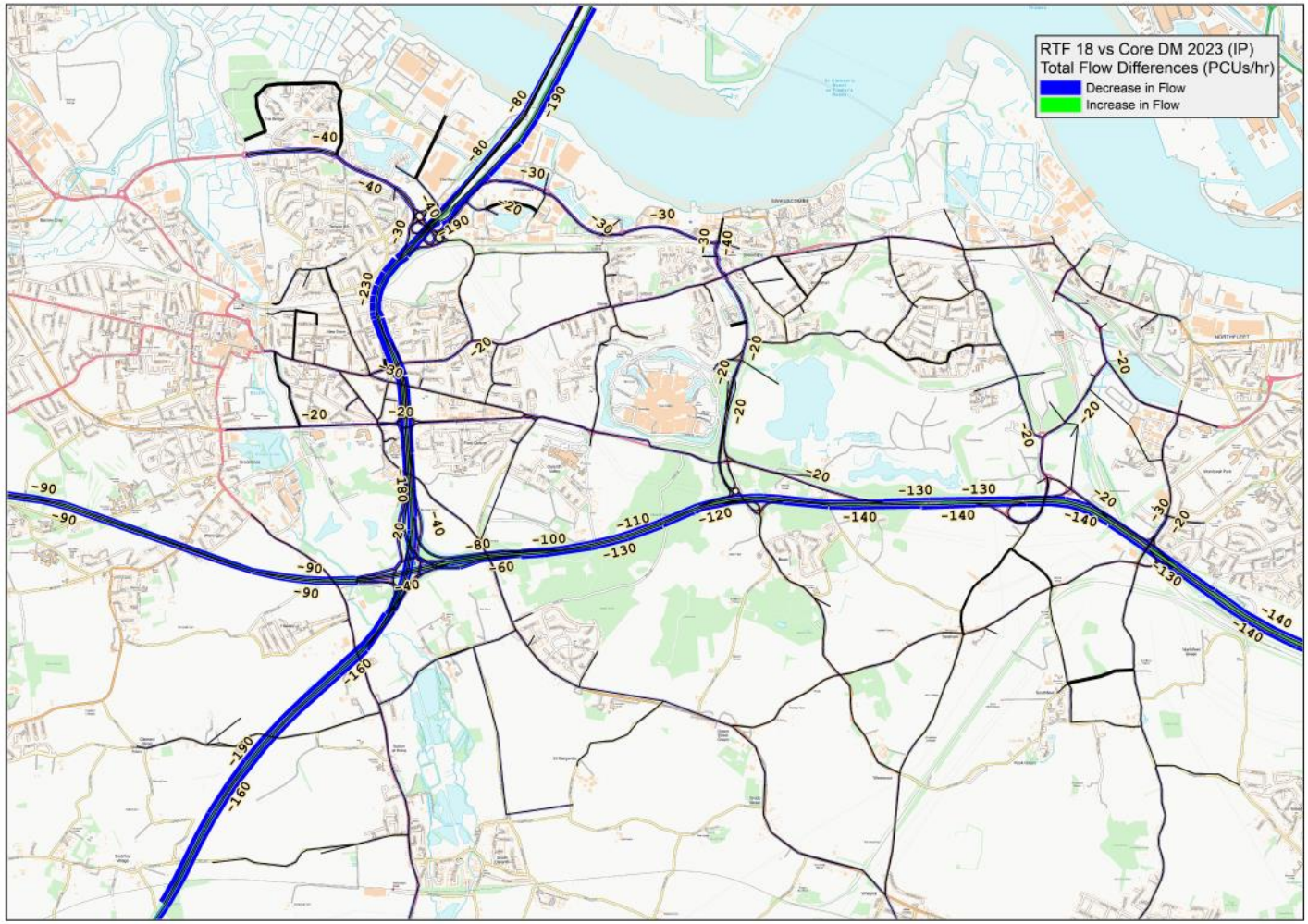


**Figure 3-3 Flow Difference between A2BE RTF18 vs A2BE Core - 2023 DM PM (PCUs/hr)**

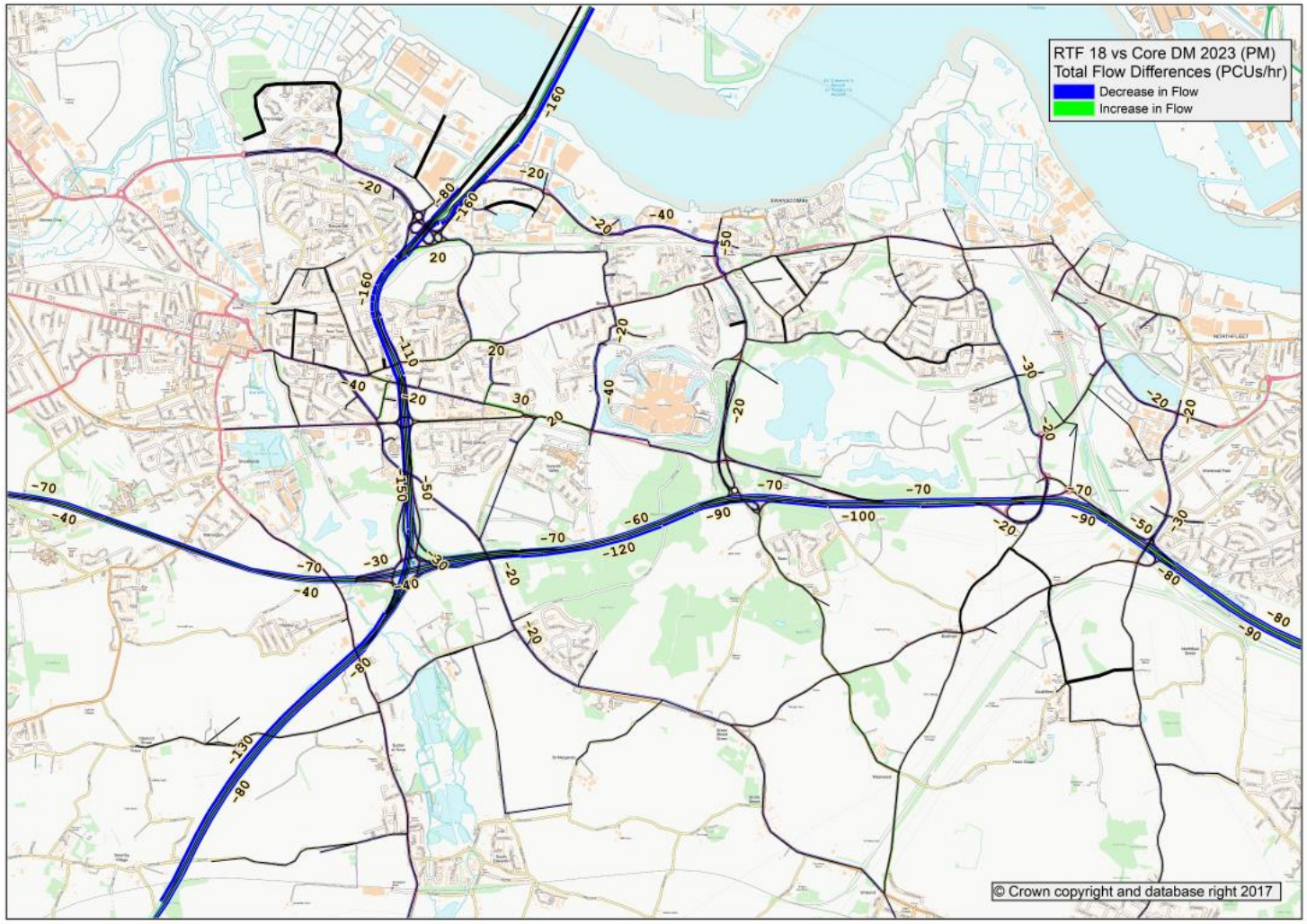


**Figure 3-4 Flow Difference between A2BE RTF18 vs A2BE Core - 2023 DS AM (PCUs/hr)**

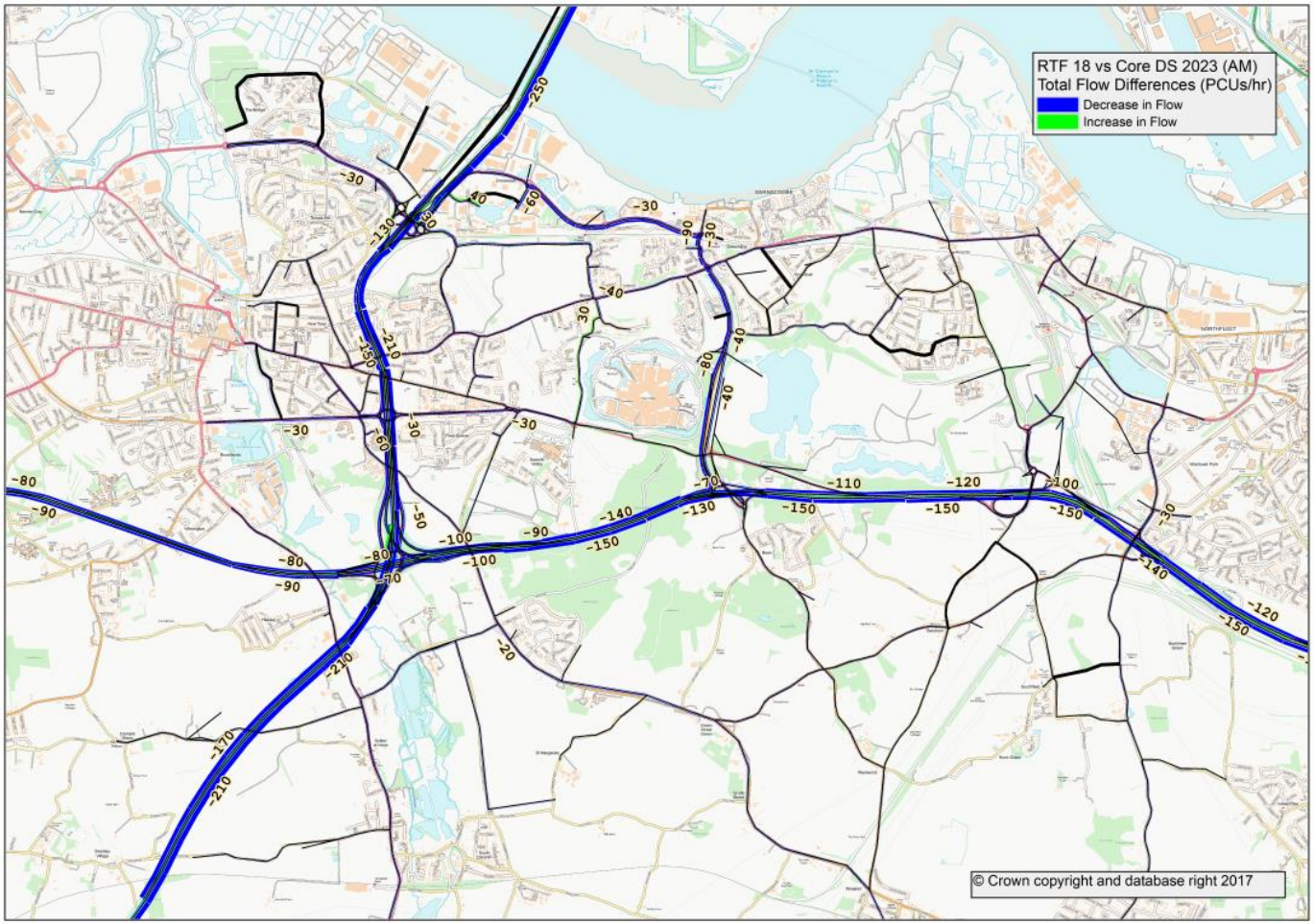


**Figure 3-5 Flow Difference between A2BE RTF18 vs A2BE Core - 2023 DS IP (PCUs/hr)**

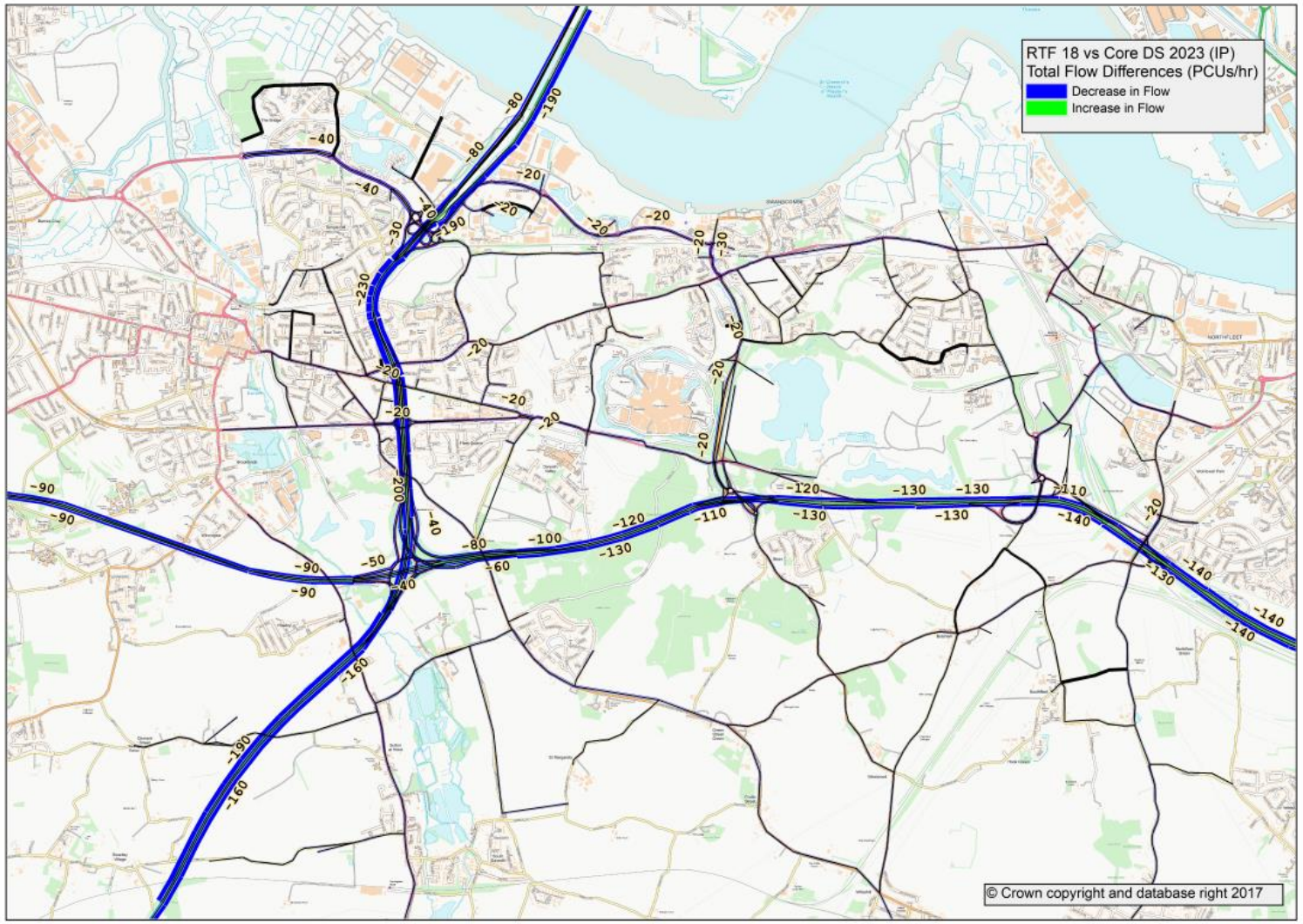


**Figure 3-6 Flow Difference between A2BE RTF18 vs A2BE Core - 2023 DS PM (PCUs/hr)**

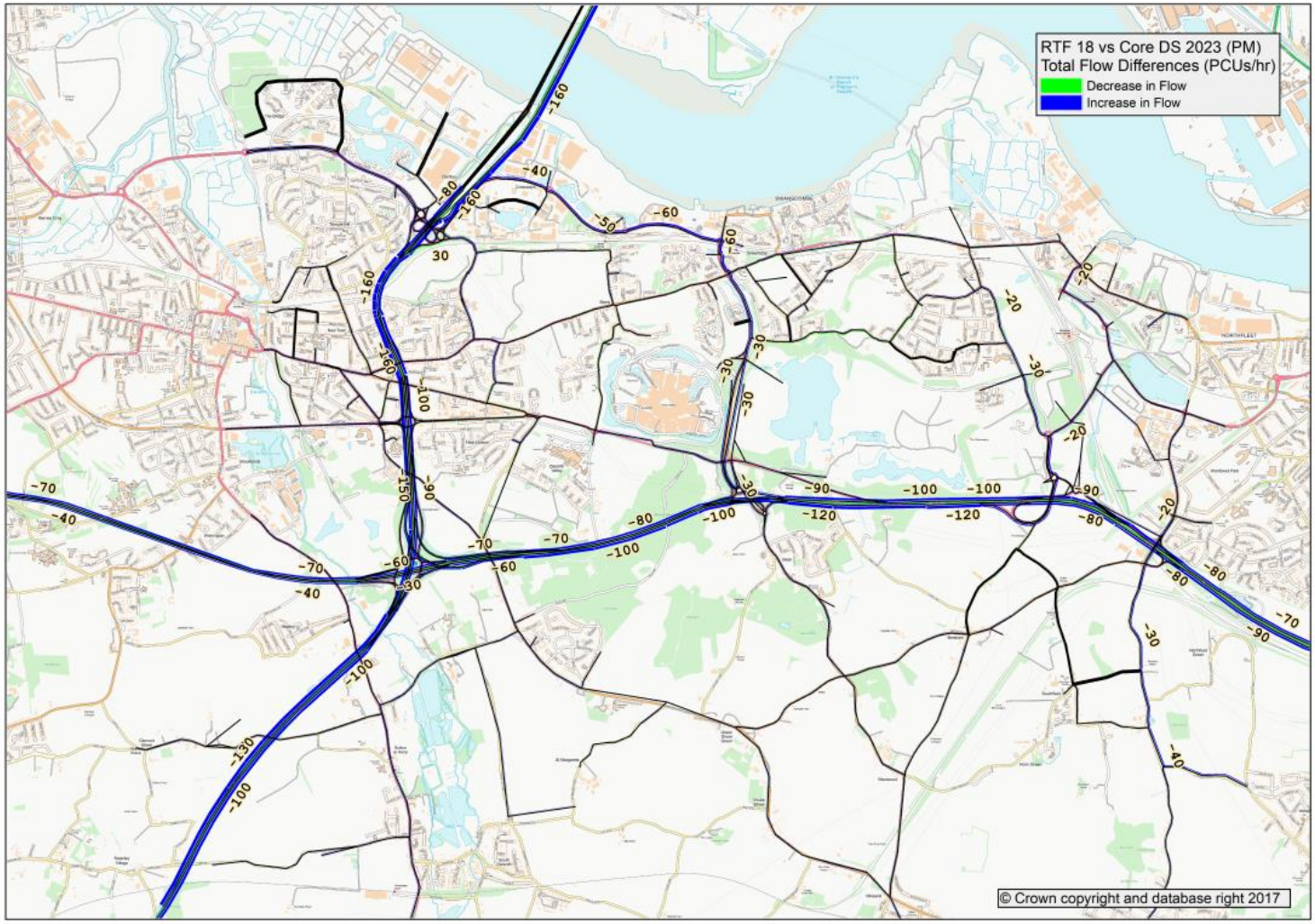


**Figure 3-7 Flow Difference between A2BE RTF18 vs A2BE Core - 2038 DM AM (PCUs/hr)**

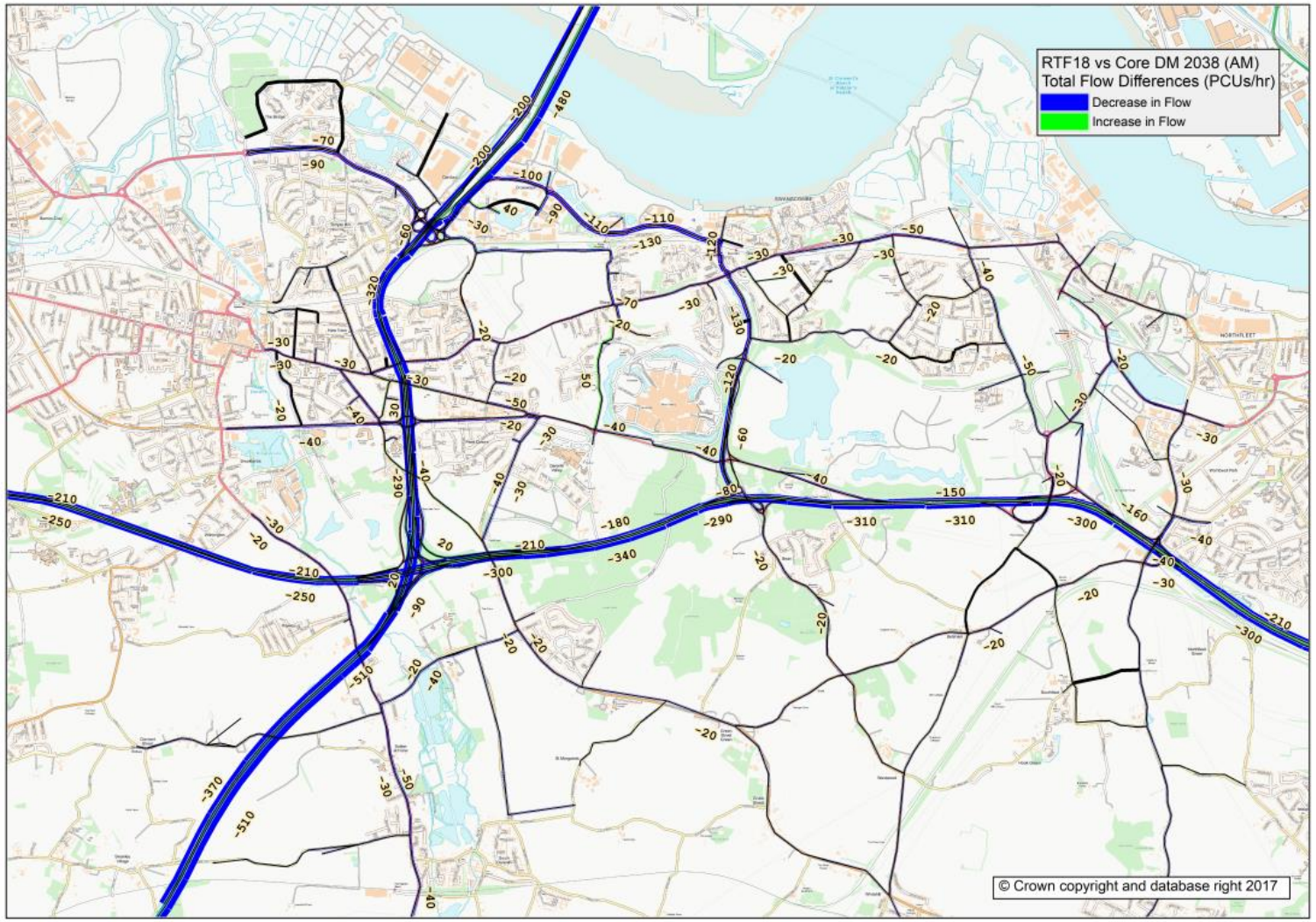


**Figure 3-8 Flow Difference between A2BE RTF18 vs A2BE Core - 2038 DM IP (PCUs/hr)**

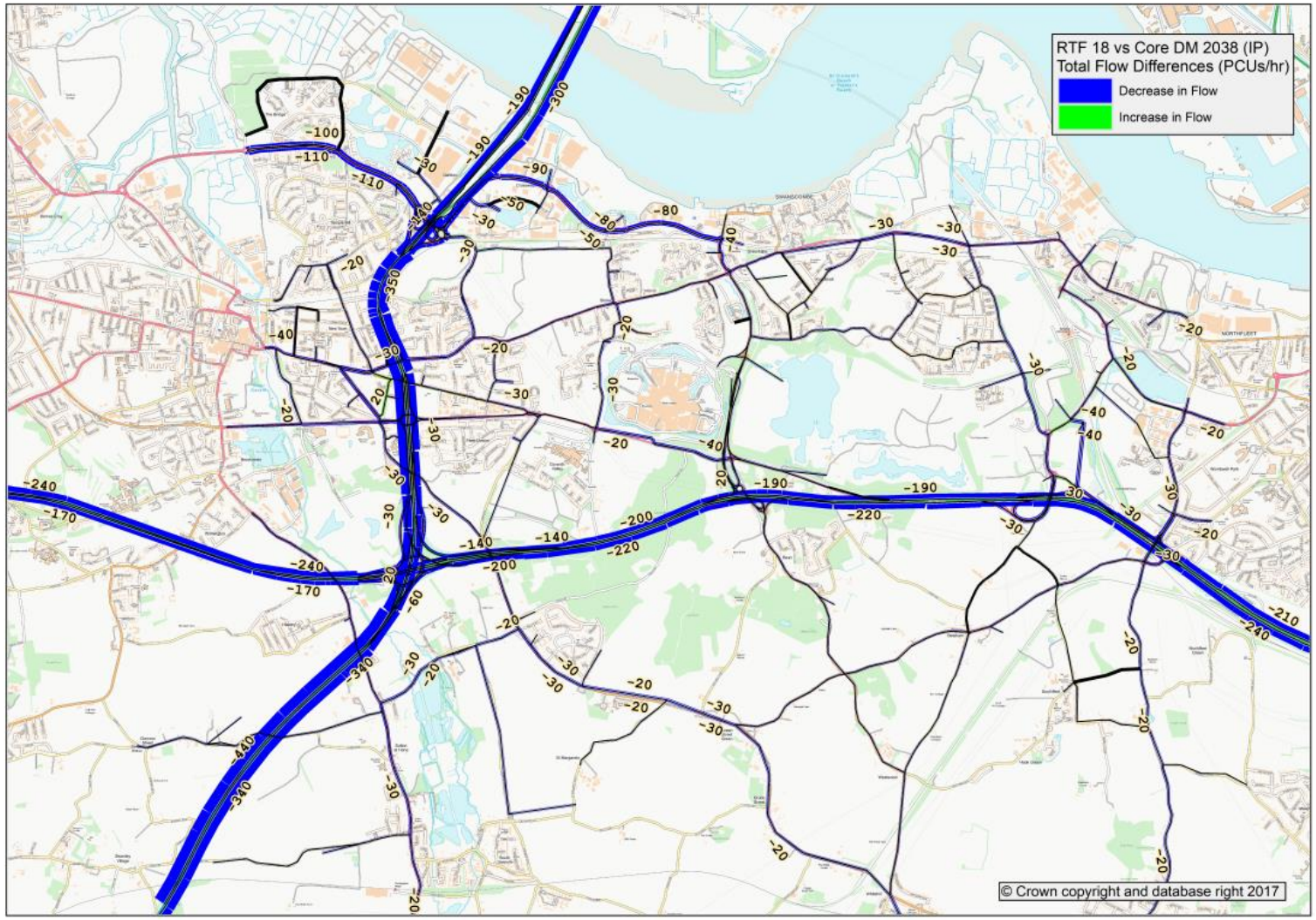


**Figure 3-9 Flow Difference between A2BE RTF18 vs A2BE Core - 2038 DM PM (PCUs/hr)**

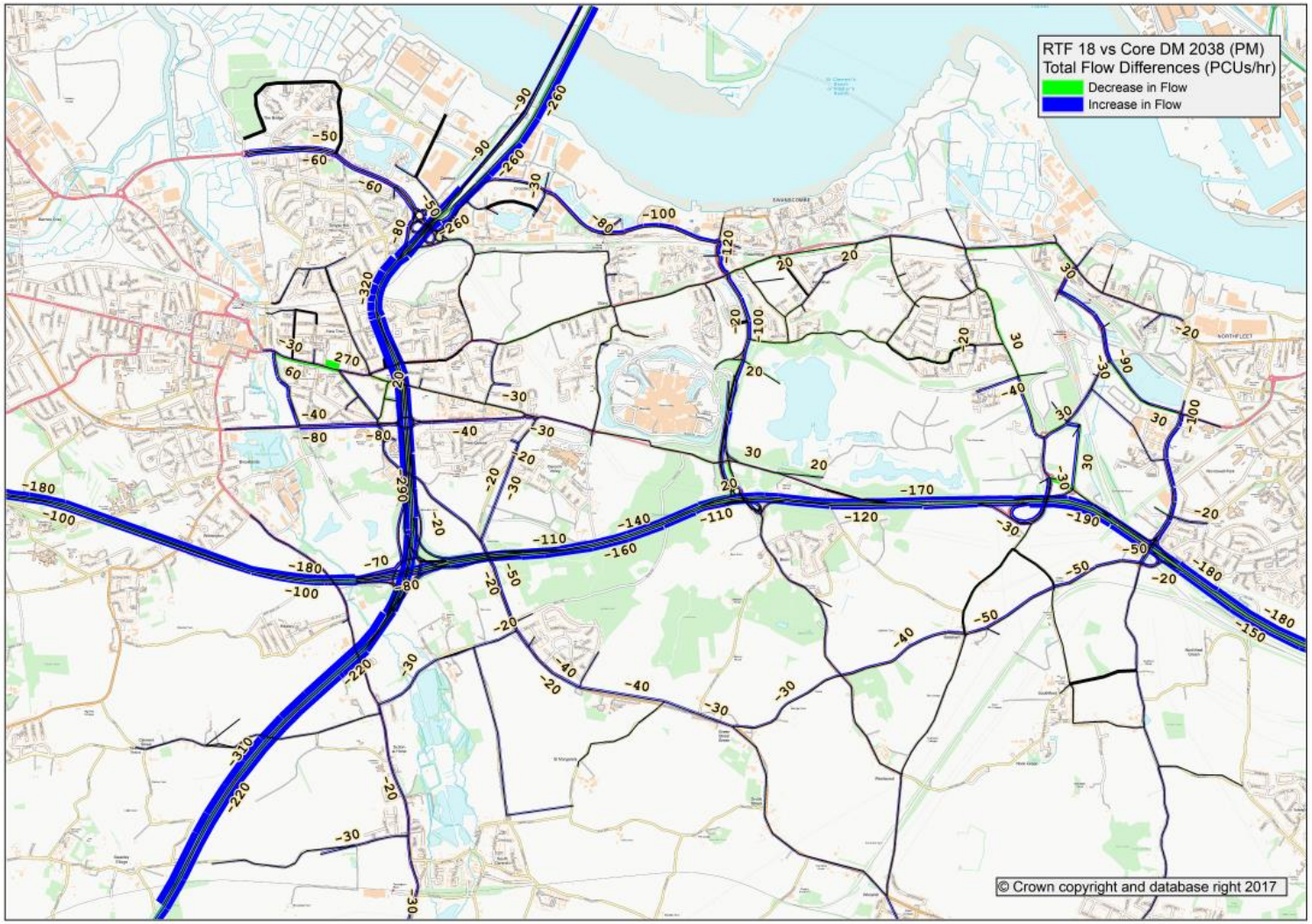


**Figure 3-10 Flow Difference between A2BE RTF18 vs A2BE Core - 2038 DS AM (PCUs/hr)**

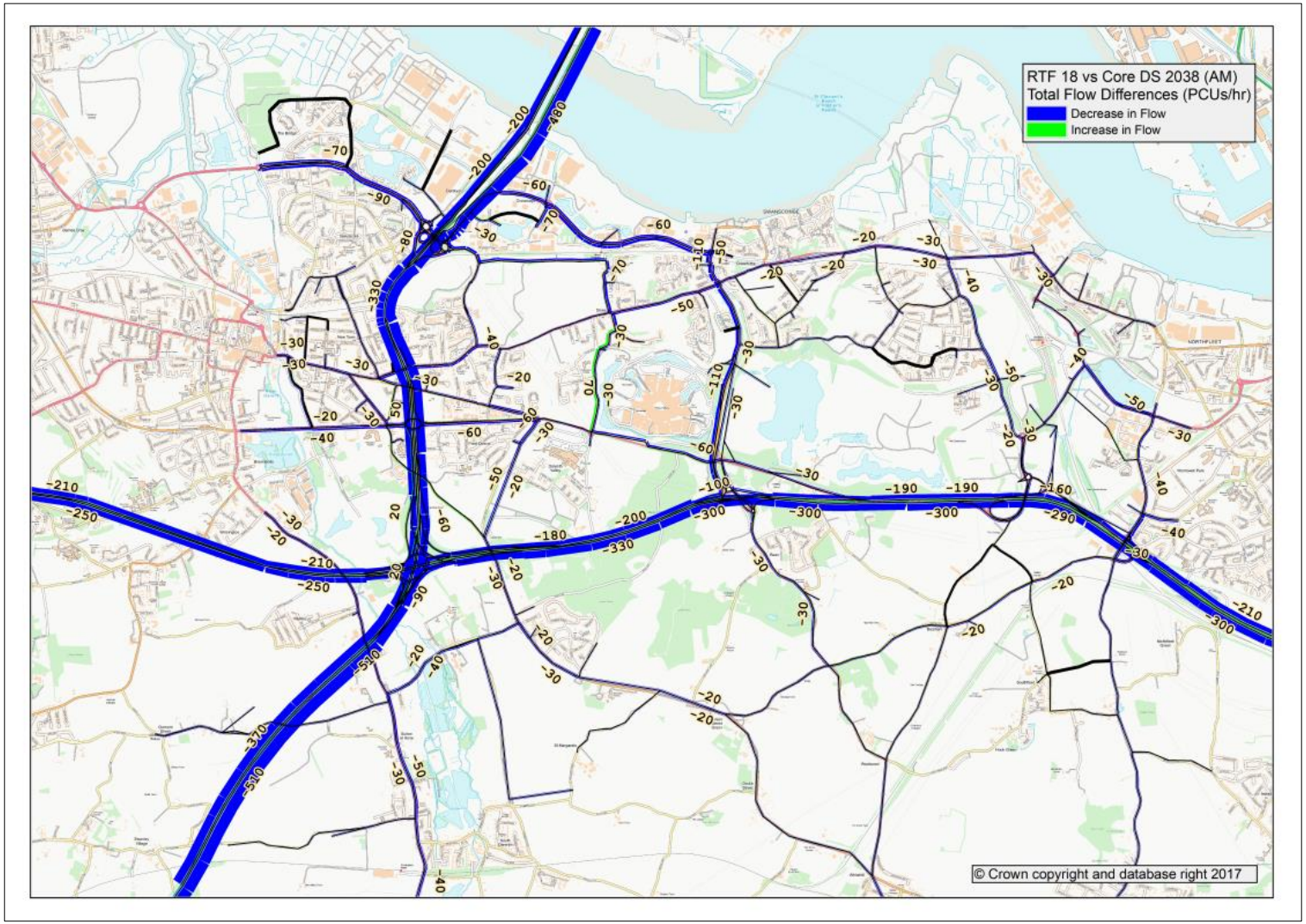


**Figure 3-11 Flow Difference between A2BE RTF18 vs A2BE Core - 2038 DS IP (PCUs/hr)**

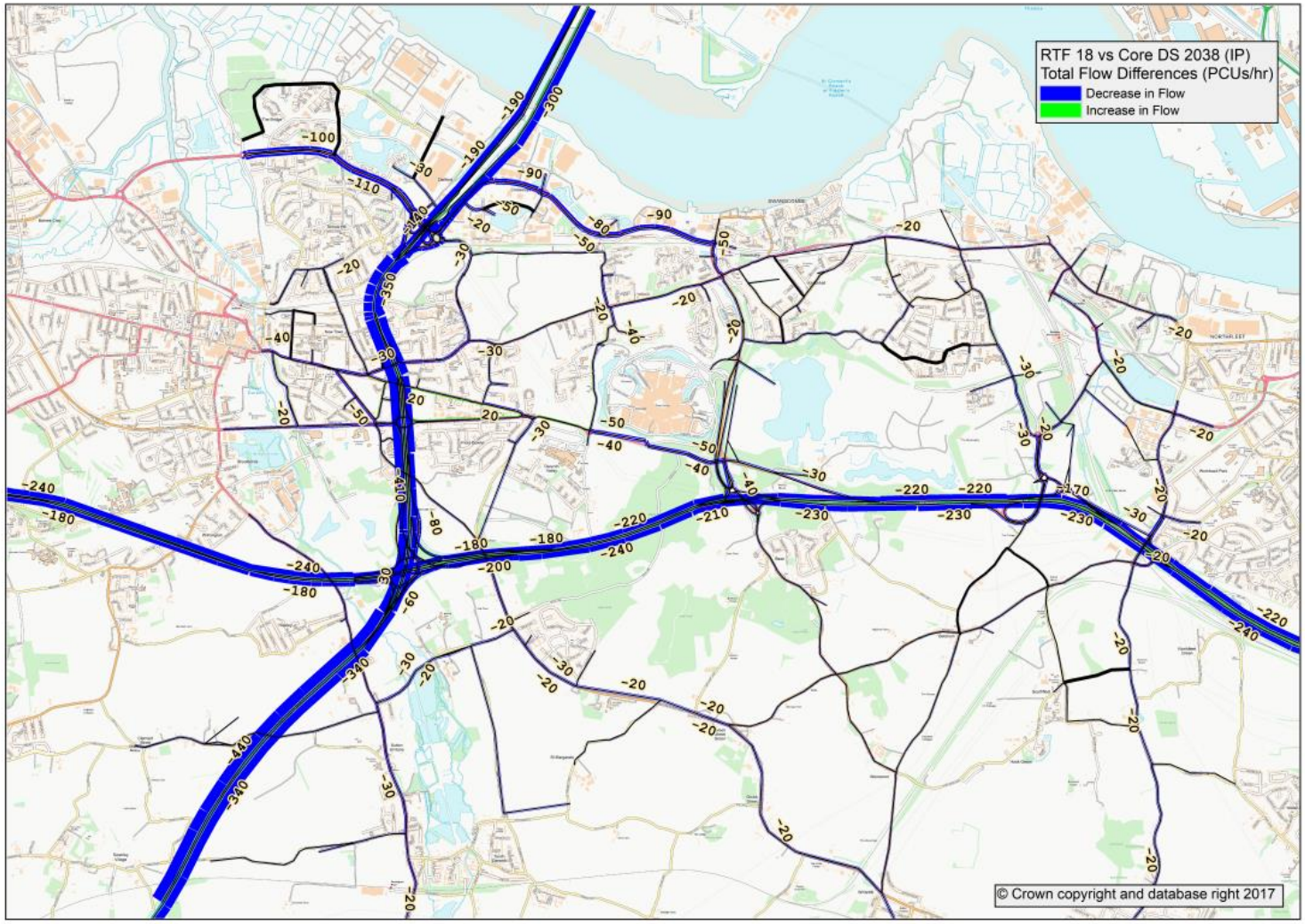
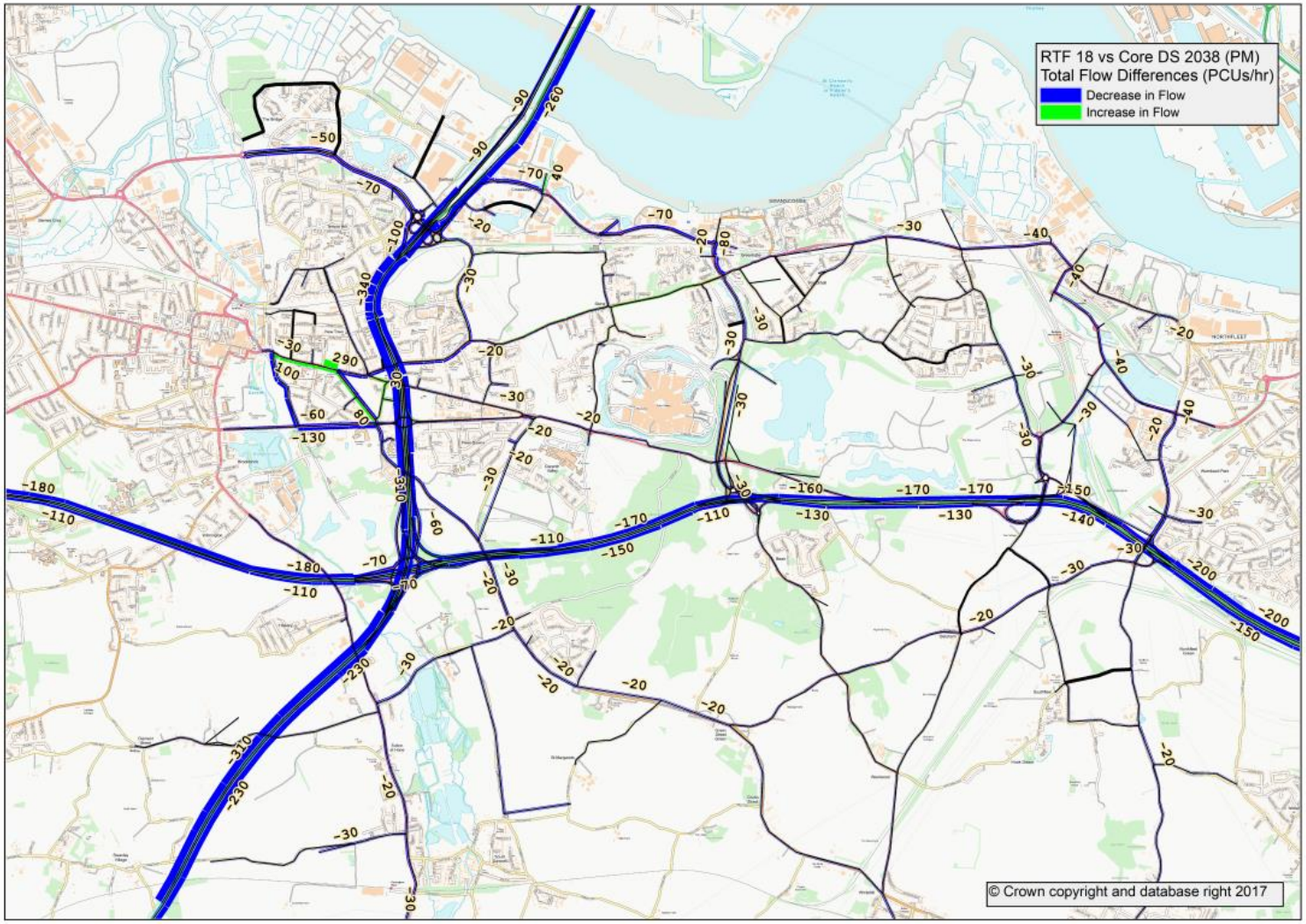


**Figure 3-12 Flow Difference between A2BE RTF18 vs A2BE Core - 2038 DS PM (PCUs/hr)**



# 4. TUBA Economic Assessment

## 4.1. Economic Appraisal Approach

The economic appraisal approach is set out in detail in the Economic Appraisal Package (HE543917-ATK-GEB-XX-RP-TB-000002). For the RTF18 sensitivity test this assessment has focussed on the changes to the TUBA user economic benefits.

## 4.2. Economic Appraisal Results

In line with the TAG guidance, all benefits and costs were calculated in monetary terms and expressed as present values (PV) in 2010 prices, discounted to 2010.

The scheme is forecast to produce TUBA user benefits of £101.31m over the 60-year appraisal period. These benefits are generated by travel time savings of £95.76m and vehicle operating cost benefits of £5.55m due to the proposed scheme generating reductions in congestion which requires less fuel to be consumed.

This compares against the core scenario where the scheme was forecast to produce user benefits of £169.2m over the 60-year appraisal period and hence reflects a 40% reduction compared to the core scenario.

## 4.3. Benefit to Cost Ratio

In the core scenario, the Present Value of Benefits (PVB) excluding reliability benefits and wider economic impacts was £143.82m. With a Present Value of Costs (PVC) of £61.76m, this gave an initial BCR of 2.33.

Inclusion of reliability benefits and wider economic impacts increased the core scenario PVB to £159.79m, resulting in an adjusted BCR of 2.59.

For the RTF18 sensitivity test, as noted above, TUBA economic assessment has been undertaken. In order to understand the overall impact on the BCR for the scheme, however, the non-TUBA elements, such as accidents, have been scaled in line with the change in TUBA between the Core and RTF18 scenarios. In the core scenario these non-TUBA elements only represent a total of -£5.89 million, (excluding the private sector contribution), or less than 4% compared to the TUBA benefit of £169 million. Given the limited scale of the non-TUBA elements this way of approximating their impact under RTF18 is considered reasonable. Based on this the PVB excluding reliability benefits and wider economic impacts reduces to £80.2m. With a PVC of £61.76m, this gives an initial BCR of 1.30.

Inclusion of reliability benefits and wider economic impacts increases the PVB to £89.75m, resulting in an adjusted BCR of 1.45.

Table 4-1 shows a summary comparison between the core scenario and RTF18 sensitivity test.

**Table 4-1 Comparison of Core Scenario and RTF18 Sensitivity Test**

| | Core Scenario | RTF18 Sensitivity Test |
|---|---|---|
| Present Value Benefits (PVB) (£m) | 143.82 | 80.17 |
| Present Value Costs (PVC) (£m) | 61.76 | 61.76 |
| Net Present Value (NPV) (£m) | 82.06 | 18.40 |
| **Initial BCR** | **2.33** | **1.30** |
| Adjusted PVB (£m) | 159.79 | 89.75 |
| Adjusted NPV (£m) | 98.03 | 27.99 |
| **Adjusted BCR** | **2.59** | **1.45** |

# 5. Additional Benefits

Whilst the impacts of the RTF18 forecasts have reduced the level of economic benefits it is important to recognise the following with regards to the additional increases to the Benefit to Cost Ratio, which includes:

- Changes to Carbon Calculations
- De-signalisation of Bean South Roundabout

These are discussed below.

## 5.1. Updated Carbon Calculations

Following a Highways England update to advice in the calculation of emissions, for all scheme assessments, the carbon calculations were revised in December 2018 to include all roads in the traffic model. This assessment showed a reduction in carbon disbenefit of the scheme from -£2.37 million to -£0.14 million. Based on a proportional change in TUBA user benefits due to RTF18 this would result in disbenefit of around -£0.08 million to the RTF18 economic benefits. This reduced carbon disbenefit would increase the BCR for the scheme.

## 5.2. De-signalisation of Bean South Roundabout

Whilst the proposed Bean and Ebbsfleet junction improvements have been developed to meet the objectives of the scheme it is recognised that further enhancements can be achieved to increase the overall benefits of the scheme.

A decision has been made to de-signalise the Bean South Roundabout to minimise delays to those trips travelling from A2 westbound off slip and southbound over the overbridge from Bean North Roundabout.

A sensitivity test has been undertaken in both the strategic and operational models to assess the potential impact of this revision compared to the Core Scenario. Based on this the key points to note are as follows:

**Strategic Model Impacts**

- Traffic flows increase marginally on all approaches of Bean North roundabout and Bean South roundabout;
- Slight reduction in traffic flow approaching the Ebbsfleet West roundabout;
- No change in delay at the Bean North roundabout; and
- Reduction in delays at the Bean South due to de-signalisation.

**Operational Model Impacts (2038 PM peak)**

- Significant reduction in queue on A2 WB off-slip at the Bean South roundabout;
- There is an increase in queue on Bean Lane NB approach of Bean South roundabout due to de-signalisation;
- No major changes were seen at Ebbsfleet junctions; and
- Reduction in queue lengths for Hall Road / Station Road roundabout and Hall Road / Sainsbury roundabout.

In addition to this assessment the impact on the economic benefits, based on the core scenario, has also been undertaken within the TUBA software. These highlighted an increase in TUBA benefits of £25 million which would increase the core scenario BCR to:

- Core Scenario BCR = 2.73
- Adjusted BCR = 2.99

A TUBA assessment has also been undertaken based on the RTF18 sensitivity test. This resulted in an increase in benefits of £12 million. The impact on the BCR is discussed below.

## 5.3. Impact on BCR

Based on the additional benefits highlighted above an adjustment has been undertaken to understand the impacts on the BCR against the RTF18 sensitivity test, as presented in Table 5-3. These have been included incrementally and are based on the following:

- Revised Carbon calculation: -£0.08 million disbenefit
- Removal of Bean South Signals - £12 million user benefits

This table highlights that the RTF18 adjusted BCR's would increase from around 1.45 to 1.67.

**Table 5-1 Impacts on BCR**

| | Core Scenario | RTF18 Sensitivity Test | + Revised Carbon Calculation | + Bean South De-signalisation |
|---|---|---|---|---|
| Present Value Benefits (PVB) (£m) | 143.82 | 80.17 | 81.50 | 93.50 |
| Present Value Costs (PVC) (£m) | 61.76 | 61.76 | 61.76 | 61.76 |
| Net Present Value (NPV) (£m) | 82.06 | 18.40 | 19.74 | 31.74 |
| **Initial BCR** | **2.33** | **1.30** | **1.32** | **1.51** |
| Adjusted PVB (£m) | 159.79 | 89.75 | 91.09 | 103.09 |
| Adjusted NPV (£m) | 98.03 | 27.99 | 29.33 | 41.33 |
| **Adjusted BCR** | **2.59** | **1.45** | **1.47** | **1.67** |

It is noted that this calculation excludes the impact of the saving of approximately £3.85m associated with the detailed modification proposed to Bean North roundabout (MOD-1).

# 6. Environmental Assessment

## 6.1. Air Quality

The air quality assessment presented in the Environmental Statement (ES), reference HE543917-ATK-EGN-RP-LM-000008, includes the assessment of the change in pollutant concentrations between the do-minimum (without Scheme) situation and the do-something (with Scheme) situation for the opening year of 2023 at selected receptors. Overall it was considered that there would not be a significant adverse effect on air quality as a result of the Scheme.

A qualitative analysis of the likely changes to air quality with RTF18 has been carried out by comparing the RTF18 traffic data with the traffic data used in the ES for the opening year.

The air quality study area with RTF18 traffic data is largely the same as that used for the Scheme. There is only one additional affected road with RTF18 outside of the current air quality study area – a section of the B260 south of the A296, to the west of the M25 - with an increase in traffic with the Scheme of 1026 AADT, whereas previously this road had an increase of 988 AADT. The DMRB criterion for assessment is a change of 1000 AADT. Given that the change in AADT is only marginally over the criterion for assessment, the change in air quality at receptors near this road is likely to be imperceptible.

The air quality assessment as reported in the ES identified 11 receptors with an exceedance of the annual mean $NO_2$ objective in the opening year of the Scheme, with only one of these receptors, R17, expected to have a small increase in concentrations with the Scheme, as a result of traffic using the new slip road from the Bean North Roundabout onto the A2 eastbound. With the RTF18 traffic data, as shown in Table 6.1, the AADT flows on the new slip road are expected to be lower, indicating that the change with the Scheme will be smaller.

At the other receptors with an exceedance (R6, R41, R51 to R58), the RTF18 traffic data are unlikely to change the effect of the Scheme as reported in the ES, either an imperceptible change or a small decrease, as the differences in the changes as shown in column 7 of Table 6.1 are all small, being less than 200 AADT.

In all cases, given that the RTF18 AADT flows are lower than those used for the assessment reported in the ES, the total concentrations are likely to be smaller than those reported.

**Table 6-1 Changes in AADT at the roads nearest to the receptors with an exceedance of the $NO_2$ annual mean objective in the opening year**

| Road | DM [1] | DS [2] | Change [3] ([2] – [1]) | RTF18 DM [4] | RTF18 DS [5] | Change [6] ([5] – [4]) | Difference [7] ([6] – [3]) |
|---|---|---|---|---|---|---|---|
| **Receptor R17** | | | | | | | |
| Slip Road e/b from Bean North Roundabout to A2 | 0 | 11,680 | +11,680 | 0 | 11,437 | +11,437 | -243 |
| A2 e/b through Bean Junction | 69,966 | 68,392 | -1,574 | 68,978 | 67,476 | -1,502 | +72 |
| A2 w/b through Bean Junction | 68,129 | 68,419 | +290 | 66,896 | 67,231 | +335 | +45 |
| **Receptors R51 and R52** | | | | | | | |
| M25 s/b north of J1b | 83,585 | 82,445 | -1,140 | 82,162 | 80,966 | -1,196 | -56 |
| M25 n/b north of J1b | 77,433 | 76,873 | -560 | 75,966 | 75,361 | -605 | -45 |
| Slip off M25 s/b to J1b | 7,227 | 7,902 | +675 | 7,187 | 7,870 | +683 | +8 |
| Slip onto M25 n/b from J1b | 10,986 | 11,375 | +389 | 10,628 | 11,136 | +508 | +119 |
| **Receptors R53 to R57** | | | | | | | |
| M25 s/b south of J1a | 90,811 | 90,347 | -464 | 89,349 | 88,836 | -513 | -49 |
| M25 n/b south of J1a | 88,463 | 88,298 | -165 | 86,634 | 86,543 | -91 | +74 |
| **Receptor R58** | | | | | | | |
| Slip off M25 to J1a n/b | 15,406 | 15,255 | -151 | 15,217 | 15,148 | -69 | +82 |
| M25 n/b at J1a | 72,983 | 72,894 | -89 | 71,417 | 71,395 | -22 | +67 |
| M25 s/b at J1a | 71,989 | 72,100 | +111 | 70,604 | 70,638 | +34 | -77 |
| Slip on M25 s/b from J1a | 18,816 | 18,241 | -575 | 18,738 | 18,192 | -546 | +29 |
| **Receptor R6** | | | | | | | |
| A2 e/b by Ebbsfleet Junction | 66,600 | 67,690 | +1090 | 65,610 | 66,608 | +998 | -92 |
| A2 w/b at Ebbsfleet junction | 87,441 | 87,016 | -425 | 86,065 | 85,680 | -385 | +40 |
| Slip road e/b to Ebbsfleet junction | 22,286 | 24,147 | +1861 | 22,165 | 24,010 | +1,845 | -16 |

| Road | DM [1] | DS [2] | Change [3] ([2] – [1]) | RTF18 DM [4] | RTF18 DS [5] | Change [6] ([5] – [4]) | Difference [7] ([6] – [3]) |
|---|---|---|---|---|---|---|---|
| **Receptor R41** | | | | | | | |
| A2 e/b east of M25 | 87,765 | 85,431 | -2334 | 86,620 | 84,131 | -2,489 | -155 |
| A2 w/b west of M25 | 83,312 | 82,195 | -1117 | 81,849 | 80,817 | -1,032 | +85 |

## 6.2. Noise and Vibration

The noise and vibration assessment presented in the Environmental Statement (ES), reference HE543917-ATK-EGN-RP-LM-000008, includes the assessment of operational noise for four different traffic situations; do-minimum (without Scheme) and do-something (with Scheme) for both 2023 and 2038. There were no significant effects reported in the noise section of the ES.

Sensitivity testing with RTF18, was carried out and compared with the traffic data used in the ES, for the same four scenarios. The traffic modelling for the A2BE noise sensitivity test is based on 18hr AAWT do-minimum and do-something 2038.

To enable comparisons, basic noise levels were predicted, at 10m from the nearside kerb, for each of the roads in the study area. The difference in noise levels between the 2023 and the 2038 scenarios, with and without RTF18, was predicted. It was found that, within the study area, the predicted differences in noise for each scenario were no higher than 0dB and so could not adversely affect the magnitude of impact and significance of effect assessments determined within the noise and vibration chapter of the ES.

The comparison of predicted noise levels is provided in Table 6-2.

**Table 6-2 Comparison of Basic Noise Levels on Selected Roads within the Noise Study Area**

| Road Name | Direction | Location | Comparison of Predicted Noise Level at 10m from the road (dB) | | | |
|---|---|---|---|---|---|---|
| | | | Do-Minimum 2023 - with RTF18 vs ES | Do-Something 2023 - with RTF18 vs ES | Do-Minimum 2038 - with RTF18 vs ES | Do-Something 2038 - with RTF18 vs ES |
| A2 | EB | West of Bean | -0.1 | -0.1 | -0.2 | -0.2 |
| A2 | WB | West of Bean | -0.1 | -0.1 | -0.2 | -0.2 |
| A2 | EB | Bean to Watling Road | -0.1 | -0.1 | -0.2 | -0.2 |
| A2 | WB | Bean to Roman Road | -0.1 | -0.1 | -0.2 | -0.2 |
| A2 | EB | Roman Road to Ebbsfleet Junction | -0.1 | -0.1 | -0.2 | -0.2 |
| A2 | WB | Roman Road to Ebbsfleet Junction | -0.1 | -0.1 | -0.2 | -0.2 |
| A2 | EB | Between slips at Ebbsfleet Junction | -0.1 | -0.1 | -0.2 | -0.2 |
| A2 | WB | Between slips at Ebbsfleet Junction | -0.1 | -0.1 | -0.2 | -0.2 |
| A2 | EB | Ebbsfleet Junction to Pepper Hill | -0.1 | -0.1 | -0.2 | -0.2 |
| A2 | WB | Ebbsfleet Junction to Pepper Hill | -0.1 | -0.1 | -0.2 | -0.2 |
| A2 | EB | West of Pepper Hill | -0.1 | -0.1 | -0.2 | -0.2 |
| A2 | WB | West of Pepper Hill | -0.1 | -0.1 | -0.2 | -0.2 |
| B262 Springhead Road | both | Hall Road to Waterdales | -0.1 | -0.1 | -0.2 | -0.2 |
| B259 Southfleet road | both | North of Ebbsfleet Junction | -0.1 | -0.1 | -0.3 | -0.2 |
| Bean Lane | both | South of Bean Roundabout (South) | -0.1 | -0.1 | -0.2 | -0.2 |
| B255 | both | North of Bluewater | -0.1 | -0.1 | -0.1 | -0.1 |
| B255 | NB | North of Bean Roundabout (North) | -0.1 | -0.1 | -0.1 | -0.1 |
| B255 | SB | North of Bean Roundabout (North) | -0.1 | -0.1 | -0.2 | -0.1 |
| Roman Road | both | Mid-Section North of Bean Triangle | -0.1 | -0.2 | 0.0 | -0.1 |

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