

# Appendix B. Cost Benefit Analysis Report & Traffic Modelling Report

**ATKINS**

Member of the SNC-Lavalin Group

**SYSTRA**

# N25 Waterford to Glenmore

## Cost Benefit Analysis Report

Kilkenny County Council

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# Notice

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## Client signoff

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# 1. Introduction

## 1.1. Overview

This report sets out the economic assessment undertaken as part of the Phase 2 Route Option Selection of the N25 Glenmore to Waterford Road Scheme. This analysis has been carried out using the TUBA v1.9.8 cost benefit analysis program in accordance with Transport Infrastructure Ireland (TII) Project Appraisal Guidelines (PAG) 2016.

## 1.2. TUBA

Cost Benefit Analysis (CBA) forms one element of the appraisal process for road infrastructure projects. At Option Selection Phase, the benefits and costs of the proposed scheme are assessed using agreed traffic growth scenarios. The TUBA program compares the “Do-Nothing” scenario (i.e. not to progress with the scheme) with a number of “Do-Something” scenarios (i.e. the scheme route options) and determines whether benefits resulting from each scheme option will outweigh the costs of construction and future maintenance.

## 1.3. CBA at Option Selection Phase

At Phase 2 Option Selection, the CBA should be undertaken at a scale that is appropriate for the phase of scheme appraisal. In accordance with the TII guidelines, the CBA has been carried out for the opening year (2030), design year (2045) and Horizon Year (2060) using forecasts provided by the TII strategic planning unit taken from the National Transport Model (NTpM).

This will provide a comparative assessment of the options on an equal level from which the preferred option can be selected and taken forward to Phase 3, Selection of Preferred Route Corridor. During Phase 3, the emerging preferred option will be subject to sensitivity testing including low, medium and high growth forecasts.

## 1.4. Scheme Description

### ***Do Nothing Network***

The future year ‘Do-Nothing’ network is identical to the 2020 base network as there are no other schemes (road and public transport) that are committed within the traffic model study area.

### ***Do Something Networks***

The Do Something networks include six major road scheme investment alternatives. The six road options under consideration are as follows and as per Figure 1:

- **Purple Route:** The Purple route is to the west of the study area and runs approximately 1.5 – 2km offset from the existing N25. The route starts in the south at Luffany Roundabout and veers northwest through the townlands of Treanaree where it turns due north through Nicolastown, Atatemore, Grogan Ardbeg, Ballinclare and Ballinlammy where it swings to the right through Haggard, Parkstown Lower, Flemingstown and Ballybroghy where it connects to the western side of the newly constructed Glenmore Roundabout;
- **Magenta Route:** The Magenta route runs north south through the middle of the study area and predominantly along the line of the existing N25. The route starts in the south at Luffany Roundabout and meanders along and either side of the existing N25 northwards through the townlands of Luffany, Curraghmore, Ballyrowragh, Davidstown, Ballyrahan, Gaulstown, Ballynamona, Robinstown, Kilmakevoe, Glenmore, Graiguenakill and Ballyverneen where it ties into the southern side of the newly constructed Glenmore Roundabout;
- **Red Route:** The Red route is approximately 9 km in length runs north to the eastern side of the study area and runs approximately 0.5 – 2km offset from the existing N25. The route starts in the south at Luffany Roundabout and is on the eastern side of the existing N25 as it heads northwards through the townlands of Luffany, Curraghmore,

Ballinlaw, Ballyvarring, Redgap, Rochestown, Kearneybay Carrickcloney, Graiguenakill and Ballyverneen where it ties into the southern side of the newly constructed New Ross Roundabout;

- **Lime Green Route:** The Lime Green route runs through the middle of the study area on the and runs within approximately 0 – 0.5km offset from the existing N25. The route starts in the south at Luffany Roundabout and is on the eastern side of the existing N25 as it heads northwards through the townlands of Luffany, Curraghmore, where it crosses to the eastern side of the N25 into the townlands of Ballyrowragh, Sacrtnamoe, Ballyrahan, Ballyhobuck, Kilmakevoge where it goes back on line with the existing N25 at Robinstown, Graiguenakill and Ballyverneen where it ties into the southern side of the newly constructed Glenmore Roundabout;
- **Navy Route:** The Navy Route runs north south through the middle of the study area and runs close to and parallel to the line of the existing N25 on the western side. The route starts in the south at Luffany Roundabout and meanders along the western side of the existing N25 northwards through the townlands of Luffany, Curraghmore, Ballyrowragh, Davidstown, Ballyrahan, Gaulstown, Ballynamona, Robinstown, Kilmakevoge, Glenmore, Graiguenakill and Ballyverneen where it ties into the southern side of the newly constructed Glenmore Roundabout;
- **Teal Route:** The Teal route runs north to the eastern side of the study area approximately 0.5 – 1.5km offset from the existing N25. The route starts in the south at Luffany Roundabout and is on the eastern side of the existing N25 as it heads northwards through the townlands of Luffany, Curraghmore, Ballyrowragh, Scartnamore. Rathinure, between Aylwardstown and Carrickcloney and through Graiguenakill where it ties into the southern side of the newly constructed Glenmore Roundabout.

Table 1-1, below, summarises the road scheme options in terms of proposed cross-section and scheme length. The alignments and cross-sections may be subject to change following selection of the preferred route, an incremental analysis process on optimum cross-section and further design work.

**Table 1-1 Road Scheme Route Options Summary**

Route Option	Scheme Length (km)	Cross-Section
Purple	11.6	Type 1 Dual Carriageway
Magenta	9.3	Type 1 Dual Carriageway
Red	9.0	Type 1 Dual Carriageway
Lime Green	8.9	Type 1 Dual Carriageway
Navy	9.5	Type 1 Dual Carriageway
Teal	8.7	Type 1 Dual Carriageway

A map showing the six road scheme options under consideration is presented in Figure 1-1 overleaf.

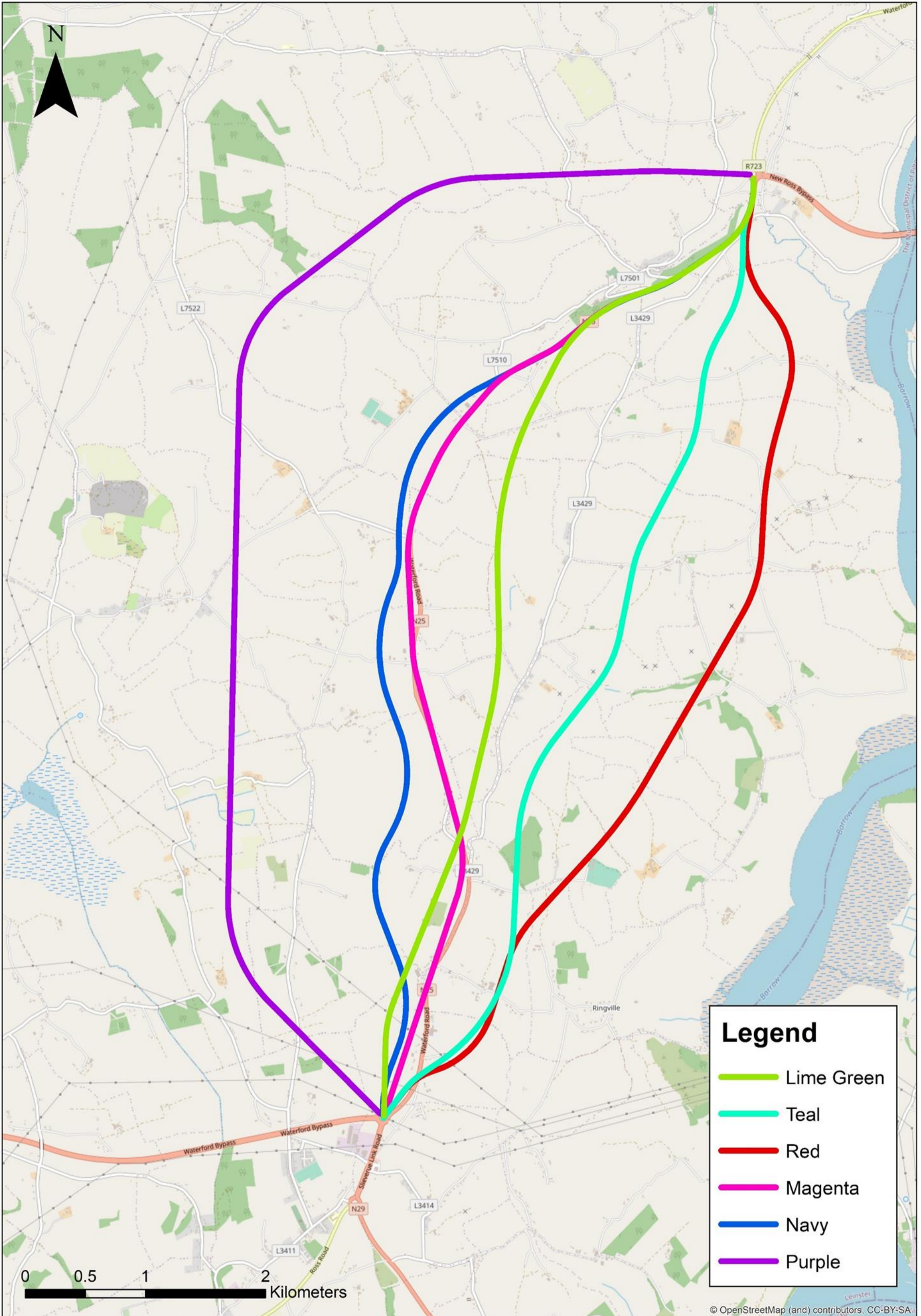


Figure 1.1 N25 Glenmore to Waterford – Road Scheme Options



## 1.5. Report Structure

This report is set out into the following sections:

2. Software Specification: sets out the version of the CBA software used in the assessment and the version of the National Parameter Values Sheet.
3. CBA Network: describes the extent of the network modelled as part of the appraisal.
4. Data Collection: summarises the extent of data collected for the purposes of a CBA.
5. CBA Input Assumptions: references the specific parameters and assumptions used in the CBA.
6. Safety Benefits: presents details of the appraisal of benefits associated with the reduction in collisions associated with the scheme options.
7. Annualisation: outlines the methodology used for converting the scheme benefits forecast in the modelled time periods into annual benefits.
8. CBA Results Summary: contains the summary of the results of the assessment for all options and includes details of the Impact on the Public Accounts.
9. Conclusions: summarises the overall process and includes a summary table of results of the CBA for each scheme option.

## 2. Software Specification

### 2.1. TUBA Specification

This CBA Option Selection Phase assessment was undertaken using the TUBA v1.9.8 cost benefit analysis programme. The latest TII economic parameters file was used with all figures discounted back to a base year of 2011. A variable discount rate was used with 4% applied for appraisal years 1-30 and 3.5% used for years 31-60.

The analysis has been carried out in accordance with TII PAG Unit 6.3: Guidance on Using TUBA (Sept 2017) and with reference to TII PAG Unit 6.11 National Parameter Values Sheets (as per October 2020 updates).

## 3. Transport Modelling

### 3.1. Overview

As part of this study, a N25 Local Area Traffic Model has been developed and used to assess various route options in TUBA. The 'N25 Glenmore to Waterford Phase 2 - Traffic Modelling Report' details the entire modelling process. The TMR is included within Appendix A of this report. This chapter provides a summary of the transport modelling process adopted for the project.

The extent of the traffic model is illustrated in the Figure below. The study area shown includes the entirety of New Ross (including the recently opened Bypass), North of Waterford City, the N29 and all local roads connecting with the existing N25.

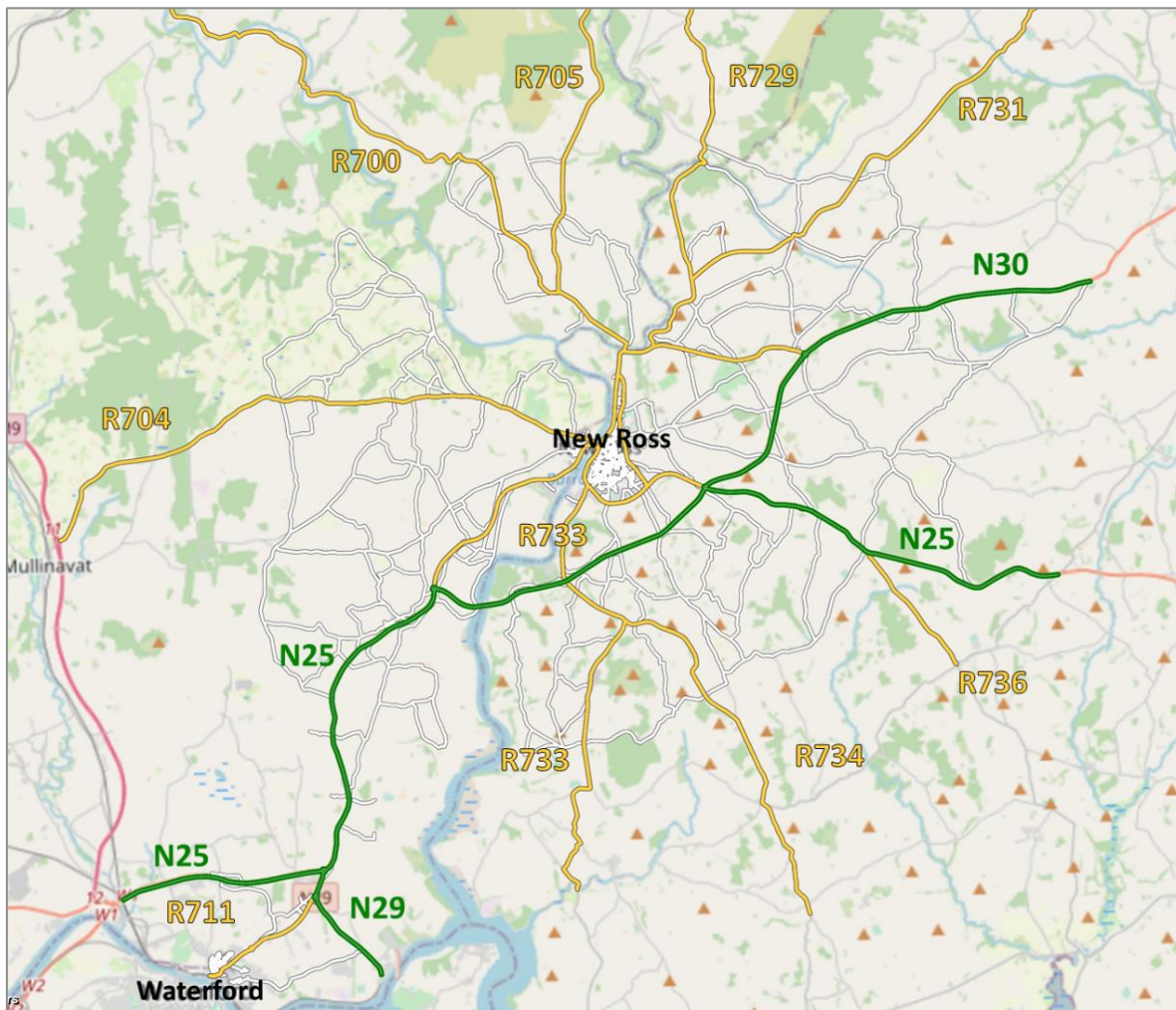


Figure 3.1 Modelled Road Network

For the purposes of this Study, a Local Area Model has been developed for the following time periods:

- AM Peak Hour (08:00 – 09:00)
- Average Inter Peak Hour (average of 12:00 – 14:00)
- PM Peak Hour (17:00 – 18:00)

Three future year models have been developed to assist in the appraisal of this scheme. The future years modelled are:

- 2030 (Opening Year);
- 2045 Design Year; and
- 2060 Horizon Year

### 3.2. Model Calibration and Validation

The model calibration process has been undertaken based on the criteria set out in TII’s PAG Unit 5.1: Construction of Traffic Models. The models were calibrated and validated to both link and turning count flows. In total, 154 counts were used in the calibration with 63 observed traffic counts used in the validation.

The PAG specify the acceptable values for modelled and observed flow comparisons and suggests how calibration should relate to the magnitude of the values being compared. A summary of these targets is shown in Table 3-1 below.

**Table 3-1 Model Calibration Criteria: Individual Flows**

Class Test	Criteria & Measure	Acceptability Guideline
1	Individual flows within 100 vph for flows <700 vph	>85% of cases
2	Individual flows within 15% for flows 700 – 2700 vph	
3	Individual flows within 400 vph for flows > 2700 vph	

When comparing modelled and observed counts, the magnitude of the observed volume is clearly important when deciding on what is a reasonable error. Therefore, in addition to considering percentage or absolute differences as outlined above, the Geoffrey E. Havers (GEH) statistic (a form of the Chi-squared statistic) is also used as a calibration measure as it incorporates both relative and absolute errors. The GEH statistic is:

$$GEH = \sqrt{\frac{(Observed - Modelled)^2}{0.5 \times (Observed + Modelled)}}$$

The PAG criteria for GEH results are outlined in Table 3-2. In addition to the criteria given, it is generally accepted that GEH values should not be greater than 10 and values greater than 10 should be examined and where an improvement in the results is not possible a reasonable explanation given.

**Table 3-2 Model Calibration Criteria: GEH Statistic**

Criteria	Measure	Acceptability Guideline
<b>GEH Statistic</b>	Individual flows GEH<5.0	>85% of cases

In terms of both calibration and validation the model passed the criteria outlined for all modelled time periods and no counts were found to have GEH of 10 or above. The full results of the count calibration and validation can be found in Sections 4.2.2 and 4.4.1 of the Traffic Modelling Report (TMR) included in Appendix A of this report.

In addition, trip matrix calibration checks were carried out on the final demand matrices to ensure the original prior matrices were not overly distorted. This included review of the prior and post estimation coincidence ratio which ensures the trip length distribution has not been changed significantly in the calibration process. The change in cell values was also checked against the criteria outlined in PAG. All trip matrix calibration checks and the results can be found in Section 4.3.2 & 4.3.3 of the TMR included in Appendix A of this report.

Journey Times along 6 routes were also used in the validation process with all modelled journey times within each peak found to be within 15%, as required by the PAG, of the observed for each time period. The results of the journey time validation can be found within Section 4.4.2 of the TMR.

In addition, validation of the modelled origin destination patterns was undertaken. Section 5.6 of Unit 5.1 of the PAGs recommends that for origin-destination surveys, modelled origin-destination patterns are to be compared to observed patterns based on the percentage split of destinations from each origin-destination survey location. A target deviation limit of  $\pm 25\%$  within more than 85% of samples should be attained. All modelled OD pairs were found to be within the target deviation limit recommended in the AM and PM and for 99% of OD pairs in the Inter peak. The origin-destination validation results can be found in Section 4.5 of the TMR included in Appendix A of this report.

### 3.3. Model Outputs for TUBA

TUBA uses modelled skims taken from each model to assess the benefits of each scheme against the Do-Nothing Scenario. These skims include the demand, travel time and distance between each modelled zone in the network for both Light and heavy vehicles. These were extracted from the model for all zones. The outputs were sense checked to ensure no 'modelled noise', i.e. changes unrelated to the scheme options, was present in the outputted skims.

## 4. Data Collection

### 4.1. Overview

In order to accurately model existing demand and replicate traffic movements and patterns, a significant level of data is needed. The following chapter provides an overview of the data collection exercise undertaken to facilitate the calibration and validation of the N25 Local Area Model.

### 4.2. Survey Summary

Two sets of surveys were undertaken as part of model development. An initial set of surveys in September 2019, prior to the opening of the New Ross Bypass, and a second set in March 2020, after the opening of bypass. The initial surveys were to allow the commencement of the model development with further data obtained to ensure the impact of the New Ross Bypass was accurately reflected in the base model.

The majority of sites surveyed in 2019 were resurveyed in 2020 with the exception of some less trafficked junctions with local access roads where the initial datasets provided sufficient data for calibration and validation of the models. The 2020 surveys were undertaken after the opening of the New Ross Bypass and before the Covid-19 restrictions were in place as detailed in sections 2.2.1 and 2.2.2 of the Traffic Modelling Report (TMR).

The surveys consisted of Automatic Traffic Counts (ATC), Junction Turning Counts (JTC) and Journey Time Survey (JTS). The 2020 surveys also included Automatic Number Plate Recognition (ANPR) Origin-Destination Surveys. A summary of the surveys is provided in Table 4.1 below.

**Table 4-1 Traffic Survey Data**

Survey Type	Description
<b>Traffic counts</b>	Automatic Traffic Counts (ATC) surveys were carried out at 14 sites between 9 <sup>th</sup> Sept and 15 <sup>th</sup> Sept 2019 and at 14 sites between the 2 <sup>nd</sup> and 8 <sup>th</sup> of March 2020.
	Junction Turning Counts (JTC) surveys were carried out at 25 location on Tuesday 12 <sup>th</sup> September 2019 between 07:00-19:00 and at 16 locations on Wednesday 4 <sup>th</sup> March 2020 between 07:00-19:00.
	Traffic data from 4 Transport Infrastructure Ireland (TII) Traffic Monitoring Units (TMU).
<b>Journey time</b>	Journey time survey data was collected via Bluetooth Surveys at 5 different locations during the 2019 surveys. A further comprehensive dataset of journey times was captured between 11 locations using ANPR on Wednesday 4 <sup>th</sup> March 2020 between 07:00-19:00.
<b>Origin-Destination</b>	Origin-Destination surveys were undertaken on Wednesday 4 <sup>th</sup> March 2020 between 07:00-19:00 using ANPR between the same 11 locations surveyed for journey times. The survey points were located at ATC points to allow sample rates to be obtained.

Further details on the survey locations and results can be found in Chapter 2 of the TMR, included in Appendix A of the TMR.

## 5. CBA Input Assumptions

### 5.1. Input Parameters

All general parameters such as value of time, value of time growth rates, discount rates, fuel cost changes, fuel consumption, vehicle operating costs fuel/non fuel, trip purpose distribution, tax rates, change in tax rates, vehicle occupancy rates, vehicle proportions and collision rates were taken from the TII Unit 6.11 National Parameters Value Sheets in the Project Appraisal Guidelines (Updated in October 2020 with changed values of time).

Fuel efficiency was taken from UK WebTAG guidance as no guidance is currently available in Ireland. Fleet fuel type proportions were available from the Department of Environment; the proportions are given in Table 5-1 below. The forecast changes to fleet fuel type were taken from WebTAG as set out in Table 5-2. Data on fuel costs, duty and VAT is provided in Table 5-3.

**Table 5-1 Car Fleet Fuel Type Split**

Year	Petrol	Diesel
2011	69.9%	30.1%

**Table 5-2 Forecast Change in Car Fleet Fuel Type Split**

Start Year	End Year	Vehicle Type	% Change Petrol
2012	2015	1 – Car	-2.6422
2016	2020	1 – Car	0.4732
2021	2025	1 – Car	-0.6619
2026	2030	1 – Car	-0.8836

**Table 5-3 Fuel Costs**

FUEL TYPE	Resource Cost (cents / l)	Duty (Cents / l)	VAT (%)	Carbon (Grams/l)
Petrol	63.00	57.62	21.0	2230
Diesel	70.00	46.57	21.0	2562

The TUBA economic input used for the appraisal of all route options is provided in full within Appendix C.

### 5.2. Scheme Costs – Capital Costs

As stipulated in the Project Appraisal Guidelines, costs are represented in 2011 prices and values exclusive of VAT in CBA appraisal. The Option Comparison Estimate (OCE) Costs are set out below, in current (2020) prices.

The OCE was prepared based on the base costs of construction, supervision, archaeology, advance works, residuals, land & property and planning & design but supplemented by a TII Programme Risk & Inflation. The OCE is outlined in Table 5-4 below. Note that for appraisal purposes and in accordance with PAG Unit 6.7, costs have been input into TUBA exclusive of VAT.

**Table 5-4 Capital Costs - Option Comparison Estimate (2020 prices)**

Option	Base Costs (incl. Project specific Risk & VAT)	Inflation Allowance	Programme Risk	Option Comparison Estimate
Purple	120.91	35.01	6.05	161.97
Magenta	101.26	29.32	5.06	135.64
Red	150.34	43.53	7.52	201.39
Lime Green	102.79	29.76	5.14	137.69
Navy	87.59	25.36	4.38	117.32
Teal	139.69	40.45	6.98	187.12

These costs were inputted into the CBA cost conversion spreadsheet provided with PAG unit 6.2 for Phase 2 Route Selection which converts the OCE costs outlined into TUBA cost inputs. As required by the current guidance from the Department of Transport Tourism and Sport (DTTaS) Common Appraisal Framework (CAF) (2016), a shadow price factor of 1.3 was been applied for public funds within this spreadsheet. In line with CAF, the economic appraisals have been estimated on the basis of a shadow price of labour of 1.0. The process of accounting for the changes in price of construction relative to movements in the relative price index is undertaken by the application of the Relative Price Factor (RPF). As specified by TII PAG 6.2, an RPF value of unity was applied.

### 5.3. Scheme Costs – Maintenance Costs

Annual maintenance costs for each route option have been included in the appraisal. The default maintenance costs by road type in TII PAG Unit 6.11, shown in the table 5-5, have been used on the lengths of standard cross-section of each route option.

**Table 5-5 Operation & Maintenance Costs estimate (2011 prices)**

Road Type	Annual Cost (€1,000/km/year)
Dual Carriageway/Motorway	42.371

The scheme input file for each route, which included 2011 scheme cost are included in Appendix D of this report.

### 5.4. Residual Value

For major transport schemes, the residual value is a measure of the net present value of the infrastructure over a specified period beyond the 30-year appraisal period. In this case a residual value period of 30 years has been applied based on the guidance outlined in Table 6.1.2 of TII PAG Unit 6.1: Guidance on Conducting CBA. The residual value is included in the final table of result in Chapter 8.



## 6. Annualisation

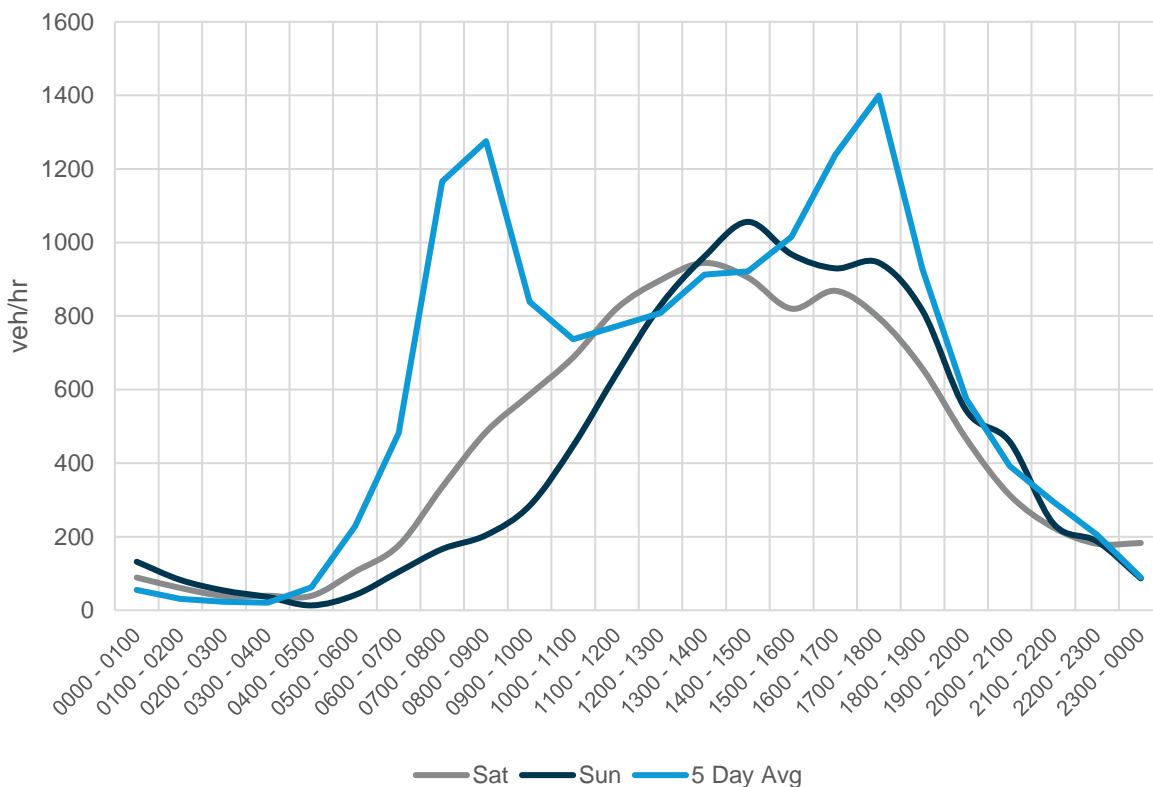
### 6.1. Introduction

Annualisation factors are used to convert the benefits from the modelled time periods to annual benefits. The benefits in each modelled time period are multiplied by the annualisation factor relevant to the modelled time and then summed to give the total annual benefits. As previously discussed, three hours were modelled using the models, these are as follows:

- Weekday AM Peak Hour (08:00 - 09:00);
- Average Weekday Inter Peak Hour (12:00 and 14:00); and
- Weekday PM Peak (17:00 - 18:00).

### 6.2. Traffic Profiles

An analysis has been undertaken on weekday and weekend traffic flow profiles along the N55 in order to assist in developing appropriate annualisation factors. A selection of ATC sites within the study area were collated to develop weighted average traffic flows for a typical weekday and weekend. The resulting daily traffic profiles are presented in Figure 6.1.



**Figure 6.1 N25 Weekday and Weekend Traffic Profiles**

As indicated in TII PAG Unit 6.3, modelled periods can be ignored if it can be assumed that their contributions to overall benefits/disbenefits are negligible (this is likely to be the case for much of the off-peak). The off-peak (OP) period is not modelled for this study and the figure above shows that the level of traffic (and the subsequent congestion) at that period are relatively low compared to the rest of the day. As a consequence, it is assumed that the off-peak benefits are negligible and will not be included in the annualisation factors.

Given the traffic profile in the previous figure, the benefits or dis-benefits, from weekends and holiday periods (unmodeled) are likely to be significant and similar to that of the weekday inter peak. TII PAG Unit 6.3

recommends adapting the outputs from modelled periods to reflect non-modelled periods where benefits or dis-benefits are likely to accrue.

The main difference between weekday and weekend flow profiles is the presence of a clear morning peak period on weekdays. The inter peak (10:00-16:00) and weekend traffic exhibit similar profiles and levels of demand. It is considered appropriate, therefore, to use the weekday inter peak modelled hour to estimate the benefits during the weekend by applying the appropriate factors, as described in the next section.

When reviewing the weekday AM and PM peak periods, the data indicates that the AM period from 7 – 10am is similar in profile to the PM period from 4 – 7pm. It is acknowledged however that the demand between 9 – 10am and 6 – 7pm are both lower. These periods of reduced demand have been accounted for in factors developed to expand from AM and PM peak hours to peak periods described in the next section.

### 6.3. Annualisation Factors

Annualisation factors are used to convert the benefits from the modelled time periods to annual benefits. The benefits in each modelled time period are multiplied by the annualisation factor and then summed to give annual benefits. Factors have been developed to derive annual average daily benefits using a regression analysis of the 9 no. days of ATC count data. This analysis involved the derivation of factors to convert from:

- Weekday AM peak hour to weekday 7 – 10 AM peak period;
- Weekday IP peak hour to weekday 10 – 16 IP peak period;
- Weekday PM peak hour to weekday 16 – 19 PM peak period; and
- Weekday IP peak hour to weekend average interpeak hours.

These factors are presented in Table 6-1.

**Table 6-1 Factors derived from traffic count data**

Modelled Time Period	Factors
Weekday AM peak hour to weekday 6 – 10 AM peak period	<b>2.571</b>
Weekday IP peak hour to weekday 10 – 16 IP peak period	<b>6.005</b>
Weekday PM peak hour to weekday 16 – 20 PM peak period	<b>2.548</b>
Weekday IP peak hour to weekend average interpeak hours	<b>8.050</b>

A factor of 251 has been used to factor average daily data to total annual working days as there are 251 peaked weekdays per annum. A factor of 114 has been used to represent the weekends and bank holidays.

The annual calculation of benefits is as follows:

- AM Peak Hour Benefits to Annual AM Peak Period Benefits (6:00-10:00): 251 working days x 2.571 = 645
- IP Peak Hour Benefits to Annual IP Peak Period Benefits (10:00-16:00): 251 working days x 6.005 = 1,507
- PM Peak Hour Benefits to Annual PM Peak Period Benefits (16:00-20:00): 251 working days x 2.548 = 639
- IP Peak Hour Benefits to Annual Weekend Average Inter Peak Benefits: 114 working days x 8.050 = 917

The resulting combined annualisation factors that were used in the TUBA model runs are presented in Table 6-2 which shows a comparison to the PAG Expected Maximum Hours taken from PAG Unit 6.6 – CBA Audit Checklist. The table shows the calculated annualization factors are less than the maximum values specified in PAG.

**Table 6-2 Combined annualisation factors used in TUBA models**

Modelled Time Period	Calculated Annualisation Factor	PAG Expected Maximum hours
AM Peak	645	759
PM Peak	639	759
Inter Peak	1,507	1,518
Weekend (incl. Bank Holidays)	917	2,688

## 7. Safety Benefits

### 7.1. Overview

The CBA program TUBA does not calculate collision costs. Past experience suggests that safety benefits can represent up to 20% of scheme benefits, therefore an assessment of potential safety benefits has been undertaken using the Irish version of COBALT (**C**ost and **B**enefit to **A**ccidents – **L**ight **T**ouch), a computer program developed by the UK DfT to undertake the analysis of the impact on accidents as part of economic appraisal for a road scheme.

### 7.2. Methodology

The COBALT assessment is based on a comparison of collisions by severity and associated costs across an identified network in 'Without-Scheme' and 'With-Scheme' forecasts, using details of link characteristics, collision rates, casualty costs and projected traffic volumes. This process was undertaken using the opening (2030), design (2045) and forecast year (2060) traffic models. Collision costs for the entire 30-year appraisal period (2030 – 2060) were calculated based on interpolated costs between opening year and 2054. The latest available COBALT version has been used to undertake the safety appraisal and the input parameters are aligned with TII PAG Unit 6.11.

### 7.3. Local Collision Rates

The COBALT software parameters file contains standard collision rates for various road types. Using relevant road traffic accident information extracted from the Road Safety Authority (RSA) accident database, the standard collision rates have been replaced with local collision data for the N25 in order to provide a more accurate estimate of safety benefits of the proposed scheme. This has been estimated based on the number of accidents from 2005-2015 and the average vehicle kilometres along this section of the N25 only. The table below outlines the collision rates obtained from the RSA for national roads in the Study Area and used in the COBALT analysis.

**Table 7-1 Local Collision Rates**

Road	Collision Rate (per 10 <sup>6</sup> veh.km)
N25	0.114

### 7.4. Monetised Safety Benefits

The results of the safety assessment are presented in Table 7.2. The results show the cost of accidents without any scheme, and with each route option in place, and the discounted safety benefits in 2011 prices, exclusive of residual value.

**Table 7-2 Discounted Safety Benefits (2011 Values)**

Route Option	Without Scheme (€m)	With Scheme (€m)	Discounted Safety Benefits (€m)
Purple	68.89	67.68	1.08
Magenta		65.98	2.91
Red		65.79	3.10
Lime Green		65.74	3.16
Navy		65.91	2.98
Teal		65.67	3.22

In terms of safety benefits, all route options produce similar results (approx. €3.07M each), with the exception of the Purple route, due to similar levels of traffic transferring onto newer, safer roads. The Purple route has much lower safety benefits as some traffic, particularly interpeak traffic, does not transfer onto new route due to the longer route length. The Teal route is forecast to have the largest safety benefits, in monetary terms, (€3.22m)

closely followed by the Lime Green Route (€3.16m). The COBALT output files can be found in Appendix B of this report.

## 7.5. Collision Reduction

The results of the COBALT assessment, in terms of the number of collision and causalities saved by each route, are outlined in Table 7-3. As indicated, the Teal Route performs best in terms of total causalities and collisions saved followed by the Red and Lime Green Route. The purple route has an increase in collisions, however it still experiences a reduction in causalities. This indicates that while collisions increase, the severity of these collisions decreases. This is due to the fact not all traffic transfers to the new route with some traffic remaining on the assumed declassified existing N25.

**Table 7-3 Accident Reduction – Total Collisions and Overall Accidents**

Accident Reduction	Purple	Magenta	Red	Lime Green	Navy	Teal
Collisions Reduction	-3.9	2.3	11.1	9.7	6.2	14.2
Fatal Casualty Reduction	0.9	2.2	2.2	2.3	2.2	2.3
Serious Casualty Reduction	1.9	4.6	4.8	4.8	4.7	4.9
Slight Casualty Reduction	2.1	19.1	30	28.7	23.9	34.1

## 8. Cost Benefits Analysis Results Summary

### 8.1. Overview

The results of the Cost Benefit Analysis are presented below based upon the annualisation factors outlined in section 6. The results take into account scheme safety benefits and residual value. The full TUBA output files for each route can be found in Appendix E of this report.

### 8.2. CBA Results

The benefits of the proposed scheme options are outlined in Table 8-1.

**Table 8-1 Cost Benefit Analysis Summary – All Routes**

	€ '000					
	Purple	Magenta	Red	Lime Green	Navy	Teal
Consumer User Benefits	-4,462	16,607	23,836	26,083	19,047	27,526
Business User Benefits	-2,689	16,783	22,855	24,745	17,959	26,734
Indirect Tax Revenues	954	-95	-1,191	-1,439	-159	-1,929
Greenhouse Gases	-62	14	97	116	16	155
Safety Benefits	1,078	2,909	3,104	3,156	2,978	3,218
Residual Value	-1,737	25,876	33,316	35,928	28,196	37,411
Present Value of Benefits (PVB)	-6,918	62,094	82,017	88,589	68,037	93,115
Present Value of Costs (PVC)	90,902	75,332	110,272	76,370	66,509	102,858
Net Present Value (NPV)	-97,820	-13,238	-28,255	12,219	1,528	-9,743
<b>Benefit to Cost Ratio (BCR)</b>	<b>-0.08</b>	<b>0.82</b>	<b>0.74</b>	<b>1.16</b>	<b>1.02</b>	<b>0.91</b>

### 8.3. Impact on Public Accounts

The “Impact on Public Accounts” for the proposed scheme, over a 30-year appraisal period, is summarised in Table 8-2 below in 2011 prices. This table fulfils the requirement of the exchequer cash flow analysis.

**Table 8-2 Impact on Public Accounts (€ '000)**

Route Option	Purple	Magenta	Red	Lime Green	Navy	Teal
Operating Costs	4,968	3,983	3,855	3,726	4,069	3,812
Investment Costs	85,933	71,349	106,418	73,094	62,440	99,046
Developer & Other Contributions	0	0	0	0	0	0
Indirect Tax Revenues	-954	95	1,191	1,439	159	1,929
<b>NET Impact</b>	<b>89,947</b>	<b>75,427</b>	<b>111,464</b>	<b>78,259</b>	<b>66,668</b>	<b>104,787</b>



## 9. Emerging Preferred Route Corridor – Sensitivity Tests

A comprehensive appraisal of the route options was carried out using the multiple criteria outlined by the Department of Transport in their report ‘Guidelines on a Common Appraisal Framework for Transport Projects and Programmes (June 2009)’. This is in line with the approach of the Project Appraisal Guidelines and considers each option under the following criteria:

- Economy;
- Safety;
- Environment;
- Accessibility & Social Inclusion; and
- Integration.

This appraisal indicated that the Navy Route Option is the preferred route option. Full details of this appraisal are contained in the Option Selection report.

A number of additional tests have been undertaken on this Emerging Preferred Route (EPR), in order to assess the impact of a change in costs based on both a differing Shadow Price of Labour and cross section. The results of these tests are outlined in the following sections of the report.

### 9.1. Shadow Price of Labour

As outlined in chapter 5 of the report, a Shadow Price of Labour (SPL) of 1.0 was adopted for the appraisal of the route options. Until 2019 the SPL given within TII’s PAG units was 0.8, this was updated to 1.0 in late 2019 to reflect the full employment levels within the Irish Labour market. However, since then, unemployment has risen sharply due to the impact of Covid-19 of which the longer-term impacts are uncertain. To address this, a sensitivity test using a SPL of 0.8 has been undertaken on the Navy Route Option. The CBA result of this sensitivity test is outlined in Table 9.1 below.

**Table 9-1 Cost Benefit Analysis EPR – Shadow Price of Labour Sensitivity Test (€’000)**

	€ ’000
	Emerging Preferred Route
Consumer User Benefits	19,047
Business User Benefits	17,959
Indirect Tax Revenues	-159
Greenhouse Gases	16
Safety Benefits	2,978
Residual Value	28,196
Present Value of Benefits (PVB)	68,037
Present Value of Costs (PVC)	62,829
Net Present Value (NPV)	5,208
<b>Benefit to Cost Ratio (BCR)</b>	<b>1.08</b>

As shown, with the SPL at 0.8 the BCR for the Emerging Preferred Route would increase to 1.08 as a result of the lower present value of costs.

### 9.2. Incremental Analysis of the Cross Section

As discussed within the Route Selection Report, a Type 1 Dual Carriageway cross section has been assumed for each of the route options to ensure continuity with the adjacent Waterford Bypass and New Ross Bypass which are both Type 1 Dual Carriageway at the point they join the proposed Waterford to Glenmore Scheme. However, an additional sensitivity test has been undertaken on the Emerging Preferred Route to understand the impact of changing the cross section to a Type 2. The CBA results of this sensitivity test is outlined in Table 9.2 below.

**Table 9-2 Cost Benefit Analysis EPR – Type 2 Cross Section Sensitivity Test (€'000)**

	€ '000
	Emerging Preferred Route
Consumer User Benefits	19,047
Business User Benefits	17,959
Indirect Tax Revenues	-159
Greenhouse Gases	16
Safety Benefits	2,978
Residual Value	28,196
Present Value of Benefits (PVB)	68,037
Present Value of Costs (PVC)	61,026
Net Present Value (NPV)	7,011
<b>Benefit to Cost Ratio (BCR)</b>	<b>1.11</b>

As the benefits delivered by the Type 2 Cross Section are the same as Type 1 in terms of journey times benefits, the lower costs of a Type 2 Dual Carriageway results in a higher BCR of 1.11 for the Navy Route.

## 10. Conclusions

The Economic Assessment has been undertaken using the TUBA software programme in accordance with TII Project Appraisal Guidelines. The assessment has demonstrated Benefit to Cost Ratio values over a 30-year appraisal period (inclusive of residual value) based on the Option Comparison Estimate costs for each scheme option as presented in Table 10-1.

**Table 10-1 Cost Benefit Analysis Summary Table (€'000)**

	Purple	Magenta	Red	Lime Green	Navy	Teal
<b>PVB</b>	-6,918	62,094	82,017	88,589	68,037	93,115
<b>PVC</b>	90,902	75,332	110,272	76,370	66,509	102,858
<b>NPV</b>	-97,820	-13,238	-28,255	12,219	1,528	-9,743
<b>BCR</b>	<b>-0.08</b>	<b>0.82</b>	<b>0.74</b>	<b>1.16</b>	<b>1.02</b>	<b>0.91</b>

The results indicate that, based on the scheme costs developed to date and the associated forecast performance of the transport network, both the Navy and Lime Green Options will represent value for money. In the table below the routes are ranked in order of most preferred to least preferred in terms of the cost benefit analysis results only.

**Table 10-2 Cost Benefit Route Ranking**

Rank	Route
1	Lime Green
2	Navy
3	Teal
4	Magenta
5	Red
6	Purple

Based on a full multi-criteria analysis, The Navy Route has been selected as the preferred option. This option will deliver value for money as well as reduced journey times for traffic, improving quality of life for those commuting along the route, accommodating significant volumes of traffic onto the newer, safer, road. This route has also been assessed with a lower Shadow of Price of Labour and Type 2 Cross Section both of which deliver increased 'value for money' in terms of the overall BCR.

# Appendix A. Traffic Modelling Report

**ATKINS**

Member of the SNC-Lavalin Group

**SYSTRA**

# N25 Waterford to Glenmore

## Traffic Modelling Report

Kilkenny County Council

Date:03/07/2020

5190130-SYS-XX-XX-RP-TM-0003



# Notice

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## Client signoff

Client	Kilkenny County Council
Project	N25 Waterford to Glenmore
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# 1. Introduction

## 1.1. Overview

The purpose of this report is to outline the traffic modelling process undertaken for Phase 2 Route Selection of the N25 Waterford to Glenmore Scheme and to provide an overview of the development of the N25 Local Area Model (LAM). The report outlines data collection, base year model development, calibration & validation, the forecasting process and results of the Phase 2 Route Option Assessment.

### 1.1.1. Project Description

The N25 forms a vital link in the national road network connecting Cork at one end to the port of Rosslare at the other end, with a link to Waterford City from the N25 between these locations. It provides access to 4 of the country's major ports, Cork, Waterford, New Ross and Rosslare. It also provides access to 2 airports, Cork and Waterford. The extents of the N25 corridor under consideration is as illustrated on Figure 1.1 below.

**Figure 1.1 Project Extents**



The village of Glenmore is adjacent to the existing N25 towards the northern end of the project extents. As shown, the project is positioned between two major bypass schemes around Waterford City and the town of New Ross. The N25 Waterford Bypass dual carriageway was officially opened on the 19<sup>th</sup> of October 2009 and the N25 New Ross Bypass dual carriageway was opened on the 29<sup>th</sup> of January 2020. Both Bypass are of Dual Carriageway Standard. This section of the national road network is rural in nature and is situated in County Kilkenny between the townland of Luffany in the south and Jamestown in the north. The extent of road under consideration predominantly consists of rural single carriageway with varying cross-section and standard of horizontal and vertical alignment geometry.

The Annual Average Daily Traffic (AADT) along the road is just over 13,000. The TII Road Link Design standard DN-GEO-03031 indicates a capacity at Level of Service D of 11,600 AADT for Type 1 Single Carriageway roads, which is broadly comparable to the existing N25 within the project extents. It is expected this demand will grow further into the future based on the travel demand projection for the South-East Region contained in Unit 5.3 of Transport Infrastructure Ireland's (TII) Project Appraisal Guidelines (PAG). There is also significant growth planned for the Port of Waterford. In addition, there are road safety issues identified along this section of the N25 with the proportion of fatal accident significantly higher than the reported national average.

The N25 road also forms part of the comprehensive TEN-T (Trans European Transport) network and as such is required to be of a motorway or expressway standard. The objective of TEN-T is to close gaps, remove bottlenecks and eliminate technical barriers that exist between the transport networks of EU Member States.

### 1.1.2. Project Background

The planning, design and appraisal of the N25 Waterford to Glenmore originally commenced in 2007 with the Constraints Report issued in 2008 and the Phase 2 PAG Deliverables including Route Selection report finalised in 2011. This work was undertaken by Tramore House Regional Design Office (THDRO) on behalf of Kilkenny County Council (KCC). The reports and models developed as part of this Phase 2 work have been provided by THDRO along with the Phase 2 & 3 models developed by AECOM as part of the New Ross Bypass Appraisal.

## 1.2. Report Structure

The remaining sections of this report will be structured as follows:

- Chapter 2 – Outline of the traffic surveys procured as part of the model development;
- Chapter 3 – Overview of the model & prior demand development and refinement;
- Chapter 4 – Model Calibration & Validation process & results; and
- Chapter 5 – Future Year model forecasting and forecast network statistics.
- Chapter 6 – Analysis of Options
- Chapter 7 – Summary

## 2. Data collection

### 2.1. Introduction

In order to accurately model existing demand and replicate traffic movements and patterns, a significant level of data is needed. The following chapter provides an overview of the data collection exercise undertaken to facilitate the calibration and validation of the N25 Local Area Model.

### 2.2. Survey Summary

Two sets of surveys were undertaken as part of the model development. An initial set of surveys in September 2019, prior to the opening of the New Ross Bypass, and a second set in March 2020, after the opening of bypass. The initial surveys were to allow the commencement of the model development with further data obtained to ensure the impact of the New Ross Bypass was accurately reflected in the base model.

The majority of sites surveyed in 2019 were resurveyed in 2020 with the exception of some less trafficked junctions with local access roads where, the initial datasets provided sufficient data for calibration and validation of the models. The surveys consisted of Automatic Traffic Counts (ATC), Junction Turning Counts (JTC) and Journey Time Survey (JTS). The 2020 surveys also included Automatic Number Plate Recognition (ANPR) Origin-Destination Surveys. A summary of the surveys is provided in Table 2.1 below.

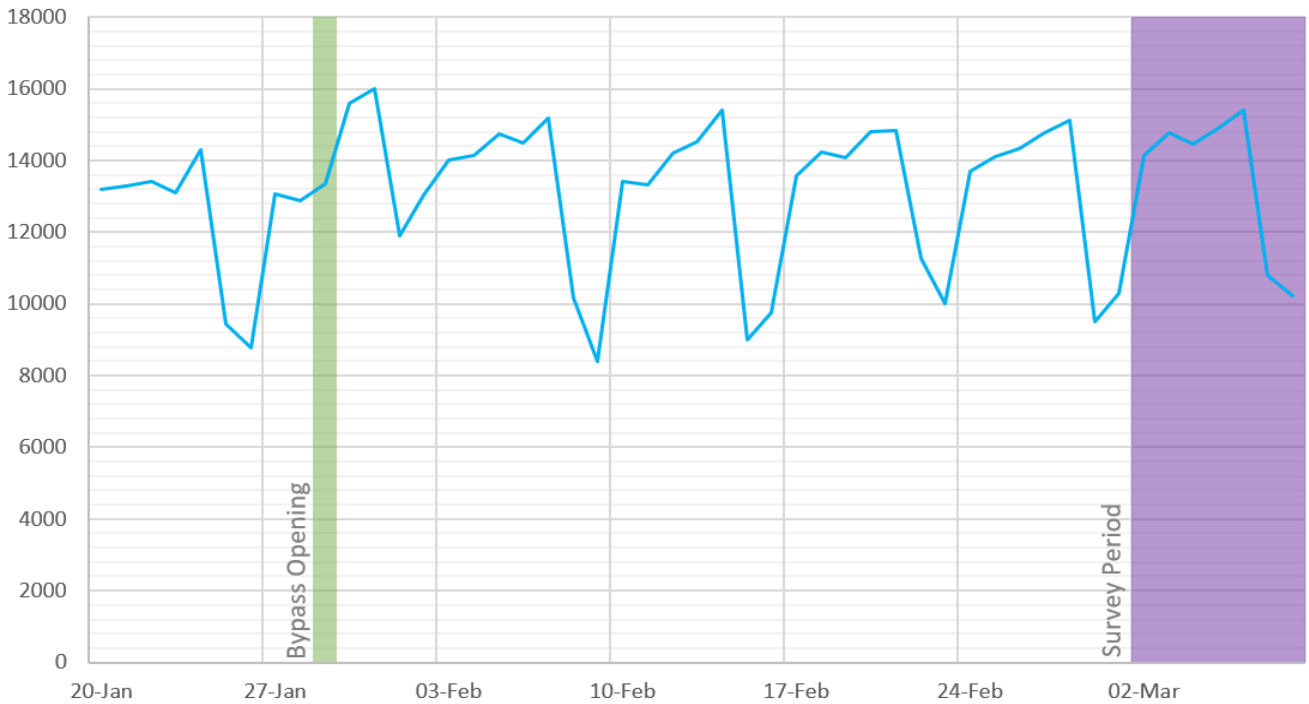
**Table 2.1: Traffic Survey Data**

Survey Type	Description
Traffic counts	Automatic Traffic Counts (ATC) surveys were carried out at 14 sites between 9 <sup>th</sup> Sept and 15 <sup>th</sup> Sept 2019 and at 14 sites between the 2 <sup>nd</sup> and 8 <sup>th</sup> of March 2020.
	Junction Turning Counts (JTC) surveys were carried out at 25 location on Tuesday 12 <sup>th</sup> September 2019 between 07:00-19:00 and at 16 locations on Wednesday 4 <sup>th</sup> March 2020 between 07:00-19:00.
	Traffic data from 4 Transport Infrastructure Ireland (TII) Traffic Monitoring Units (TMU).
Journey time	Journey time survey data was collected via Bluetooth Surveys at 5 different locations during the 2019 surveys. A further comprehensive dataset of journey times was captured between 11 locations using ANPR on Wednesday 4 <sup>th</sup> March 2020 between 07:00-19:00.
Origin-Destination	Origin-Destination surveys were undertaken on Wednesday 4 <sup>th</sup> March 2020 between 07:00-19:00 using ANPR between the same 11 locations surveyed for journey times. The survey points were located at ATC points to allow sample rates to be obtained.

#### 2.2.1. Impact of the New Ross Bypass

The 2020 surveys were not undertaken until approximately 5 weeks after the bypass opened. This was to allow traffic patterns to settle and any induced demand on the bypass and N25 to be account for. Figure 2.1 below shows the daily traffic volumes along the N25 before and after the bypass opening. As shown, there was an initial jump in traffic volumes the week after opening. However, in the four following weeks prior to the survey, traffic volumes were consistent though higher than prior to the bypass opening. Overall the AADT in February and early March, discounting the first week after bypass opening and factoring for seasonality, grew by 7.4% along the N25 compared to the 2019 AADT.

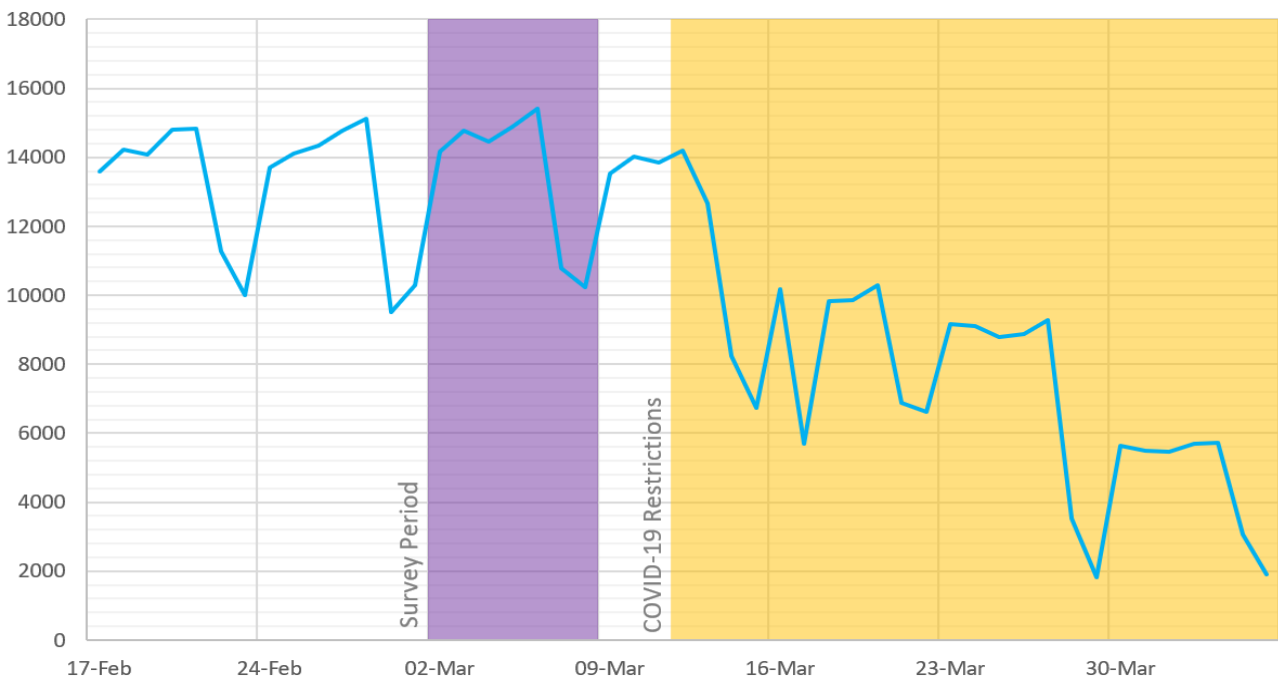
**Figure 2.1: N25 Daily Traffic Volumes - Impact of New Ross Bypass (TMU No. 20252)**



### 2.2.2. Impact of COVID-19 Restrictions

Due to the Covid-19 outbreak, restrictions were in place from Mid-March to address the outbreak. Schools, universities and childcare facilities were closed from March 12<sup>th</sup>, 4 days after the surveys were completed. A review of the traffic volumes was undertaken to ensure the introduction of these measures did not impact upon the survey period to ensure the validity of the data collected. Figure 2.2 below show the Average Daily Traffic for each week prior to and after the survey periods. As shown, the restrictions did not impact traffic volumes until the week after the survey period.

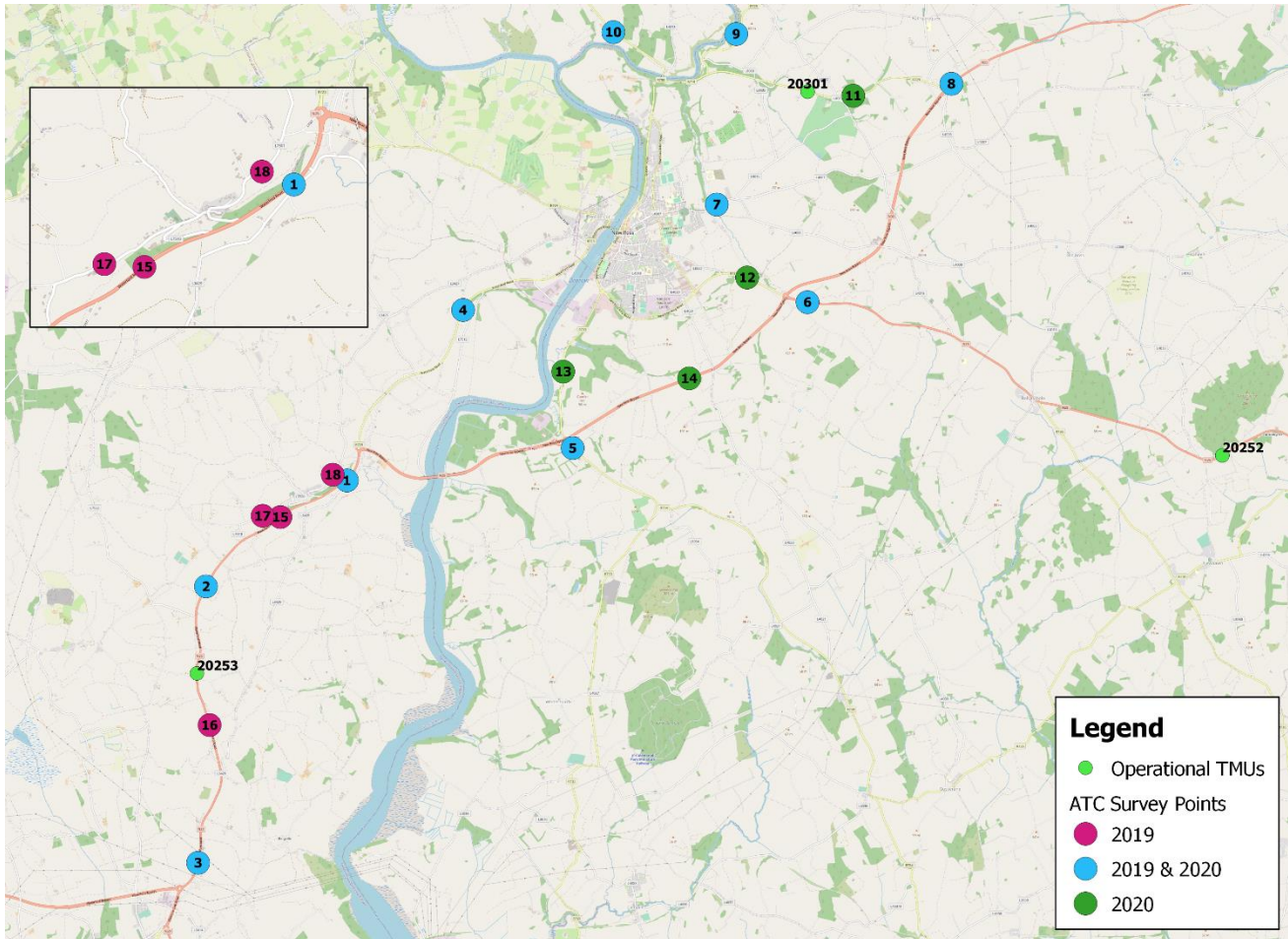
**Figure 2.2: Average Daily Traffic Volumes - Impact COVID-19 Restrictions (TMU No. 20252)**



### 2.2.3. Automatic Traffic Counter

ATCs capture the flow passing a given point on a road, classifying it into different vehicle categories, allowing for a distinction between Light Vehicles (LVs) and Heavy Goods Vehicles (HGVs). The locations of the 18 ATCs undertaken for this study are illustrated in Figure 2.3 below. Also shown is the location of the local, operational TII Traffic Monitoring Units (TMUs).

**Figure 2.3: ATC Survey Locations 2019 & 2020**



Traffic flow data extracted from the 18 ATC surveys undertaken over the 7-day period are also presented in Table 2.2 for the following time periods:

- AM Peak (08:00 – 09:00)
- Average Inter Peak (average hour between 12:00 – 14:00)
- PM Peak (17:00 – 18:00)

Table 2.2 also provides annual average estimates of 7-day traffic flow (AADT). In order to estimate annual data, seasonality factors have been developed using data from the TII TMUs within the study area and applied to the survey data. Sites for which only 2019 data was available have been factored to 2020 using data from nearby sites with both years surveyed.

**Table 2.2: Automatic Traffic Counter Data 2020**

Site no.	Location	Direction	Vehicles Per Hour (Average Weekday)			Vehicles Per Day
			AM	IP	PM	AADT 2020
1	N25 - 1km south of Glenmore Roundabout	Northbound	438	441	893	6445
		Southbound	725	393	458	6316
2	N25 - 1km north of L7522 Jct	Northbound	435	441	905	7029
		Southbound	865	404	468	6218
3	N25 - 1 km north of Luffany Roundabout	Northbound	398	461	935	7150
		Southbound	921	433	518	6727
4	N25 - 800m south of the L7512 Jct	Eastbound	176	156	277	2594
		Westbound	269	161	183	2270
5	R733 - 300m north west of the L8050 Jct	Northbound	367	176	187	2615
		Southbound	149	192	371	2857
6	N25 - 600m west of Ballymacar Roundabout	Eastbound	365	335	551	4915
		Westbound	604	320	438	4945
7	L4007 - 1km east of Bawnmore Road Jct	Eastbound	158	71	93	1131
		Westbound	87	81	104	1056
8	N30 - 150m north east of Corcoran's Cross Roundabout	Northbound	243	182	311	2775
		Southbound	296	180	263	2730
9	R729 - 2km north east of the N30 Jct	Eastbound	66	70	148	1106
		Westbound	135	73	77	1041
10	R700 - 2km north west of the N30 Jct	Northbound	158	117	201	1820
		Southbound	202	110	200	1856
11	R729 – 1km east of the L401 Junction	Eastbound	118	87	129	1270
		Westbound	106	62	100	986
12	R723 – 1km west of the Ballymacar Roundabout	Eastbound	253	260	383	3557
		Westbound	431	246	337	3549
13	R733 – 2km north of the New Ross bypass	Eastbound	325	212	225	2872
		Westbound	183	210	305	2803
14	New Ross bypass, 1 km west of the L4021 crossing	Eastbound	249	222	451	3541
		Westbound	422	234	304	3565
15	N25 - 750 m north of L7517 Jct	Eastbound	427	407	890	6664
		Westbound	813	414	544	6209
16	N25 - 1.5 km north of L3429	Northbound	395	413	906	6725
		Southbound	890	412	506	6431
17	L7501 - 1km south of St James Church	Eastbound	29	14	14	174
		Westbound	15	16	10	142
18	L7501 - 1km South west of Glenmore Roundabout	Northbound	14	14	14	170
		Southbound	18	14	13	177

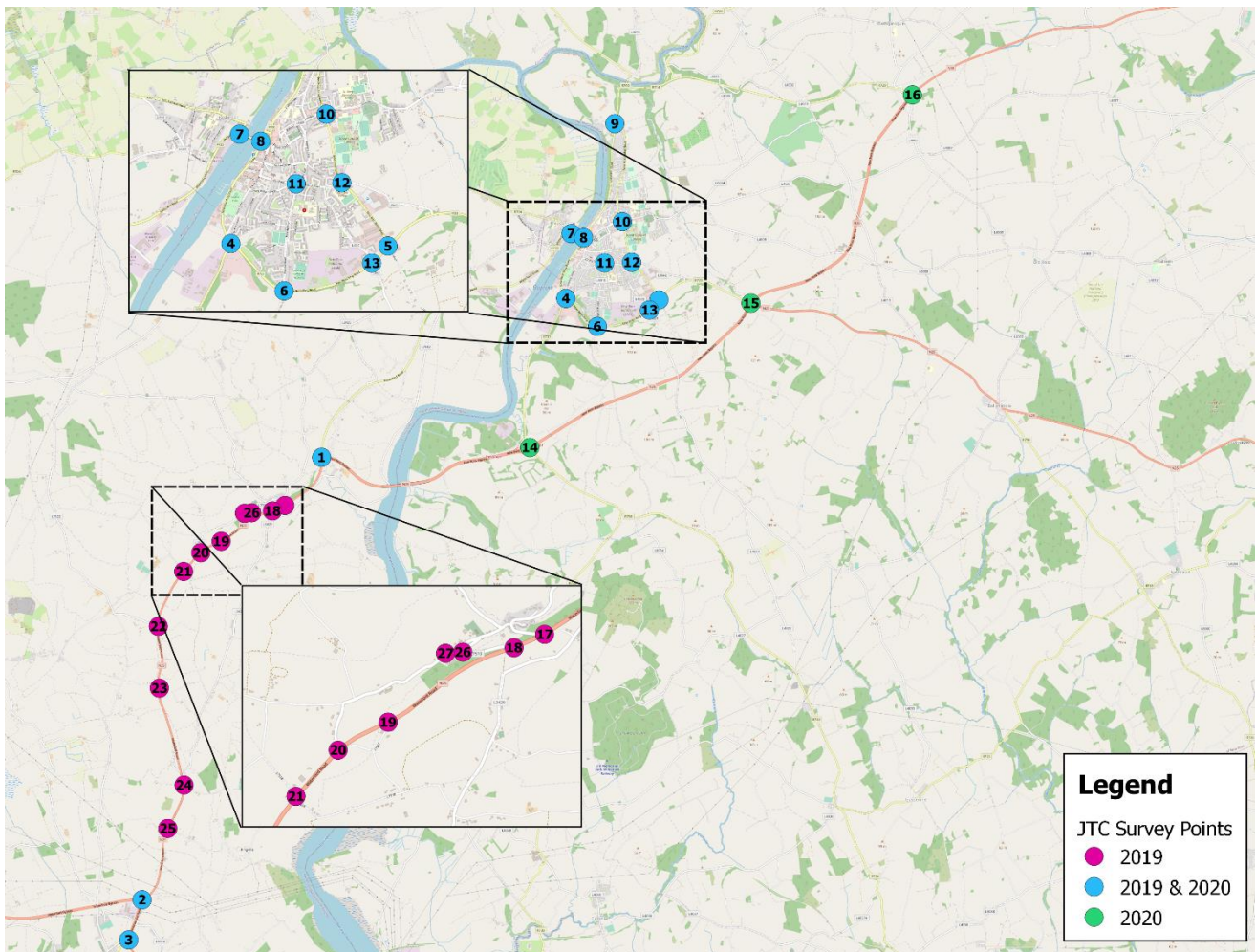
## 2.2.4. Junction Turning Counts

A JTC captures the number of vehicles turning at a junction and observes which turn they take. As with the ATCs they classify the traffic into different vehicles categories. JTC surveys were undertaken at 27 junctions across the 2 survey periods outlined. Traffic flow was classified by vehicle type and recorded in 15-minute time intervals. The following junctions were surveyed (refer to Figure 2.4):

1. New Roundabout with bypass
2. N29/N25 Luffany Roundabout
3. N29/R711 Slieverue Roundabout
4. Oaklands Roundabout N25/R733
5. N25/N30 Roundabout
6. Hospital Rd/Knockmullen Rd/N25
7. R704/N25
8. N25/Quay St
9. N30/R700 roundabout
10. Irishtown/N30
11. Three Bullet Gate Roundabout
12. Wexford St/ Bosheen St/N30
13. Deerpark/N25
14. NR bypass road / R733
15. Ballymcar roundabout
16. Corcoran's Cross Roundabout
17. Glenmore Northern Access-L7510/N25
18. Glenmore Southern Access-L7510/N25
19. N25/L7517
20. N25/L7510
21. N25/L7518
22. N25/L7522
23. L7469/L7523/N25
24. L3429/L34291/N25
25. L7470/N25
26. Glanbia Agribusiness Glenmore
27. Glenmore National School

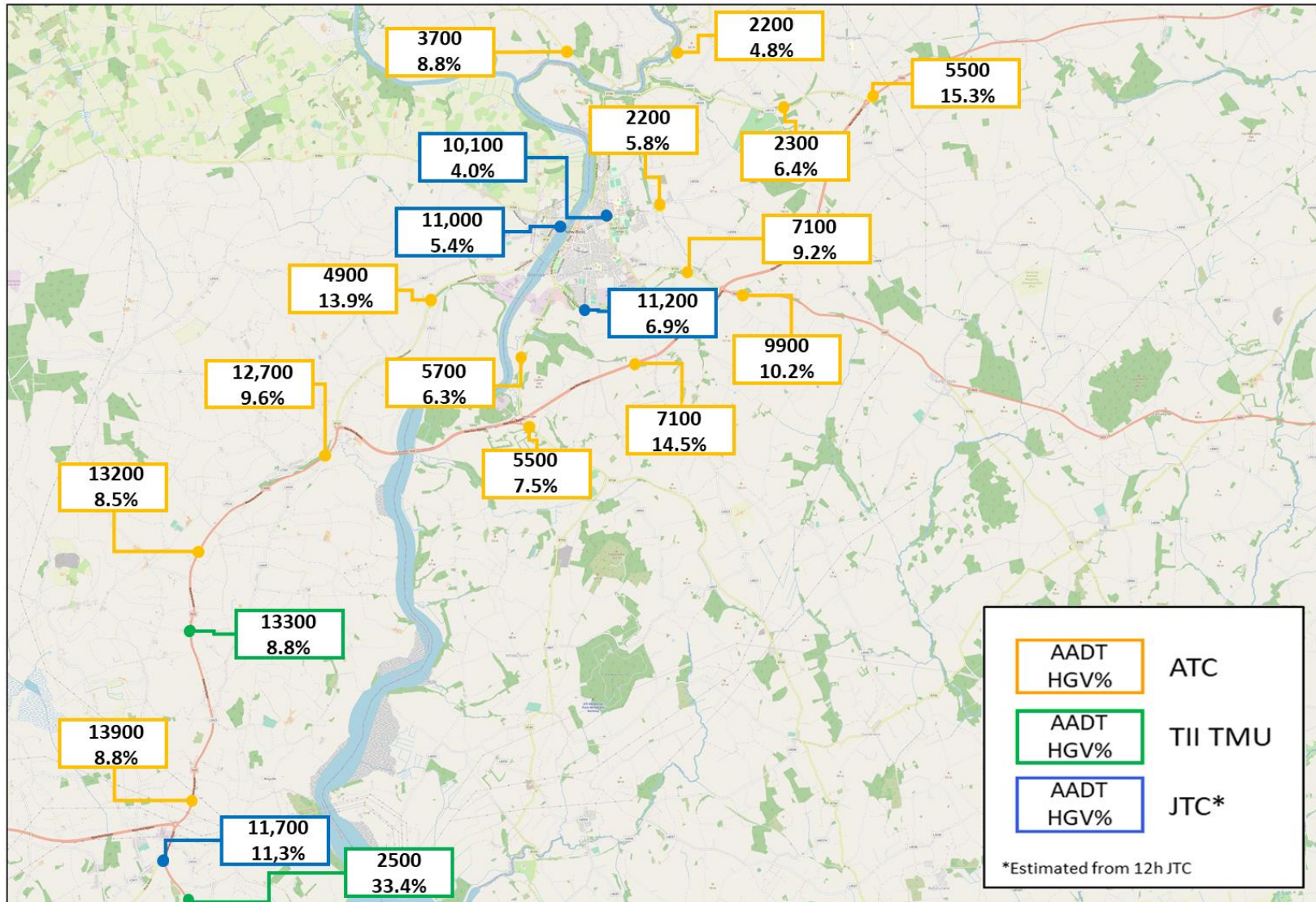


**Figure 2.4: Overview of JTC Survey Locations**



A summary of the estimated AADT for all main links in the study area based on ATC, TII and JTC data is presented in Figure 2.5. The JTC data has been converted to AADT based on factors derived from the ATC and TII counts.

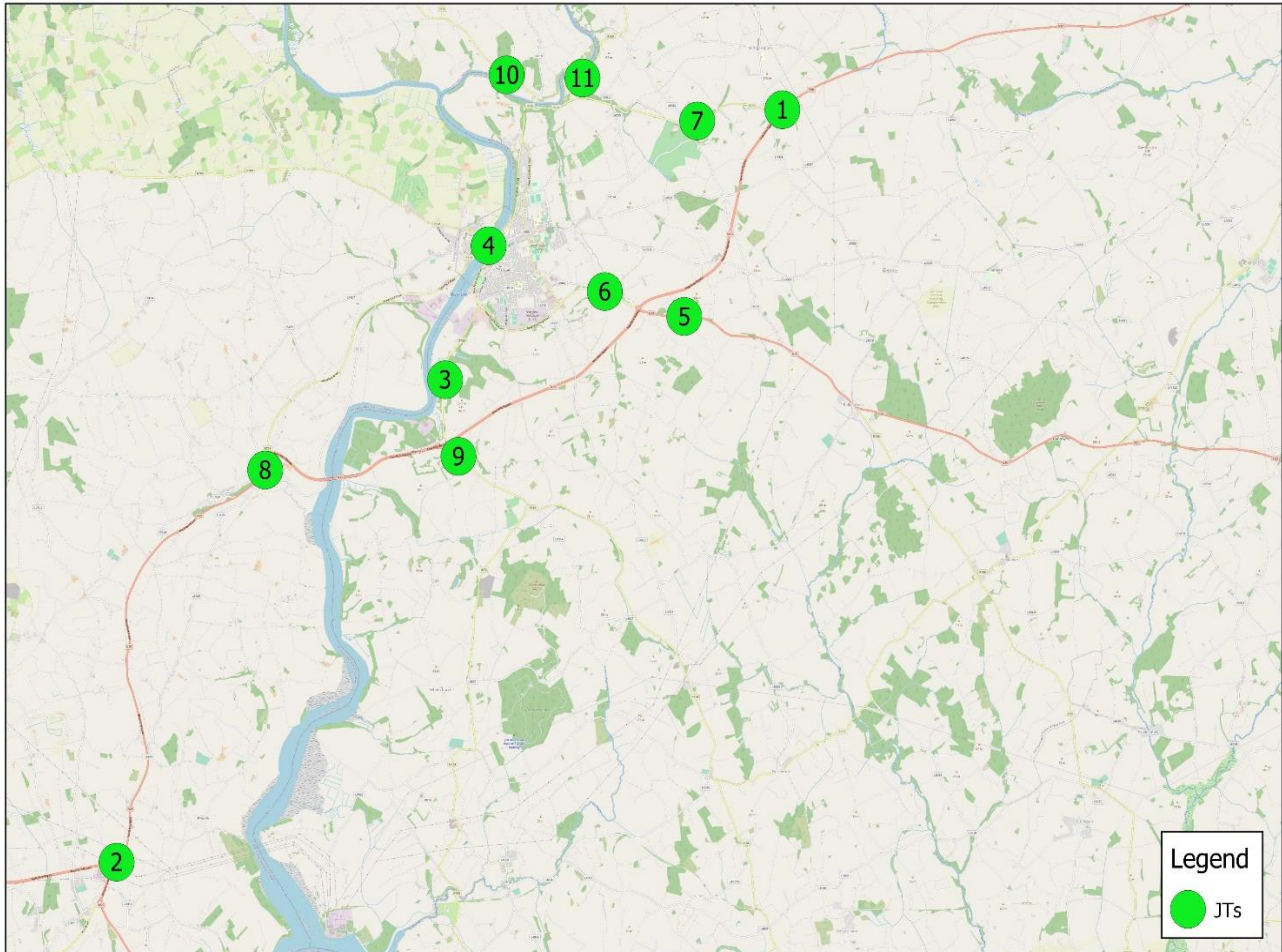
Figure 2.5: Estimated 2020 AADT



### 2.2.5. Journey Times

In order to ensure a robust representation of current delays on the network, journey time surveys were undertaken in both survey periods. All routes surveyed in 2019 were resurveyed in 2020. The survey was undertaken for a 12hour period on the 4<sup>th</sup> of March, the same day as the Junction Turning Counts and Origin-Destination Survey, using the ANPR method. The location of the journey time points is shown below in Figure 2.6.

**Figure 2.6 : Location of Journey Time Survey Points**



Appropriate filters were applied to data when processing to ensure trips with a stop-off were removed from the datasets. While there were journey times recorded between many points, only journey times between the busiest points with a high sample rate were chosen for use in the model validation. The routes and the journey times along those routes are outlined in Table 2.3 for each peak period. The average of journey times from both 2019 & 2020 have been used between points 2 & 8, where speeds weren't directly impacted by the bypass, to get a more representative average. Based on these journey times the average speeds along the scheme extent (between points 1 & 2) is 77.5 & 83.8kph southbound and northbound respectively in the morning peak; 85.0 & 84.0kph in the Inter peak and 81.1 & 81.7kph in the evening peak. These speeds are all well below the signed posted speed limit of 100 kph.

**Table 2.3: Observed Average Journey Times between JT Sites**

Route	AM	IP	PM
1=>2	16:10	16:15	15:42
2=>1	16:46	16:59	16:41
1=>4	11:33	10:14	10:27
4=>1	11:35	09:45	10:51
2=>8	06:33	06:46	06:39
8=>2	06:50	06:28	06:27
4=>6	05:35	05:38	05:25
6=>4	05:08	05:24	05:06
4=>8	05:51	06:03	05:57
8=>4	06:11	06:40	06:06
5=>6	02:35	02:10	02:32
6=>5	01:45	01:58	01:49

### 2.2.6. Origin-Destination Surveys

As mentioned previously, origin-destination surveys were also carried out at each of the JTS points presented previously. The OD surveys were carried out for a 12hour period between 07:00-19:00 on the 4<sup>th</sup> of March. A sample rate of 85% or higher was achieved across all points for each surveyed hour. The data was factored using the sample rate to get a representative distribution of trips between the points for each peak period. The data is presented for the AM, IP and PM peaks respectively in Tables 2.4-2.6.

The data shows the number of trips from the ‘first seen’ origin point traveling to the ‘last seen’ destination point. For example, in the AM peak, see Table 2.4 below, there are 268 vehicles first seen at point 5 and last seen at point 6. Vehicles first seen at point 5 and last seen at point 4 would also have likely travelled through point 6 but are not included within the 268 mentioned as they were last at another survey point.

**Table 2.4: AM Origin-Destination Distribution**

AM	1	2	3	4	5	6	7	8	9	10	11
1		185	4	6	3	61	52	7	12	11	0
2	84		48	112	116	6	7	19	22	9	8
3	5	67		7	9	13	3	3	62	5	0
4	36	153	6		47	14	26	6	26	20	15
5	4	292	1	62		268	0	11	9	26	0
6	44	16	8	20	144		0	1	4	12	1
7	40	13	0	10	6	0		1	1	3	5
8	5	135	3	6	6	0	0		1	1	0
9	17	98	180	46	19	14	3	4		13	1
10	26	25	0	30	16	1	0	1	8		0
11	5	35	5	29	4	2	0	1	4	0	

**Table 2.5: IP Origin-Destination Distribution**

IP	1	2	3	4	5	6	7	8	9	10	11
1		76	3	12	2	38	43	3	9	12	1
2	74		37	135	107	13	8	12	32	17	15
3	7	36		0	5	10	3	1	93	4	0
4	24	61	6		40	23	24	2	21	49	40
5	3	138	1	27		150	0	5	14	19	0
6	38	11	6	16	159		0	0	5	-1	2
7	45	3	0	0	4	0		0	0	10	4
8	7	88	3	12	10	1	1		3	2	1
9	6	27	115	14	8	5	2	1		4	4
10	11	4	2	11	17	4	0	0	12		0
11	1	6	0	6	3	6	0	0	0	0	

**Table 2.6: PM Origin-Destination Distribution**

PM	1	2	3	4	5	6	7	8	9	10	11
1		148	2	21	1	41	52	6	13	13	1
2	192		120	234	345	28	22	47	90	15	23
3	4	31		7	7	10	1	1	207	0	2
4	28	73	5		39	16	22	3	27	14	13
5	4	179	6	34		213	0	7	9	21	4
6	36	11	5	10	190		0	0	7	2	1
7	28	4	1	0	3	0		0	1	4	2
8	4	48	3	5	8	1	0		2	0	1
9	3	32	114	22	8	6	1	1		8	1
10	4	11	1	13	19	4	0	0	8		0
11	0	9	2	9	1	1	0	0	2	0	

## 3. Model development

### 3.1. Overview

This chapter of the report describes the development of the base year N25 Local Area Model (LAM) with reference to the following aspects:

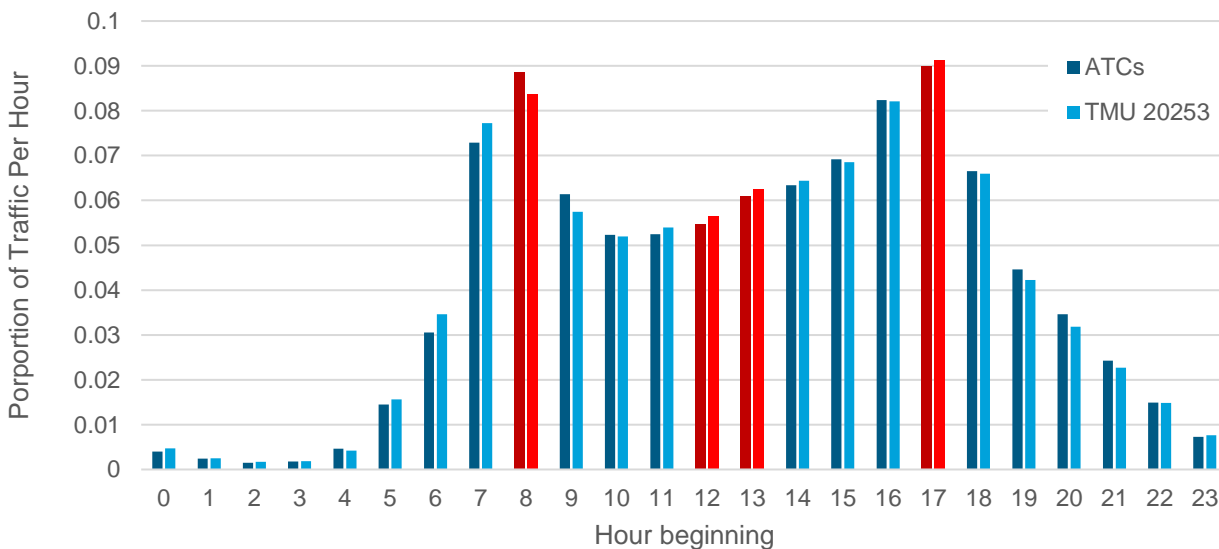
- peak hour selection for each of the modelled time periods;
- road network development; and
- development of initial zone system and associated travel demand (prior matrices).

The model was developed and calibrated using PTV VISUM version 18.02-05.

### 3.2. Peak Hour Selection

Data from the ATC and TII traffic counter located between Glenmore and Waterford was used to identify the busiest AM & PM Peak hours and a representative interpeak hour to be modelled in the LAM. The profile of traffic from both traffic counts are shown below in Figure 3.1.

**Figure 3.1 N25 Daily Weekday Traffic Profile**



Based on the above profile of traffic along the N25 the following time periods were identified:

- AM Peak Hour (08:00 – 09:00)
- Average Inter Peak Hour (average of 12:00 – 14:00)
- PM Peak Hour (17:00 – 18:00)

### 3.3. National Transport Model

The Base Year LAM was developed from the 2016 Base Year National Transport Model (NTpM), which is developed and maintained by TII. The NTpM is a strategic multi-modal variable demand model used by the TII to assess the impact of infrastructure or policy changes at national, regional and local level. Within the NTpM there are four modules, which are as follows:

- National Traffic Model (NTM);
- National Rail Model (NRM);

- National Bus Model (NBM);
- Variable Demand Model (VDM).

The three assignment models (NTM, NRM & NBM) are used to assign the demand for travel represented by the demand matrices to the network, generating travel costs (e.g. time, distance, tolls, fares) for each mode. The Variable Demand Model is used to assess demand response to changes in the generalised cost or the network for any of the three assignment models.

### 3.3.1. National Traffic Model

The NTM is a strategic (macroscopic) traffic model developed using the transportation modelling software VISUM and forms the road traffic element of the NTpM as outlined above. The model covers the entire national and regional road network and is used by TII as a tool in the appraisal of potential road schemes, land-use and policy changes. The NTM provides demand data for Light Vehicles (Car & Light Goods Vehicles) and Heavy Vehicles (Other Goods Vehicle 1, Other Goods Vehicle 2 and Buses/Coaches) for the following time periods:

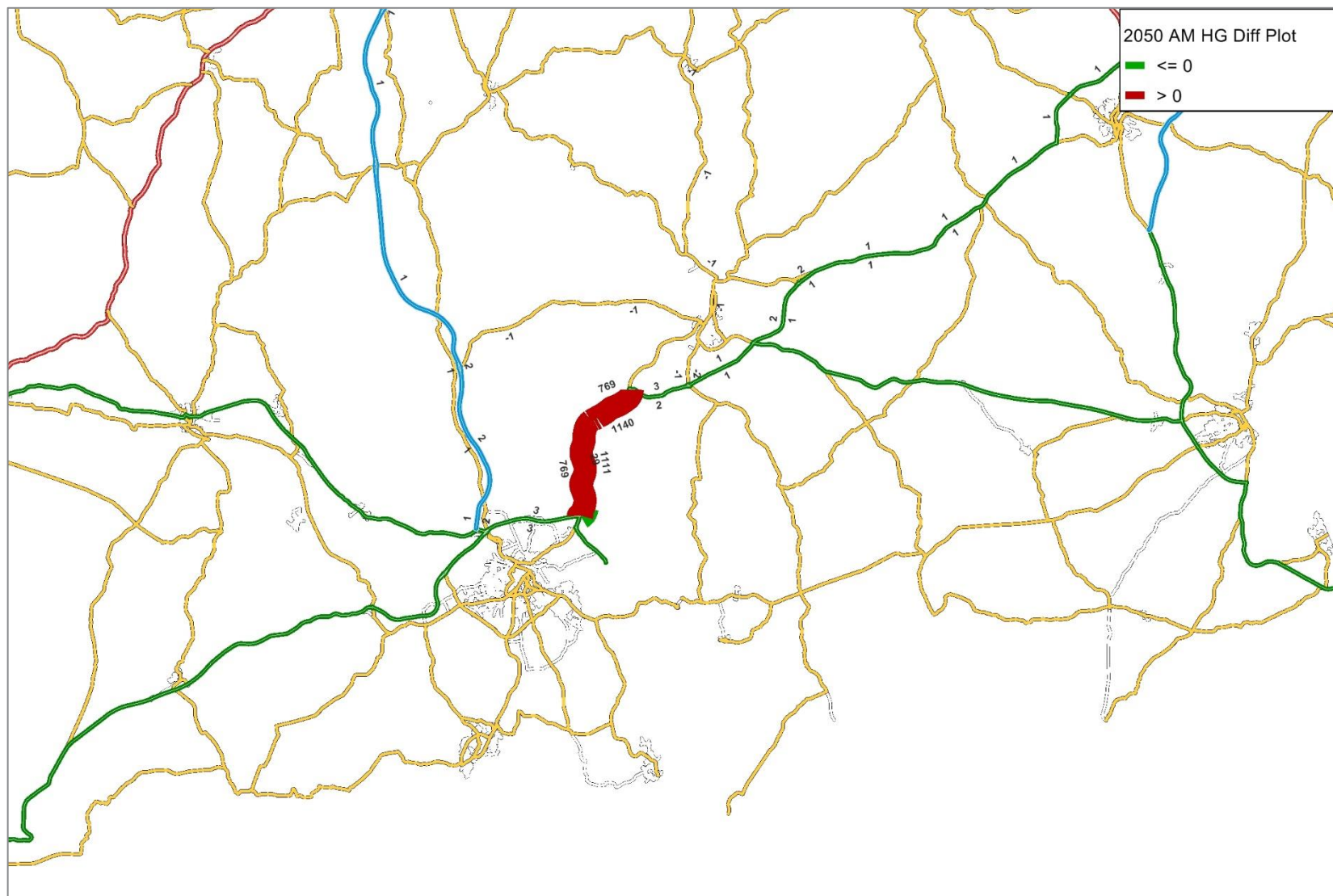
- Average AM Peak Hour (average hour between 07:00 – 09:00);
- Average Inter Peak Hour (average hour between 12:00 – 14:00).

The NTM is high level strategic traffic model and though it is suitably refined to test impacts on a national scale it is not detailed enough to assess local impacts on the network. However, the model provides both the initial highway network cordon and demand matrices for the LAM.

### 3.3.2. Definition of Model Study Area

To identify the extent of the cordon for the LAM a high-level assessment was undertaken using the National Traffic Model (NTM) by TII. The emerging preferred option identified in the previous 2011 Phase 2 assessment undertaken by THDRO for the scheme was coded into the future 2050 High Growth NTM to identify the ‘zone of influence’ of the scheme. As can be seen in Figure 3.2 below, the scheme has relatively minor reassignment impacts on the surrounding network. However, despite this, New Ross Bypass and New Ross Town have been included in the LAM cordon to fully capture any interactions between the two schemes.

Figure 3.2: Defining LAM Study Area



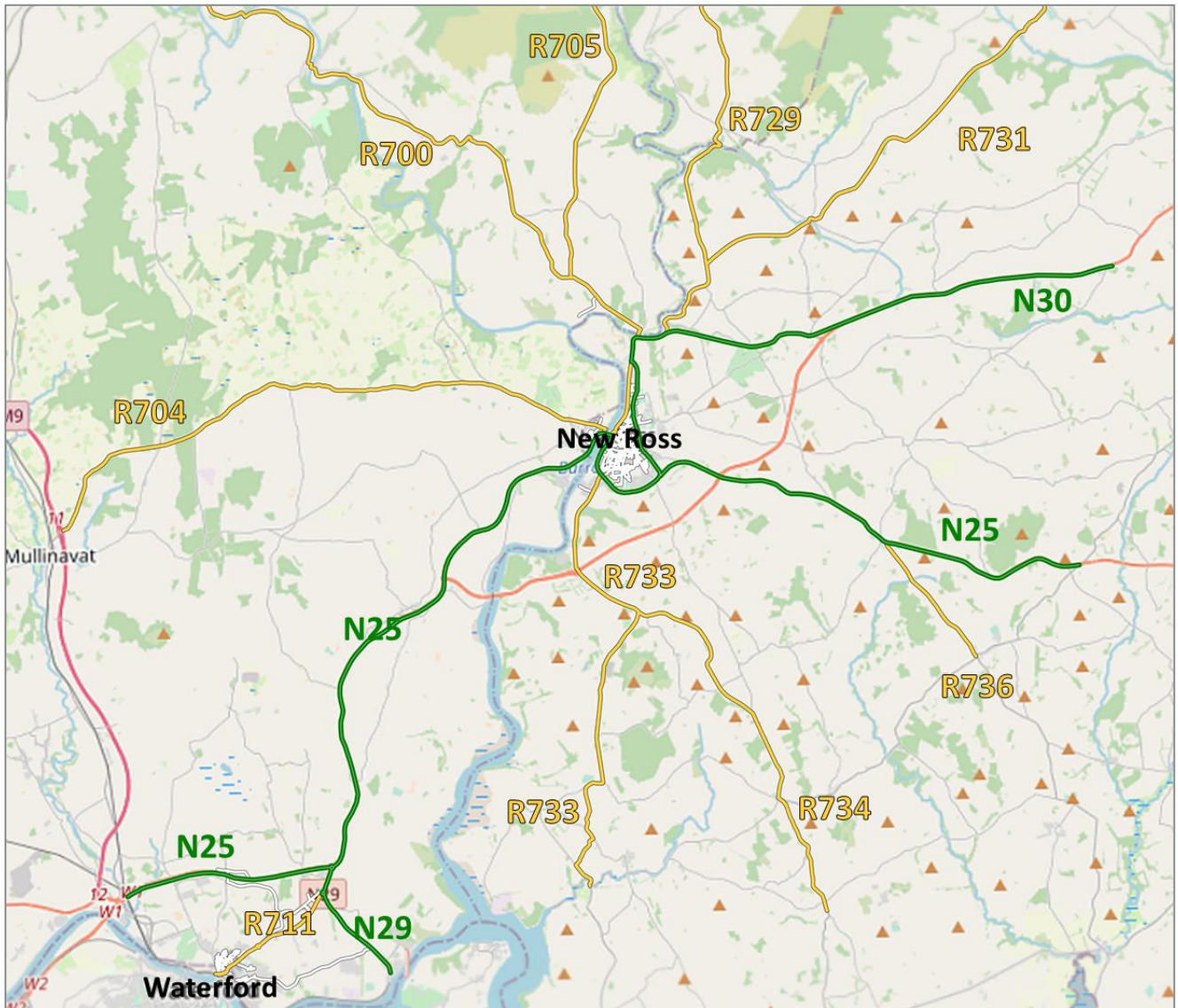


### 3.4. Network Development

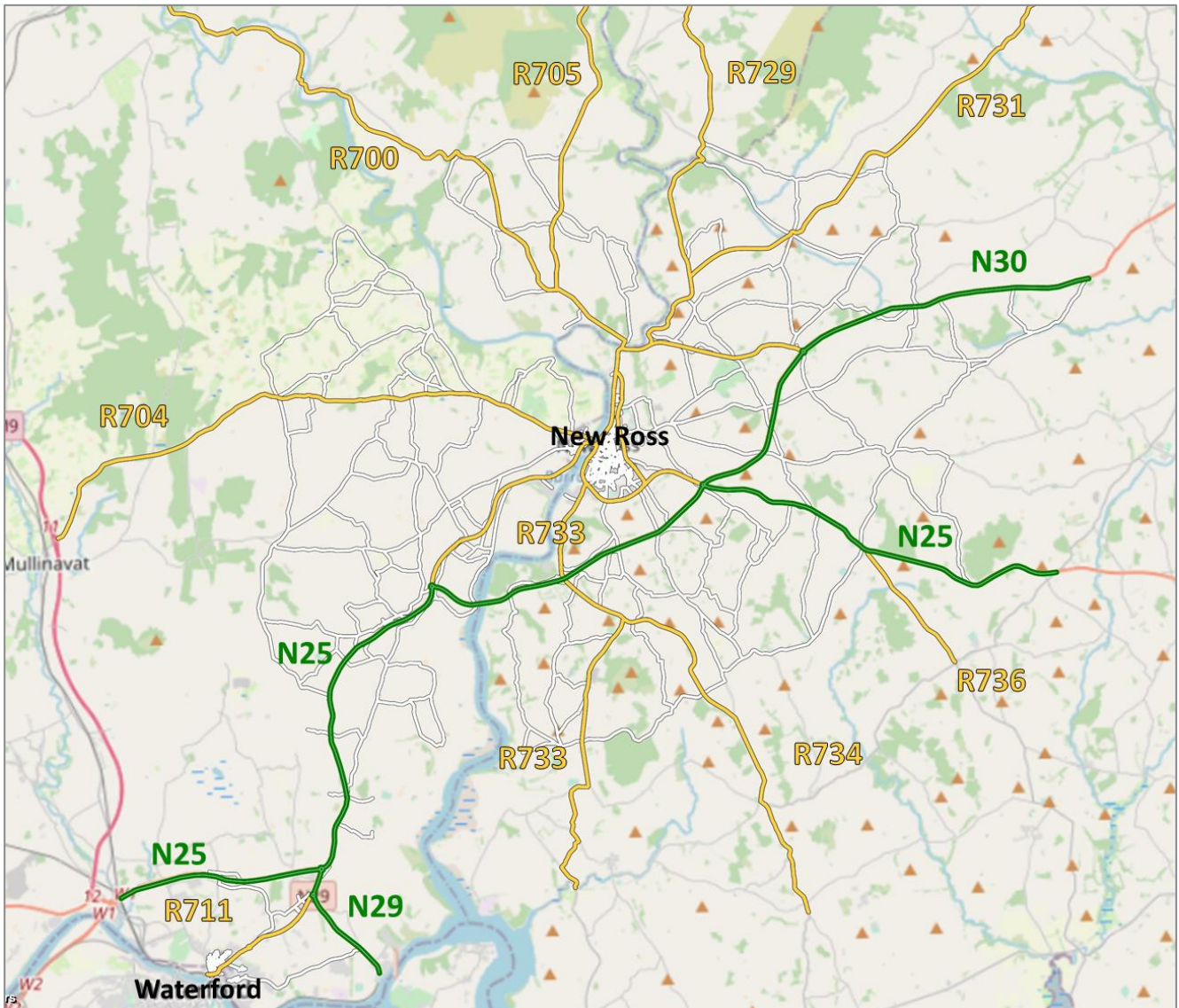
#### 3.4.1. Refinement of LAM Road Network

Once cordoned, the road network of the LAM required further refinement to accurately reflect the 2020 local road conditions. These included the addition of local roads not included in the NTM, corrections of speed limits and more detailed junction modelling. The extent of the road network in the study area is shown before and after the network refinement in Figures 3.3 & 3.4 respectively. As shown, the 2016 base network from the NTM doesn't include the New Ross Bypass which was also coded in.

**Figure 3.3: Initial NTM Cordoned Road Network**



**Figure 3.4: Refined LAM Network**

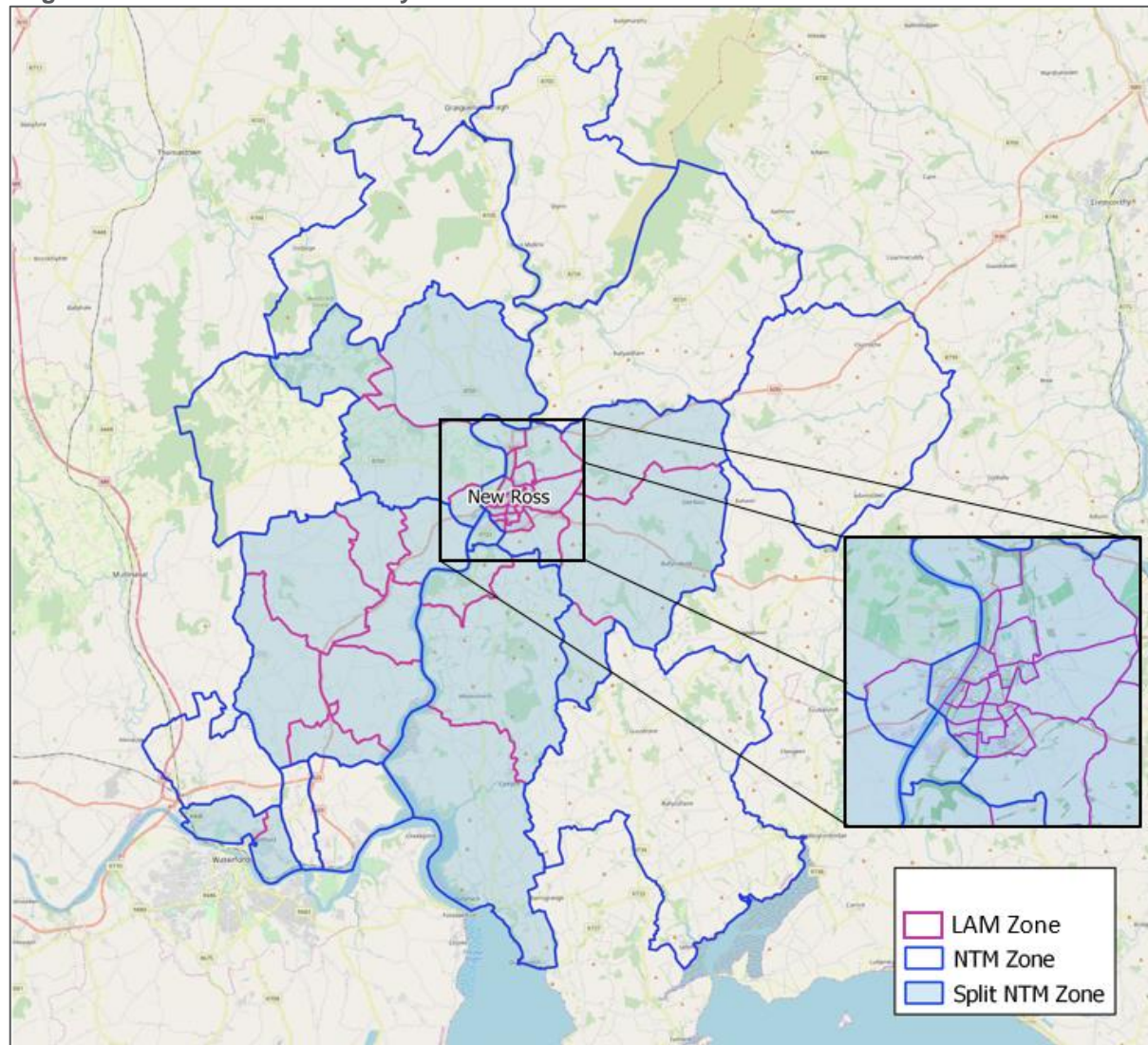


### 3.4.2. Refinement of LAM Zoning System

To accurately reflect demand across the network and calibrate the LAM, a more detailed zoning system than the one used in the NTM was required. The zoning system in the NTM is based on the aggregation of CSO Electoral Divisions (ED's) which form large zones. However, a more detailed zone system was required in more urban areas and closer to the project extent between Glenmore & Waterford. The zones covering these areas were disaggregated into a number of sub zones isolating, where feasible, key trip generators such as schools and employment centres. Where possible, the disaggregation of these zones was based on the CSO ED, Small Area and Work Zone boundaries. The zones are also disaggregated along the main road corridors which also align with origin-destination survey points outlined in Section 2.

Figure 3.5 illustrates the initial NTM and refined LAM zone system. The original NTM zone system included 32 zones with 65 zones included in the refined LAM zones system.

Figure 3.5: Refined LAM Zone System



### 3.5. Prior Matrix Development

'Prior' AM Peak and Inter Peak hour Light and Heavy vehicle matrices were extracted from the cordoned 2016 NTM. The light vehicle demand from the NTM zones was disaggregated into the sub-zones based on the proportion of estimated population and jobs or a combination of both depending on the peak hour. The heavy vehicle demand was disaggregated based in the estimated jobs per sub zone.

A factor of 1.10 was then applied to the matrices to account for growth in the study area from 2016 to form 2020 prior demand matrices. This growth factor of 1.10 was derived from historic data from the 3 local TMUs. The prior matrices were then calibrated to 2020 traffic counts. Further details on this calibration process are presented in Chapter 4 of this report. As there is no PM Peak Hour in the NTM, the calibrated AM Peak Hour matrices were transposed to give a 'Prior' PM matrix which was then also calibrated to 2020 traffic counts.

## 4. Model Calibration

### 4.1. Overview

The section of the report outlines the base year model calibration and validation in accordance with TII guidelines. Calibration is the process of adjusting the LAM network and demand to ensure that it provides a robust estimate of assignment when compared to 2020 observed data which generally includes observed traffic count data. The adjustment of demand during calibration is undertaken using Matrix Estimation.

#### 4.1.1. Calibration Steps

The first step in calibrating the LAM is reviewing the assignment of the demand with respect to routing and route choice. Often counts may not be calibrating as part of the network is not coded in sufficient detail or accurately reflecting delay and thus demand may choose a perceived shorter and incorrect route. For instance, in the N25 LAM the junctions within New Ross required further refinement of junction delays and capacity constraints as too much demand was routing through the town as opposed to using the N30 & N25. More zone connectors, which transfer demand from the zone onto the road network, were also required to get a more accurate dispersion of demand across the network. This is common in strategic models. Once the calibration was improved through network refinement and there were no further realistic refinements to be made to the network Matrix Estimation was undertaken.

Matrix Estimation (ME) is the process in which the number of trips assigned along a model link is adjusted to match an observed total thus allowing the demand to be calibrated. ME can be undertaken manually through flow bundle analysis or through the “TFlow Fuzzy” matrix estimation tool provided in VISUM. “TFlow Fuzzy” is designed to automatically adjust trip matrices to match modelled volumes to observed volumes along multiple links or turns. Initial ME of the LAMs was undertaken using TFlowFuzzy with subsequent ME iterations undertaken using incremental flow bundle analysis. Flow bundle matrices were extracted, examined and subsequently adjusted to match observed flows up and downstream of the point at which the flow bundle was taken.

#### 4.1.2. Validation

A proportion of observed traffic data, including some traffic counts and journey time data, is not included in the ME and calibration process. These are compared to the modelled demand after ME as a validation of the model. This helps to ensure that the model is not just replicating the observed demand at the calibration points used during ME. Modelled demand along validation points cannot be specifically targeted during the ME.

## 4.2. Network Calibration

### 4.2.1. Calibration Criteria

The model calibration process has been undertaken based on the criteria set out in TII’s PAG *Unit 5.1: Construction of Traffic Models*. The PAG specify the acceptable values for modelled and observed flow comparisons and suggests how calibration should relate to the magnitude of the values being compared. A summary of these targets is shown in Table 4.1 below.

**Table 4.1: Model Calibration Criteria: Individual Flows**

Class Test	Criteria & Measure	Acceptability Guideline
1	Individual flows within 100 vph for flows <700 vph	>85% of cases
2	Individual flows within 15% for flows 700 – 2700 vph	
3	Individual flows within 400 vph for flows > 2700 vph	

When comparing modelled and observed counts, the magnitude of the observed volume is clearly important when deciding on what is a reasonable error. Therefore, in addition to considering percentage or absolute differences as outlined above, the Geoffrey E. Havers (GEH) statistic (a form of the Chi-squared statistic) is also used as a calibration measure as it incorporates both relative and absolute errors. The GEH statistic is:

$$GEH = \sqrt{\frac{(Observed - Modelled)^2}{0.5 \times (Observed + Modelled)}}$$

The PAG criteria for GEH results are outlined in Table 4.2. In addition to the criteria given, it is generally accepted that GEH values should not be greater than 10 and values greater than 10 should be examined and where an improvement in the results is not possible a reasonable explanation given.

**Table 4.2: Model Calibration Criteria: GEH Statistic**

Criteria	Measure	Acceptability Guideline
GEH Statistic	Individual flows GEH<5.0	>85% of cases

### 4.2.2. Calibration Results

In total between the TMU, ATC & JTC counts, there were 231 observed traffic counts in the modelled area. Of these 154, or 67%, have been used in the calibration process and subject to Matrix Estimation. The remaining counts were excluded from ME and were used in the validation of the model. The validation results are presented in Section 4.4. The calibration results for both link and turn counts for the criteria outlined in Tables 4.1 & 4.2 are presented below in Table 4.3-4.6. As shown, the model is calibrated across all peaks for both links and turns.

**Table 4.3: Model Calibration: Individual Link Flows**

Peak	Individual Link Flows		Acceptability Guideline
	Light Vehicles	Heavy Vehicles	
AM	100%	100%	>85% of cases
IP	100%	100%	
PM	100%	100%	

**Table 4.4: Model Calibration: GEH Statistic of Link Flows**

Peak	Individual Link Flows		Acceptability Guideline
	Light Vehicles	Heavy Vehicles	
AM	100%	100%	>85% of cases
IP	100%	100%	
PM	100%	100%	

**Table 4.5: Model Calibration: Individual Turning Flows**

Peak	Individual Turning Flows		Acceptability Guideline
	Light Vehicles	Heavy Vehicles	
AM	97%	100%	>85% of cases
IP	100%	100%	
PM	98%	100%	

**Table 4.6: Model Calibration: GEH Statistic of Turning Flows**

Peak	Individual Turning Flows		Acceptability Guideline
	Light Vehicles	Heavy Vehicles	
AM	90%	100%	>85% of cases
IP	93%	100%	
PM	90%	99%	

The comparison of modelled and observed flows demonstrates that the AM, Inter and PM Peak period models have meet or exceeded the flow criteria for all user classes. Likewise, the GEH results also exceed the criteria for all user classes. The results therefore confirm that the models have been calibrated to a standard compliant with the PAG criteria for all user classes and all time periods. In addition to the outlined results there were no GEH values above 10 in any modelled hour.

The GEH results for link flows at each of the ATC points outlined previously in 2.2.3 used for calibration is presented in Table 4.7. The individual calibration results for turning flows is presented in Appendix A.

Table 4.7: Model Calibration: GEH Statistic of Individual Link Flows

Site	Location	Observed Flows						Modelled Flows						GEH					
		AM		IP		PM		AM		IP		PM		AM		IP		PM	
		LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
1NB	N25 - 1km south of Glenmore Roundabout	396	42	380	61	840	53	388	55	342	77	770	73	0.4	1.9	2.0	1.9	2.5	2.5
1SB		656	68.8	339	54	431	27	704	73	373	53	444	31	1.8	0.5	1.8	0.2	0.6	0.7
11EB	R729 – 1km east of the L401 Junction	111	7	79	7	120	9	105	7	67	7	107	3	0.6	0.0	1.4	0.0	1.2	2.4
11WB		96	10	57	5	95	5	71	2	56	9	90	2	2.7	3.3	0.1	1.5	0.5	1.6
12EB	R723 – 1km west of the Ballymacar Roundabout	223	30	229	31	354	29	276	22	262	22	367	18	3.4	1.6	2.1	1.7	0.7	2.3
12WB		403	28	220	27	312	25	438	27	263	19	300	24	1.7	0.2	2.8	1.7	0.7	0.2
13NB	R733 – 2km north of the New Ross bypass	310	15	194	18	210	15	307	4	191	15	207	10	0.2	3.6	0.2	0.7	0.2	1.4
13SB		162	21	196	14	288	17	177	19	216	4	305	9	1.2	0.4	1.4	3.3	1.0	2.2
14EB	New Ross bypass, 1 km west of the L4021 crossing	196	53	172	50	391	59	232	47	158	44	367	50	2.5	0.8	1.1	0.9	1.2	1.2
14WB		378	44	192	42	283	21	386	53	174	48	303	25	0.4	1.3	1.3	0.9	1.2	0.8
15NB	N25 - 750 m north of L7517 Jct	370	57	343	64	800	90	407	56	348	77	795	73	1.9	0.2	0.3	1.5	0.2	1.8
15SB		741	72	360	54	511	33	764	73	372	53	438	31	0.8	0.2	0.6	0.1	3.4	0.3
16NB	N25 - 1.5 km north of L3429	353	42	359	54	837	69	384	56	368	77	869	73	1.6	2.0	0.5	2.8	1.1	0.5
16SB		821	69	360	52	475	31	796	73	385	54	429	31	0.9	0.5	1.3	0.3	2.2	0.0
17WB	L7501 - 1km south of St James Church	28	1	14	2	14	0	9	1	15	0	13	0	4.6	0.0	0.3	2.0	0.3	0.0
17EB		13	2	13	1	10	0	7	1	17	0	33	0	2.0	0.9	1.0	1.4	5.0	0.0
18NB	L7501 - 1km South west of Glenmore Roundabout	13	1	14	1	13	1	20	2	13	3	25	1	1.7	0.8	0.3	1.4	2.8	0.0
18SB		18	0	13	1	12	1	25	2	13	0	6	1	1.5	2.0	0.0	1.4	2.0	0.0



### 4.3. Trip Matrix Calibration

#### 4.3.1. Criteria

As noted previously, ‘Matrix Estimation’ was used to adjust the prior trip matrix in order to provide a better correlation between modelled and observed flows. However, TII’s PAG suggests that caution should be taken when using estimation, and that the changes introduced should be monitored to ensure that the original matrices are not overly distorted, thus providing irregular movement patterns. There are two check undertaken on the impact of ME on trip length distribution and on the significance of the matrix estimation changes. It should be noted that the second check is not required under PAG but is required under the UK Transport Appraisal Guidance (TAG) and has been undertaken as additional sense check of the ME process.

‘Matrix Estimation’ can sometimes generate increased short distance trips to match count information, thus distorting the profile of trip making on the network. PAG suggests that the coincidence ratio<sup>1</sup> should be used to compare trip length distributions before and after estimation, with a desirable range between 0.7 and 1.0.

**Figure 4.1: Coincidence Ratio Calculation – TII PAG (Page 20)**

A coincidence ratio can be used to compare two distributions by examining the ratio of the total area of those distributions that coincide. The coincidence ratio is defined as:

$$CR = \frac{\sum\{\text{Min (TLDs, TLDf)}\}}{\sum\{\text{Max (TLDs, TLDf)}\}}$$

Where TLDs is the source trip length frequency and TLDf is the final trip length frequency. A desirable range for the coincidence ratio is between 0.7 and 1.0 where a ratio of 1.0 suggests an identical distribution.

Table 4.8 outlines the matrix estimation change criteria, as specified in WebTAG Unit M3-1, Section 8.3, Table 5. Though this calibration check is not required by PAG guidance the analysis has still been undertaken as an additional check of the impact of the estimation process. The guidelines use regression analysis to identify the correlation/relationship between the demand pre and post ‘Matrix Estimation’ and suggest careful monitoring of the changes in cell values. Scatter plots of matrix zonal cell values, prior to and post matrix estimation, with regression statistics (slopes, intercepts and R<sup>2</sup> values) should meet the criteria outlined in Table 4.8.

**Table 4.8: Significance of Matrix Estimation Changes**

MEASURE	SIGNIFICANCE CRITERIA
Matrix zonal cell value	Slope within 0.98 and 1.02; Intercept near zero; R <sup>2</sup> in excess of 0.95

#### 4.3.2. Trip Length Distribution Check

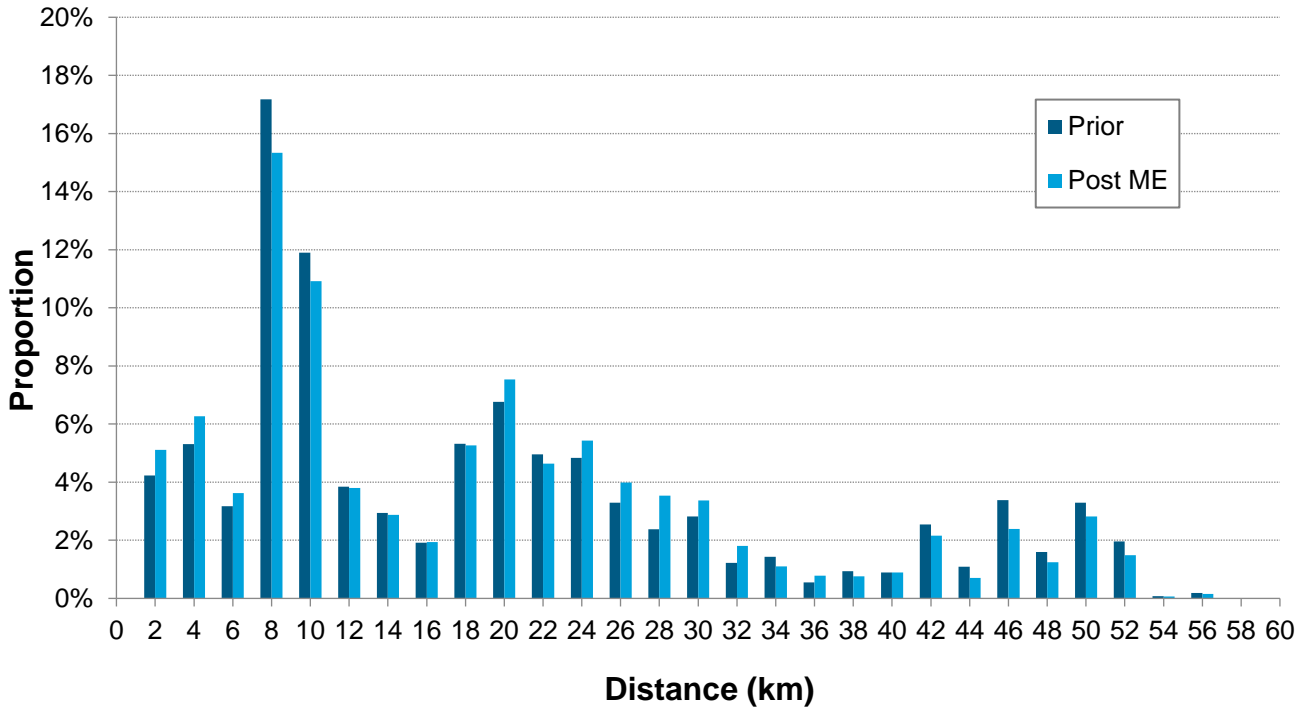
The trip length distribution of the prior and post ME matrices are illustrated in Figures 4.2-4.4 for the AM, IP and PM Peak respectively. As shown in each of the graphs, the trip length distribution is largely similar before and after matrix estimation with no significant change to the profile of trip lengths. Table 4.9 presents the coincidence ratio for each peak and as outlined each modelled peak hour is within the desired range of 0.7-1.0.

<sup>1</sup> The coincidence ratio is a calculation used to examine the how the total area under different distributions coincide, with a value of 1 representing an identical distribution.

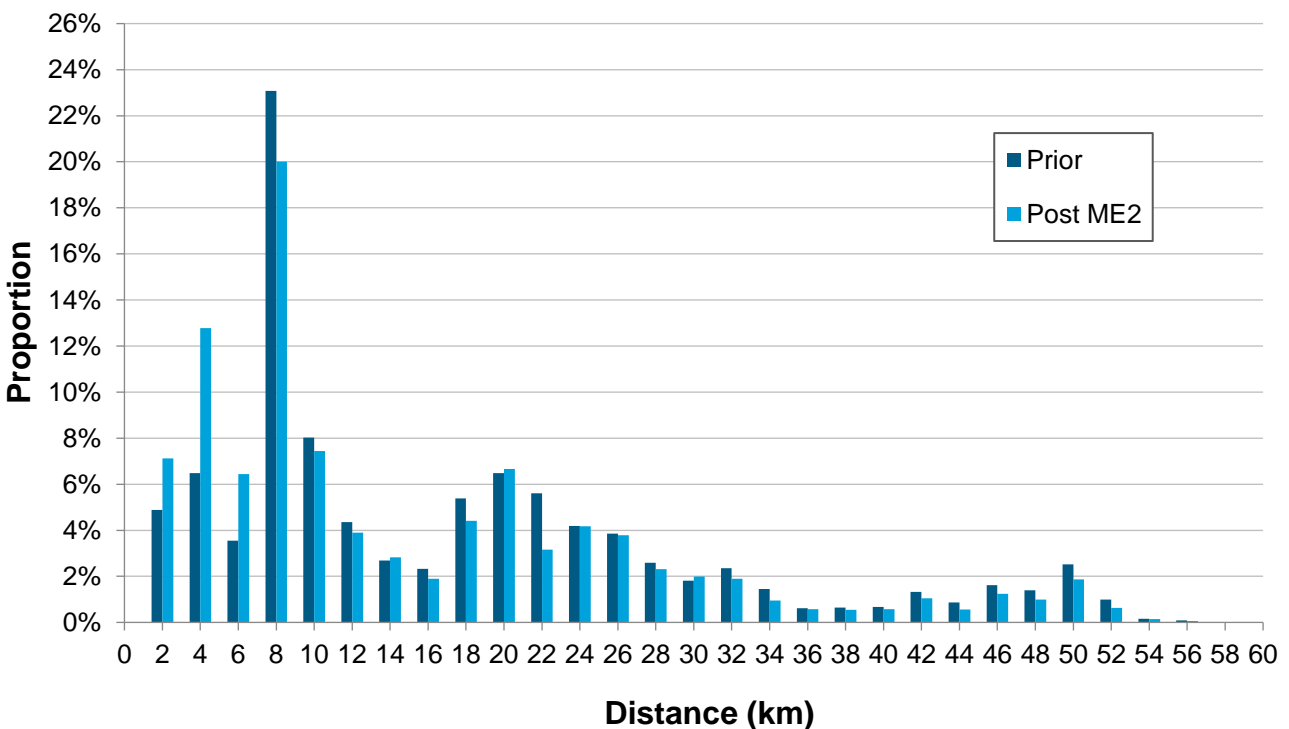
**Table 4.9: Trip Length Distribution Check: Coincidence Ratio Results**

MEASURE	SIGNIFICANCE CRITERIA	AM	IP	PM
Coincidence Ratio	Between 0.7 and 1.0	0.81	0.79	0.83

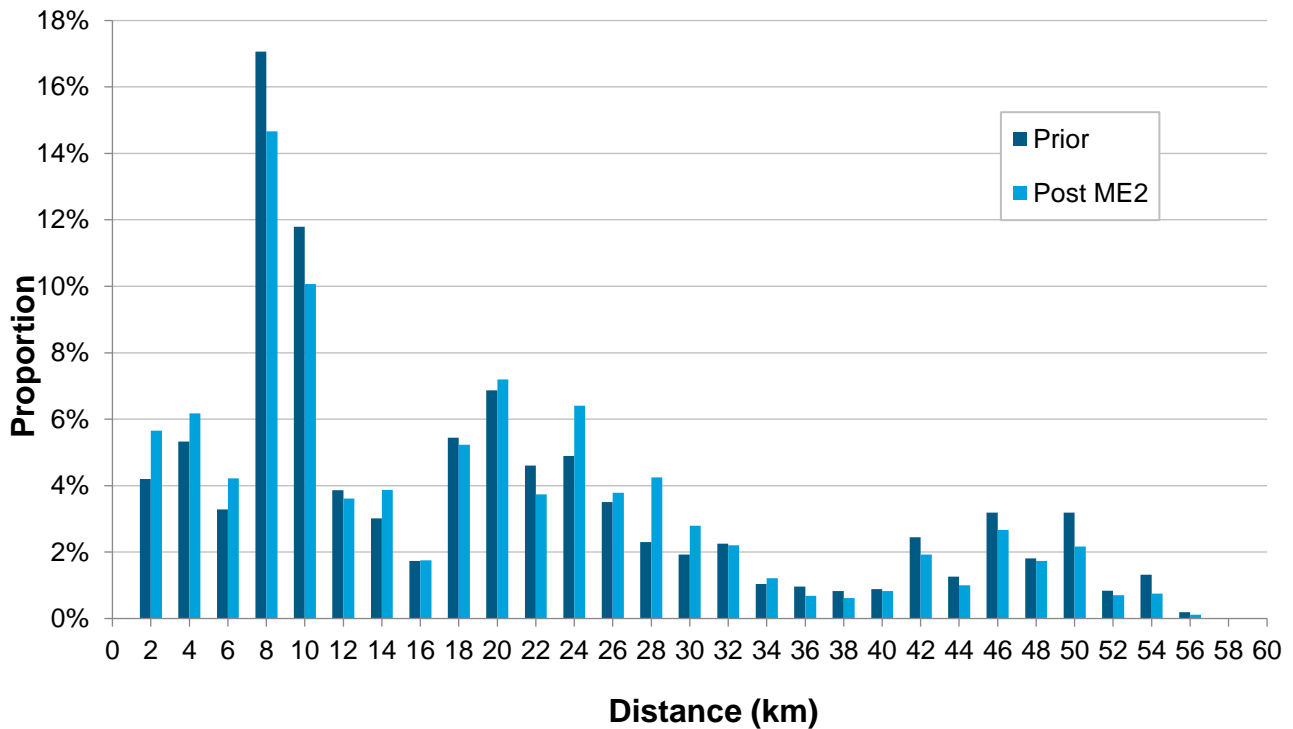
**Figure 4.2: AM Prior & Post ME Trip Length Distribution**



**Figure 4.3: IP Prior & Post ME Trip Length Distribution**



**Figure 4.4: PM Prior & Post ME Trip Length Distribution**



### 4.3.3. Regression Analysis

Pre and Post 'Matrix Estimation' matrices were plotted and the slope, and R<sup>2</sup> measure of goodness of fit were calculated. The results of this analysis is outlined in Table 4.10 for each peak and shown in Figures 4.5-4.7. As outlined, each peak hour passes the criteria outlined in WebTAG for matrix cell changes. Therefore, the significance of these changes is deemed acceptable and in line with best practice guidance.

**Table 4.10: Matrix Zonal Cell Regression Analysis Results**

Measure	Significance Criteria	AM	IP	PM
R <sup>2</sup>	R <sup>2</sup> in excess of 0.95	0.9559	0.9555	0.9558
Slope	Within 0.98 and 1.02	0.9843	0.9832	0.988
Intercept	Intercept near zero	0.2962	0.2701	0.3397

Figure 4.5: AM Matrix Cell Regression Analysis

*Regression Analysis - Matrix Zonal Cell Values*

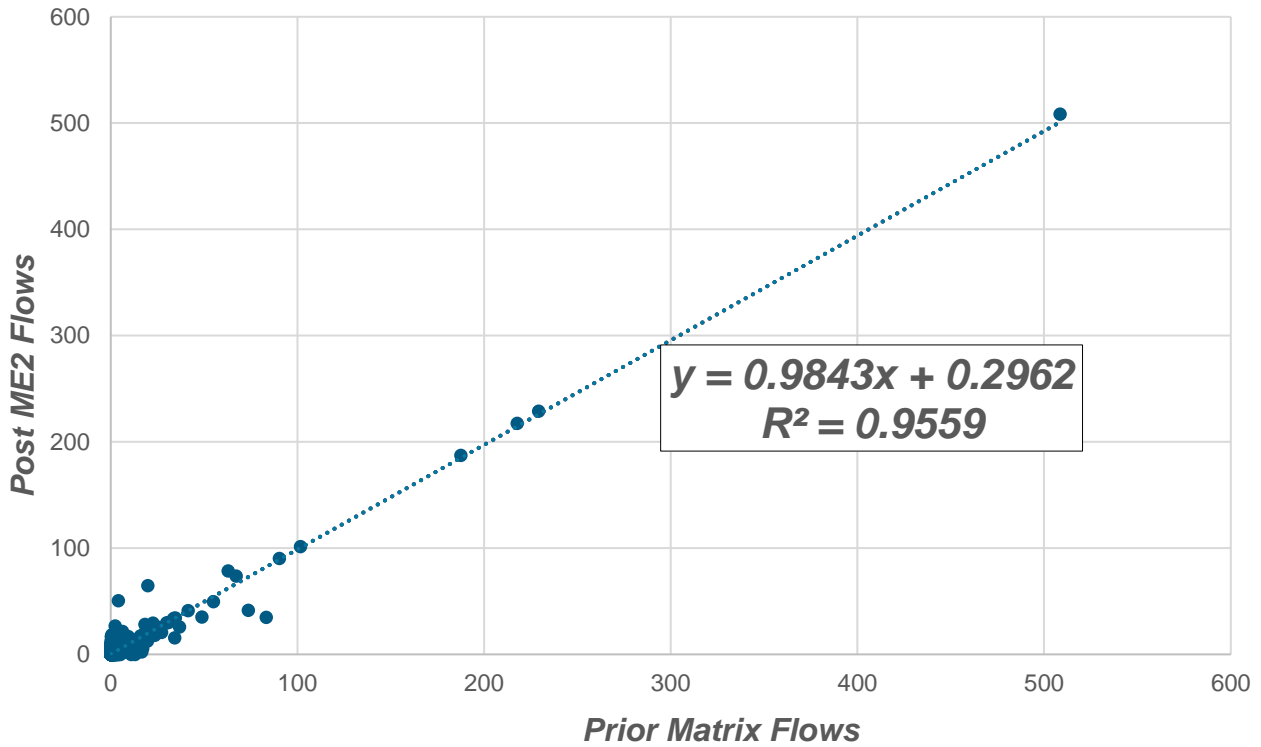


Figure 4.6: IP Matrix Cell Regression Analysis

*Regression Analysis - Matrix Zonal Cell Values*

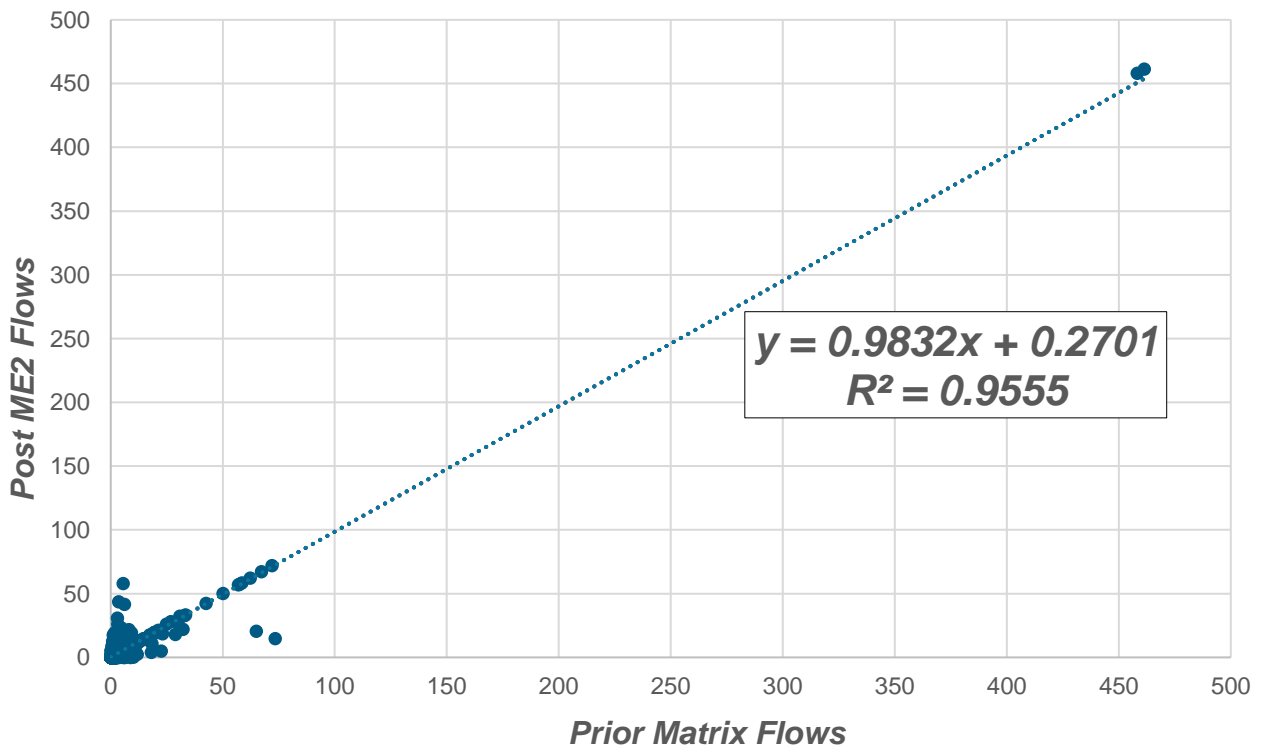
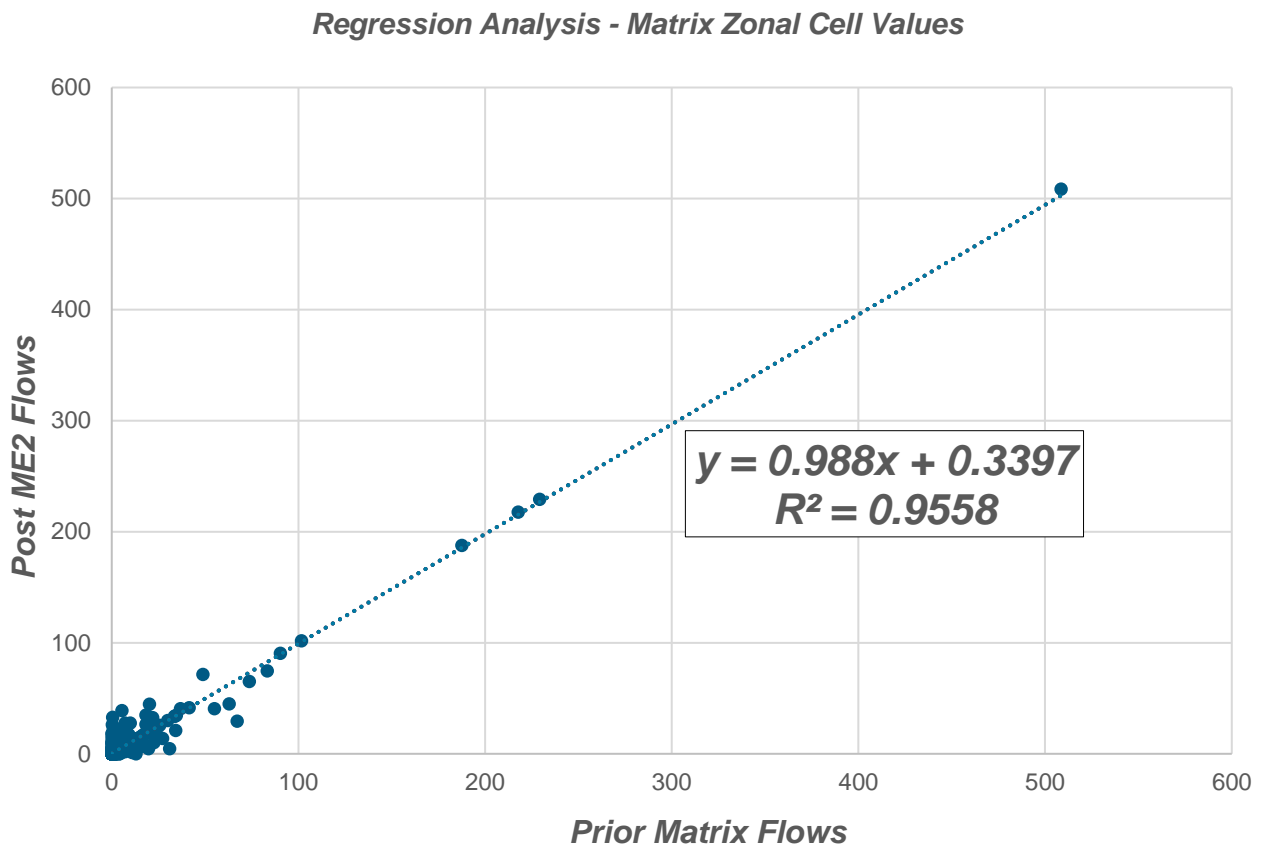


Figure 4.7: PM Matrix Cell Regression Analysis



## 4.4. Model Validation

### 4.4.1. Count Validation Results

The model has been validated using 63 observed traffic counts, 30% of total available counts. The criteria for validation of the traffic counts is the same as the calibration criteria outlined previously in Section 4.2.1. The result of the traffic count validation for link and turning flows for each peak period is outlined in Tables 4.11-4.14. As shown in the tables, each peak model exceeds the validation criteria for both Light and Heavy vehicles.

Table 4.11: Model Validation: Individual Link Flows

Peak	Individual Link Flows		Acceptability Guideline
	Light Vehicles	Heavy Vehicles	
AM	100%	100%	>85% of cases
IP	100%	100%	
PM	100%	100%	

Table 4.12: Model Validation: GEH Statistic of Link Flows

Peak	Individual Link Flows		Acceptability Guideline
	Light Vehicles	Heavy Vehicles	
AM	100%	100%	>85% of cases
IP	100%	100%	
PM	100%	100%	

**Table 4.13: Model Validation: Individual Turning Flows**

Peak	Individual Turning Flows		Acceptability Guideline
	Light Vehicles	Heavy Vehicles	
AM	97%	100%	>85% of cases
IP	100%	100%	
PM	95%	100%	

**Table 4.14: Model Validation: GEH Statistic of Turning Flows**

Peak	Individual Turning Flows		Acceptability Guideline
	Light Vehicles	Heavy Vehicles	
AM	92%	100%	>85% of cases
IP	95%	100%	
PM	92%	100%	

The GEH results for link flows at each of the ATC points outlined previously in 2.2.3 used for validation is presented in Table 4.15. The individual calibration results for turning flows is presented in Appendix A.

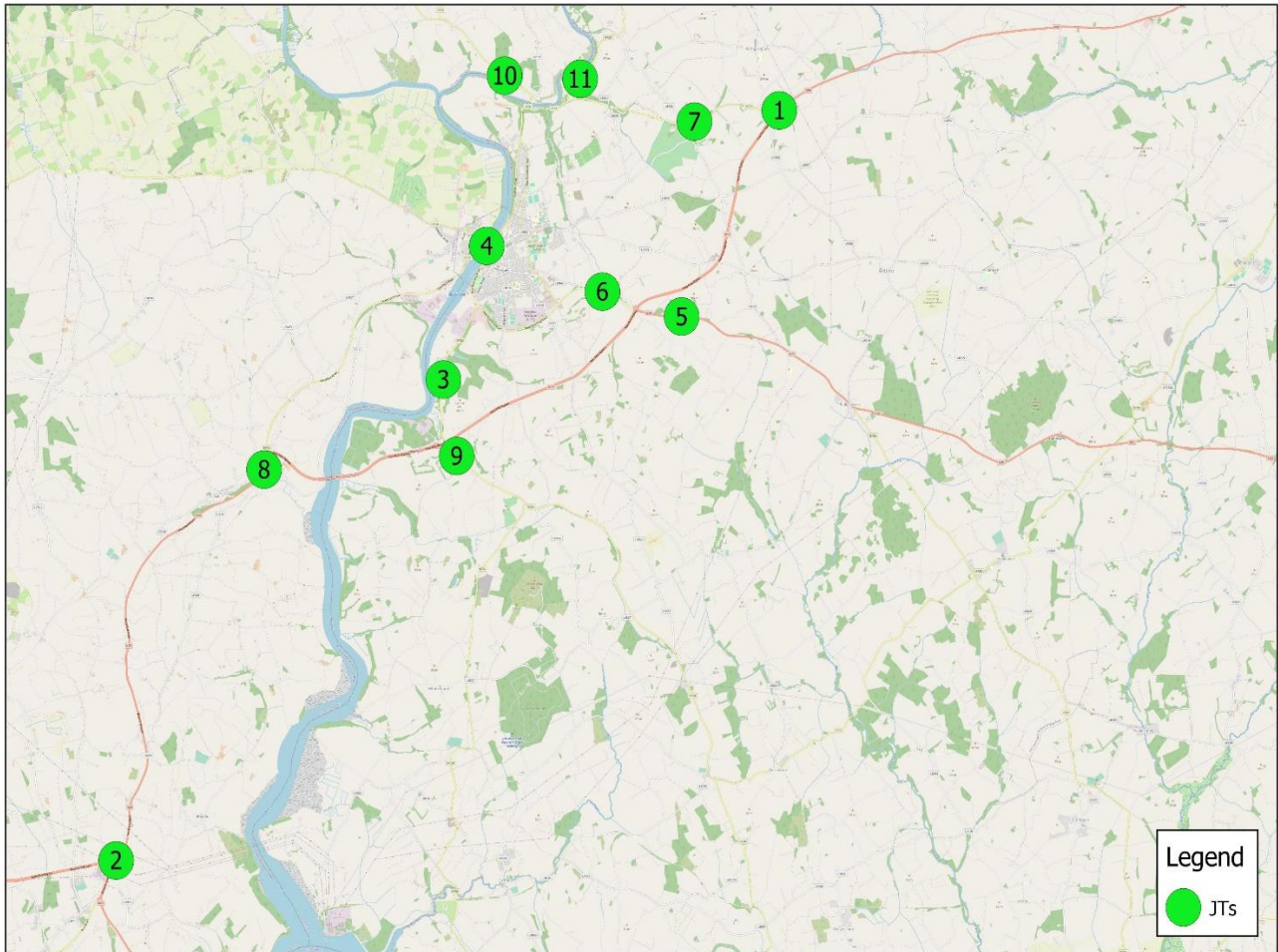
Table 4.15: Model Validation: GEH Statistic of Individual Link Flows

Site	Location	Observed Flows						Modelled Flows						GEH					
		AM		IP		PM		AM		IP		PM		AM		IP		PM	
		LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
2NB	N25 - 1km north of L7522 Jct	396	39	390	51	847	58	396	56	364	77	839	73	0.0	2.5	1.3	3.3	0.3	1.9
2SB		795	71	354	50	439	29	773	73	388	54	448	31	0.8	0.2	1.8	0.6	0.4	0.4
3NB	N25 - 1 km north of Luffany Roundabout	350	49	394	68	853	82	379	55	382	76	920	74	1.5	0.8	0.6	0.9	2.3	0.9
3SB		854	67	378	55	487	32	835	73	395	54	423	31	0.7	0.7	0.9	0.1	3.0	0.2
4NB	N25 - 800m south of the L7512 Jct	150	26	130	26	248	29	157	24	135	20	255	8	0.6	0.4	0.4	1.3	0.4	4.9
4SB		251	18	150	11	172	11	208	9	148	1	138	1	2.8	2.4	0.2	4.1	2.7	4.1
5NB	R733 - 300m north west of the L8050 Jct	340	27	158	19	174	13	349	28	196	18	188	14	0.5	0.2	2.9	0.2	1.0	0.3
5SB		129	20	175	16	348	23	158	17	207	16	354	22	2.4	0.7	2.3	0.0	0.3	0.2
6EB	N25 - 600m west of Ballymacar Roundabout	337	28	302	33	517	34	310	30	275	39	494	43	1.5	0.4	1.6	1.0	1.0	1.5
6WB		526	69	264	57	391	47	504	54	290	36	429	32	1.0	1.9	1.6	3.1	1.9	2.4
7EB	L4007 - 1km east of Bawnmore Road Jct	148	10	68	4	88	5	100	0	93	0	85	0	4.3	4.5	2.8	2.8	0.3	3.2
7WB		77	10	75	6	93	11	57	1	63	0	102	0	2.4	3.8	1.4	3.5	0.9	4.7
8NB	N30 - 150m north east of Corcoran's Cross Roundabout	192	51	144	38	270	41	205	33	141	27	269	24	0.9	2.8	0.3	1.9	0.1	3.0
8SB		262	35	145	35	227	36	267	20	126	30	216	19	0.3	2.9	1.6	0.9	0.7	3.2
9NB	R729 - 2km north east of the N30 Jct	59	7	65	6	136	12	91	1	66	0	148	1	3.7	3.0	0.1	3.5	1.0	4.3
9SB		132	4	71	2	75	2	119	1	57	0	99	1	1.2	1.9	1.8	2.0	2.6	0.8
10NB	R700 - 2km north west of the N30 Jct	143	16	105	13	189	12	188	24	107	25	195	16	3.5	1.8	0.2	2.8	0.4	1.1
10SB		185	17	96	14	180	20	239	24	91	23	163	25	3.7	1.5	0.5	2.1	1.3	1.1

### 4.4.2. Journey Time Validation Results

In addition to observed traffic counts the model has been validated to the observed journey time data collated along the main routes between the points shown previously in Figure 2.2 and again in Figure 4.8 for reference.

**Figure 4.8: Journey Time Survey Points**



TII PAG requires modelled journey times to be within 15% of observed, or within 1 minute where higher than 15%, for 85% or more of cases. The comparison of modelled and observed journey times is outlined in Tables 4.16-4.18 for each modelled peak hour. As outlined, all modelled journey times are within the 15% of observed for each peak.

**Table 4.16: Model Validation: AM Journey Time Results**

Route	Observed	Modelled	%Diff	Validated
1=>2	16:10	17:42	9.4%	✓
2=>1	16:46	16:41	-0.5%	✓
1=>4	11:33	10:47	-6.6%	✓
4=>1	11:35	10:10	-12.2%	✓
2=>8	06:44	06:19	-6.0%	✓
8=>2	07:16	07:33	3.9%	✓



4=>6	05:35	05:24	-3.2%	✓
6=>4	05:08	05:26	5.9%	✓
4=>8	05:51	06:00	2.4%	✓
8=>4	06:11	06:25	3.9%	✓
5=>6	02:35	02:15	-13.1%	✓
6=>5	01:45	01:55	9.6%	✓

**Table 4.17: Model Validation: IP Journey Time Results**

Route	Observed	Modelled	%Diff	Validated
1=>2	16:08	16:11	0.3%	✓
2=>1	16:05	16:37	3.3%	✓
1=>4	11:44	10:15	-12.7%	✓
4=>1	09:17	09:44	4.9%	✓
2=>8	06:43	06:23	-5.0%	✓
8=>2	06:38	06:24	-3.5%	✓
4=>6	05:33	05:34	0.4%	✓
6=>4	05:25	05:18	-2.1%	✓
4=>8	05:54	05:52	-0.6%	✓
8=>4	05:59	06:23	6.6%	✓
5=>6	02:32	02:01	-20.5%	✓
6=>5	01:50	01:55	4.4%	✓

**Table 4.18: Model Validation: PM Journey Time Results**

Route	Observed	Modelled	%Diff	Validated
1=>2	15:42	16:18	3.8%	✓
2=>1	16:41	18:07	8.7%	✓
1=>4	10:27	10:16	-1.8%	✓
4=>1	10:51	10:36	-2.4%	✓
2=>8	06:54	07:39	10.8%	✓
8=>2	06:58	06:23	-8.2%	✓
4=>6	05:25	05:46	6.4%	✓
6=>4	05:06	05:22	5.1%	✓
4=>8	05:57	05:55	-0.6%	✓
8=>4	06:06	06:32	7.1%	✓
5=>6	02:32	02:07	-16.3%	✓
6=>5	01:49	01:58	8.5%	✓

Based in the above results and count validation results outlined in Section 4.4.1 the model has been validated in accordance with the criteria outlined in TII's PAG and is considered 'fit for purpose'.

## 4.5. Origin-Destination Comparison

Section 5.6 of Unit 5.1 of the PAGs recommends that for origin-destination surveys modelled origin-destination patterns be compared to observed patterns based on the percentage split of destinations from each origin-destination survey location. A target deviation limit of  $\pm 25\%$  within more than 85% of samples should be attained. Tables 4.19-4.21 outline the results of this comparison for each modelled peak period. As shown, all OD pairs are within the target deviation limit recommended in the AM and PM and for 99% of OD pairs in the Inter peak. The representation of the distribution of movements in the model therefore meets the criteria set out in PAG Unit 5.1 and is considered suitably robust.

**Table 4.19: Model Validation: AM OD Comparison Results**

AM	1	2	3	4	5	6	7	8	9	10	11
1		-17.5%	-1.1%	3.5%	2.2%	3.9%	2.4%	4.2%	1.9%	0.4%	0.0%
2	-6.6%		3.1%	1.0%	-4.2%	0.2%	1.2%	4.1%	1.6%	0.5%	-1.0%
3	-2.8%	-8.0%		-1.9%	-5.4%	-7.5%	-1.7%	-0.2%	13.9%	13.1%	0.4%
4	3.2%	-5.5%	-0.8%		6.0%	-2.0%	-6.9%	1.5%	9.5%	-2.2%	-2.8%
5	0.4%	-11.9%	-0.2%	3.5%		13.4%	0.0%	-1.4%	-1.2%	-2.7%	0.0%
6	14.7%	-5.1%	-3.2%	-3.5%	2.3%		0.0%	1.0%	-1.0%	-4.8%	-0.4%
7	22.8%	-13.9%	0.0%	-4.0%	-7.5%	2.9%		-0.7%	-1.3%	7.9%	-6.4%
8	-0.1%	-3.3%	3.0%	-1.1%	0.6%	0.7%	-0.2%		0.2%	0.6%	-0.3%
9	2.9%	-6.8%	6.1%	-10.4%	6.3%	-3.0%	-0.8%	-0.7%		6.4%	0.0%
10	-9.4%	-2.4%	4.8%	-22.2%	1.5%	3.8%	7.9%	1.5%	-0.6%		15.1%
11	-5.7%	10.0%	-5.9%	-7.1%	-4.1%	-2.4%	0.0%	1.1%	-2.2%	16.2%	

**Table 4.20: Model Validation: IP OD Comparison Results**

IP	1	2	3	4	5	6	7	8	9	10	11
1		-1.6%	-1.3%	0.6%	-0.2%	9.6%	-10.9%	-0.7%	0.5%	4.5%	-0.4%
2	-1.6%		2.2%	-6.2%	2.2%	-1.8%	-1.5%	6.8%	3.3%	-1.7%	-1.7%
3	-4.4%	5.6%		1.2%	-3.2%	-6.3%	-1.9%	2.1%	7.7%	-1.4%	0.6%
4	-1.8%	10.2%	-0.7%		12.5%	-3.7%	-7.3%	1.1%	9.7%	-12.2%	-7.7%
5	0.5%	-5.5%	-0.4%	1.4%		7.5%	0.0%	-0.4%	-0.7%	-2.4%	0.0%
6	5.1%	-4.2%	-2.5%	-4.0%	6.5%		0.0%	0.9%	-1.8%	1.0%	-0.8%
7	2.1%	-2.0%	0.0%	9.1%	-6.1%	2.3%		-0.2%	0.0%	0.8%	-6.0%
8	-3.1%	2.1%	1.5%	0.7%	-3.4%	1.1%	-0.6%		-0.2%	2.9%	-1.0%
9	-1.4%	2.2%	-10.4%	7.2%	-0.2%	-2.2%	-1.3%	0.5%		6.3%	-0.6%
10	6.8%	-3.6%	0.1%	-6.2%	-11.5%	-4.8%	16.4%	4.7%	-13.3%		11.5%
11	-4.6%	4.9%	0.0%	7.3%	-13.9%	-27.3%	0.0%	2.9%	7.7%	23.1%	

**Table 4.21: Model Validation: PM OD Comparison Results**

PM	1	2	3	4	5	6	7	8	9	10	11
1		-13.6%	-0.6%	-1.2%	3.0%	11.9%	-8.2%	-1.5%	-1.6%	12.2%	-0.3%
2	-2.6%		1.0%	2.4%	-1.5%	-2.0%	-1.9%	0.3%	2.8%	2.0%	-0.5%
3	-1.5%	9.1%		-1.5%	-2.7%	-3.5%	-0.2%	2.4%	-3.2%	1.4%	-0.3%
4	2.5%	-4.9%	-1.1%		7.3%	-4.8%	-7.1%	0.3%	8.6%	0.1%	-0.8%
5	0.1%	-1.4%	-1.2%	5.0%		-7.9%	0.2%	0.9%	4.8%	0.4%	-0.8%
6	8.2%	-3.9%	-1.9%	-2.4%	2.8%		0.0%	-0.2%	-2.3%	-0.2%	-0.2%
7	18.1%	-7.6%	-1.2%	5.3%	-4.3%	0.0%		-0.4%	-2.1%	-3.0%	-4.7%
8	0.4%	-4.7%	2.6%	-0.9%	-4.3%	5.4%	-0.7%		3.5%	-0.5%	-0.7%
9	3.0%	7.6%	-23.8%	6.2%	-2.0%	-2.7%	0.2%	0.5%		10.4%	0.5%
10	23.5%	-10.5%	0.6%	-3.4%	-0.1%	-5.4%	2.2%	0.4%	-8.4%		1.1%
11	0.0%	-14.4%	-6.8%	-1.1%	-3.4%	-2.3%	0.0%	4.6%	4.6%	18.8%	

## 4.6. AADT Accuracy

Section 5.9 of PAG Unit 5.1 highlights the need for LAM to produce accurate modelled AADT as well as accurately reflecting peak hour conditions. AADTs play a key role in the determination of suitable cross-sections and are required for input into environmental appraisals of schemes. To estimate the Annual Average Daily Traffic (AADT), factors were developed which allowed the extrapolation of AM, Inter and PM peak hour traffic flows to AADT. The factors were derived from regression analysis undertaken on the TMUs within the study area. The AM, Inter and PM Peak Hour flows were converted to AADT flows using the following formula:

$$(AM\ LV * 2.73) + (IP\ LV * 5.82) + (PM\ LV * 3.52) = LV\ AADT$$

$$(AM\ HV * 2.36) + (IP\ HV * 5.86) + (PM\ HV * 3.79) = HV\ AADT$$

$$LV\ AADT + HV\ AADT = Total\ AADT$$

Using the above formulas, the modelled AADT has been calculated for each of the 18 ATC points presented previously in Section 2.2.3. Guidance within PAG states that modelled AADT should be within 15% of observed where AADT values are greater than 700. Where observed AADT is less than 700 modelled AADT should be within 100 vehicles. Table 4.22 outlines the results of this comparison and shows that the modelled AADT meets the criteria for all sites.

**Table 4.22: Modelled vs Observed AADT**

Site No.	Location	Direction	AADT				
			Observed	Modelled	<700	Diff	Validated
1	N25 - 1km south of Glenmore Roundabout	Northbound	6445	6610	No	2.6%	✓
		Southbound	6316	6202	No	-1.8%	✓
2	N25 - 1km north of L7522 Jct	Northbound	7029	7012	No	-0.2%	✓
		Southbound	6218	6493	No	4.4%	✓
3	N25 - 1 km north of Luffany Roundabout	Northbound	7150	7346	No	2.7%	✓
		Southbound	6727	6612	No	-1.7%	✓
4	N25 - 800m south of the L7512 Jct	Eastbound	2594	2315	No	-10.8%	✓
		Westbound	2270	1943	No	-14.4%	✓
5	R733 - 300m north west of the L8050 Jct	Northbound	2615	2981	No	14.0%	✓
		Southbound	2857	3097	No	8.4%	✓
6	N25 - 600m west of Ballymacar Roundabout	Eastbound	4915	4643	No	-5.5%	✓
		Westbound	4945	5032	No	1.8%	✓
7	L4007 - 1km east of Bawnmore Road Jct	Eastbound	1131	1116	No	-1.3%	✓
		Westbound	1056	899	No	-14.9%	✓
8	N30 - 150m north east of Corcoran's Cross Roundabout	Northbound	2775	2657	No	-4.3%	✓
		Southbound	2730	2431	No	-11.0%	✓
9	R729 - 2km north east of the N30 Jct	Eastbound	1106	1157	No	4.6%	✓
		Westbound	1041	1009	No	-3.1%	✓
10	R700 - 2km north west of the N30 Jct	Northbound	1820	2086	No	14.6%	✓
		Southbound	1856	2040	No	9.9%	✓
11	R729 – 1km east of the L401 Junction	Eastbound	1270	1120	No	-11.8%	✓
		Westbound	986	888	No	-9.9%	✓
12	R723 – 1km west of the Ballymacar Roundabout	Eastbound	3557	3818	No	7.3%	✓
		Westbound	3549	4033	No	13.6%	✓
13	R733 – 2km north of the New Ross bypass	Eastbound	2872	2811	No	-2.1%	✓
		Westbound	2803	2916	No	4.0%	✓
14	New Ross bypass, 1 km west of the L4021 crossing	Eastbound	3541	3400	No	-4.0%	✓
		Westbound	3565	3568	No	0.1%	✓

Site No.	Location	Direction	AADT				
			Observed	Modelled	<700	Diff	Validated
15	N25 - 750 m north of L7517 Jct	Eastbound	6664	6788	No	1.9%	✓
		Westbound	6209	6338	No	2.1%	✓
16	N25 - 1.5 km north of L3429	Northbound	6725	7099	No	5.6%	✓
		Southbound	6431	6470	No	0.6%	✓
17	L7501 - 1km south of St James Church	Eastbound	174	137	Yes	-37	✓
		Westbound	142	222	Yes	80	✓
18	L7501 - 1km South west of Glenmore Roundabout	Northbound	170	248	Yes	78	✓
		Southbound	177	177	Yes	0	✓

## 5. Future Year Development

### 5.1. Overview

This section sets out the development of the future year LAM models for the scheme opening year (2030) and design year (2045). These forecast years will be used for assessing the future performance of the N25. A 2060 (Scheme Opening + 30 years) model was also developed, however, this model will be used for cost benefit analysis purposes only and therefore is not referred to in this report.

### 5.2. Future Year Do-Minimum Network Development

The future year 'Do-Minimum' network includes the 2020 base network and all schemes that are already built, or are committed, or likely to be built by 2030 and 2045. As the New Ross Bypass is now open and included in the modelling there are no other 'committed' schemes planned with the study area.

### 5.3. Future Year Matrix Development

#### 5.3.1. NTM Forecasts

Origin and Destination growth rates for both the internal and external zones for light and heavy vehicles were provided by TII for the years 2016-2030, 2030-2040 and 2040-2050. These years correspond with the NTpM forecast years. The growth rates were provided for a low, central and high growth scenario. The low and high growth scenarios are based on the CSO population and labour force projections for scenarios "M3F2" and "M1F1" respectively. Low and High forecasts are used for the economic and environmental sensitivity tests required as part of the project appraisal. The central growth scenario is based National Planning Framework 2040 population and employment projections which were developed by the Economic and Social Research Institute (ESRI). Growth beyond 2040 was assumed to grow at a reduced rate. The growth rates provided by TII were annualised for each period and applied to the LAM trip ends for each forecast year to obtain future year trip ends.

#### 5.3.2. Port Growth

There were two zones in the model for which TII growth rates were not provided. These were two 'special zones' which covered Waterford & New Ross Ports. Port of Waterford Masterplan 2020-2044<sup>2</sup> details expected annual growth in port traffic for the lifetime of the masterplan. For the medium scenario, which has been assumed to apply to TII's central growth scenario, the expected growth in port traffic is 4% per annum. As a simple working assumption, Port-related road traffic is forecast to grow in line with this growth in throughput.

Projections for light vehicles (cars, LGVs) are not provided within the masterplan document nor are employment projections. However, masterplans for other Irish Ports such as Foynes & Dublin have assumed light vehicle traffic and/or employment grows at a much lower rate than HGV traffic from the port, approximately 60-80% lower. Therefore, it has been assumed that light vehicles traffic from the special zones will grow in line with the link-based forecasts provided for Waterford County within PAG Unit 5.3 and outlined below in Table 5.1. This equates to a growth rates of 1.6% per annum for the lifetime of the port masterplan.

**Table 5.1: TII Waterford County Link Based Growth Rates**

Time Period	TII Central Growth Rates		
	2016-2030	2030-2040	2040-2050
<b>Annualised LV Growth Rate</b>	1.0171	1.0079	1.0073

In 2019, the operation of New Ross port was transferred to Port of Waterford Company. However, as this is a smaller port the same level of HGV growth has not been assumed, i.e. 4% per annum. The TII link based growth rates for both LV and HV have applied to this zone.

<sup>2</sup> [http://www.portofwaterford.com/uploads/download/Port\\_of\\_Waterford\\_Summary\\_WEB.pdf](http://www.portofwaterford.com/uploads/download/Port_of_Waterford_Summary_WEB.pdf)

### 5.3.3. Future Year Trip Distribution

Future year trip distribution was undertaken utilising the furnessing distribution method. Furnessing changes the demand matrix such that the matrix cells are adjusted until the row, or origin, trip totals and column, or destination, trip ends match target values. These target values are set by applying the Origin and Destination growth rates from the NTM to the base year trip end totals.

To undertake the trip distribution process, it was first necessary to ‘seed’ the cells with no trips in the base year matrices with very small numbers (0.001 vehicles) to allow for future year trips between those specific cells. Otherwise any cell with a zero will remain zero irrespective of the factor applied which may lead to less accurate forecasting. As part of the trip distribution process the matrix totals were doubly constrained to the mean of the forecast origin and destination trip end totals meaning the process was undertaken iteratively, using VISUM, until the optimal solution for both sets of trip ends was met.

### 5.3.4. Future Year Demand Forecast Totals

The total demand for each year, base and forecast, along with the growth for opening and design year percentage are presented below in Table 5.2 for each peak and mode. As shown, HGV growth is generally expected to be much higher than light vehicles growth which is line with the NTpM growth forecasts provided by TII.

**Table 5.2: Trip Matrix Growth – Central Growth Scenario**

Matrix	Demand Totals			Demand Growth	
	2020	2030	2045	2030	2045
AM Peak LV	6467	7305	7522	13.0%	16.3%
AM Peak HV	351	445	525	26.8%	49.7%
Inter Peak LV	5918	6572	6760	11.1%	14.2%
Inter Peak HV	343	420	499	22.3%	45.3%
PM Peak LV	6678	7535	7753	12.8%	16.1%
PM Peak HV	290	369	437	27.3%	50.6%

## 5.4. Future Matrix Analysis

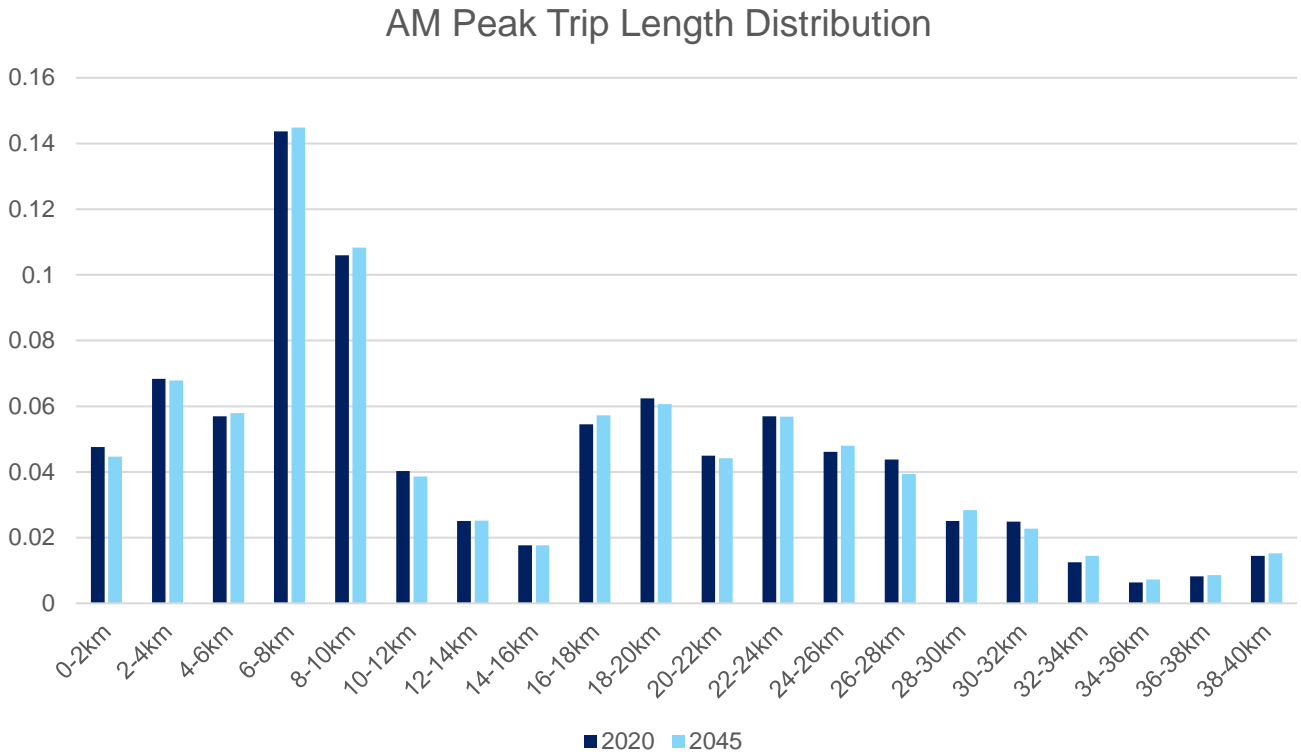
The PAG requires a quantitative assessment of the impact of the traffic forecasting process to be undertaken upon the following criteria:

- Trip Length Distribution;
- Trip End Growth; and
- Zone to Zone Growth.

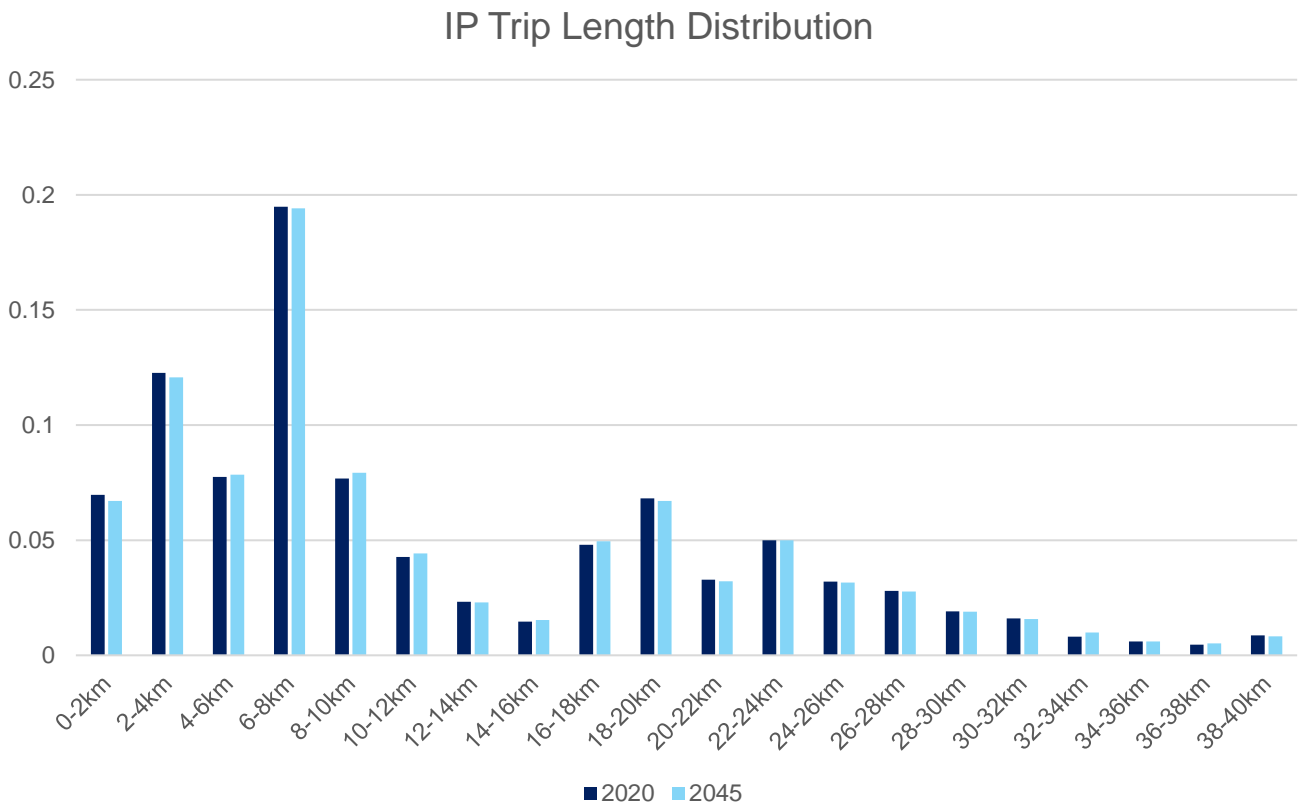
### 5.4.1. Trip Length Distribution

The graphs below show the change in trip length distribution between the 2020 Base and 2045 (Central Growth) Do-Minimum, Design Year for car trips in the modelled time periods. The 2020 trip length distribution closely matches the 2045 Do-Minimum trip length distribution, however there has been a slight increase in the proportion of middle-distance trips across the entire model area.

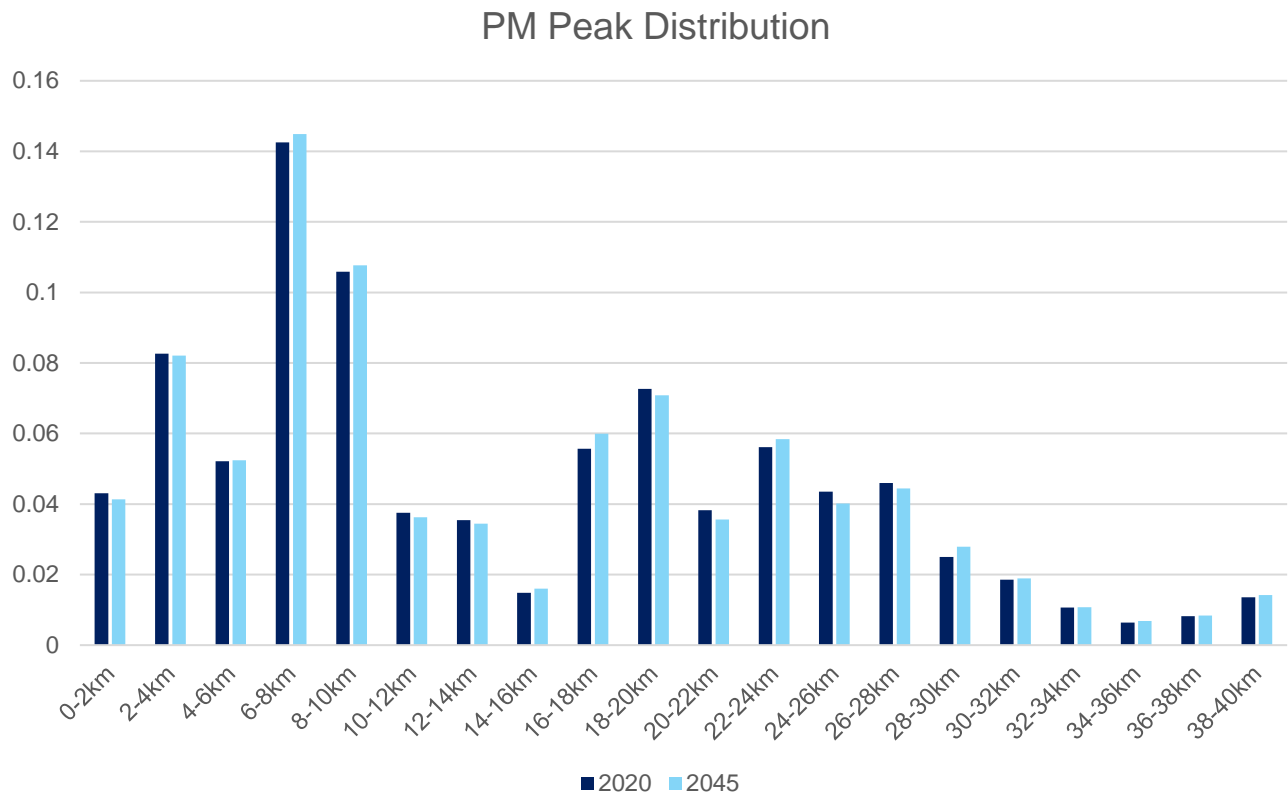
**Figure 5.1: AM Peak Base & Design Year Trip Length Distribution**



**Figure 5.2: Inter Peak Base & Design Year Trip Length Distribution**



**Figure 5.3: PM Peak Base & Design Year Trip Length Distribution**



### 5.4.2. Trip End Growth

An assessment of the Trip End Growth (TEG) between the Base and Design Year demand in the Peak Hours was undertaken to assess if there were any significant changes in demand at trip end level when compared to the overall growth between the Base and Design Year demand.

The assessment indicated that the percentage increase between several trip ends in the Base and Design Year demand was significant but that the actual increase in the number of trips was only minor. In order to assess the true magnitude of TEG, the GEH statistic was applied to the Base and Design Year trip ends in order to take account of not only the difference between the Base and Design Year demand, but also the magnitude of the difference.

Figure 5.4-5.6 illustrate the GEH between the Base and Design Year demand (Central Growth) in the modelled time periods. The PAG guidance on the GEH statistic indicates that any GEH statistic above 10 warrants further investigation. The figures show that there are no zones with a GEH statistic above 10 in any of the time periods.



Figure 5.4: AM Peak Trip End Growth GEH

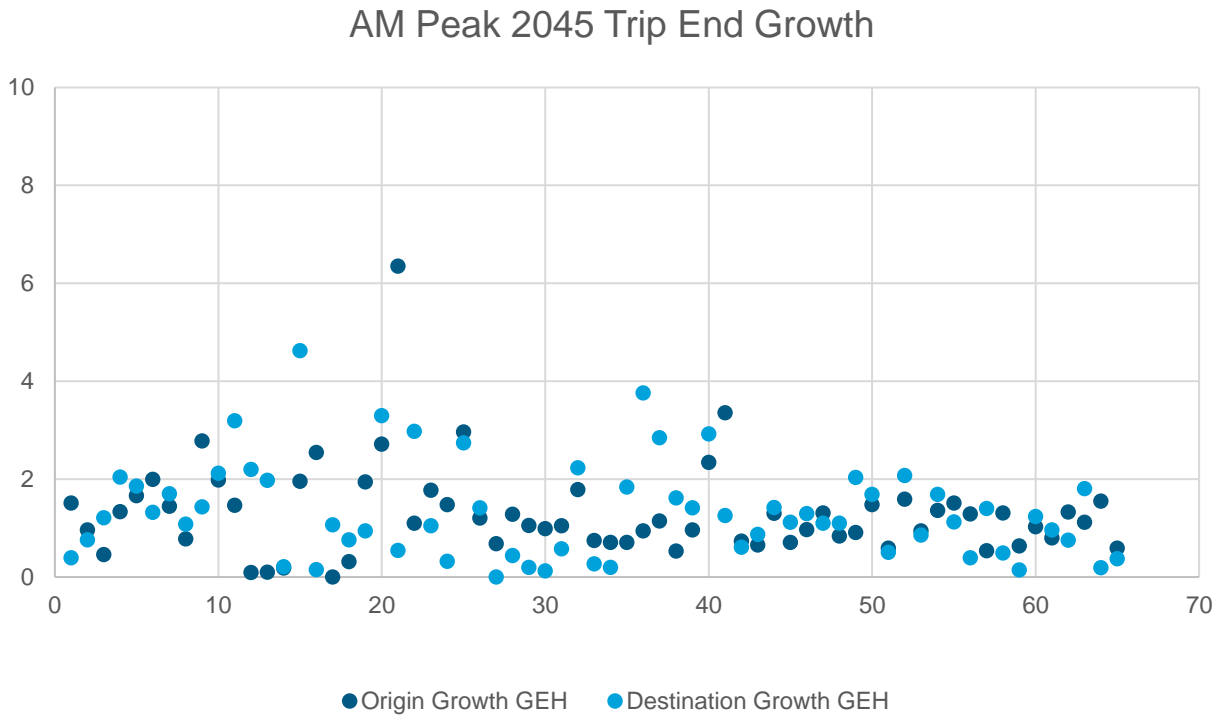
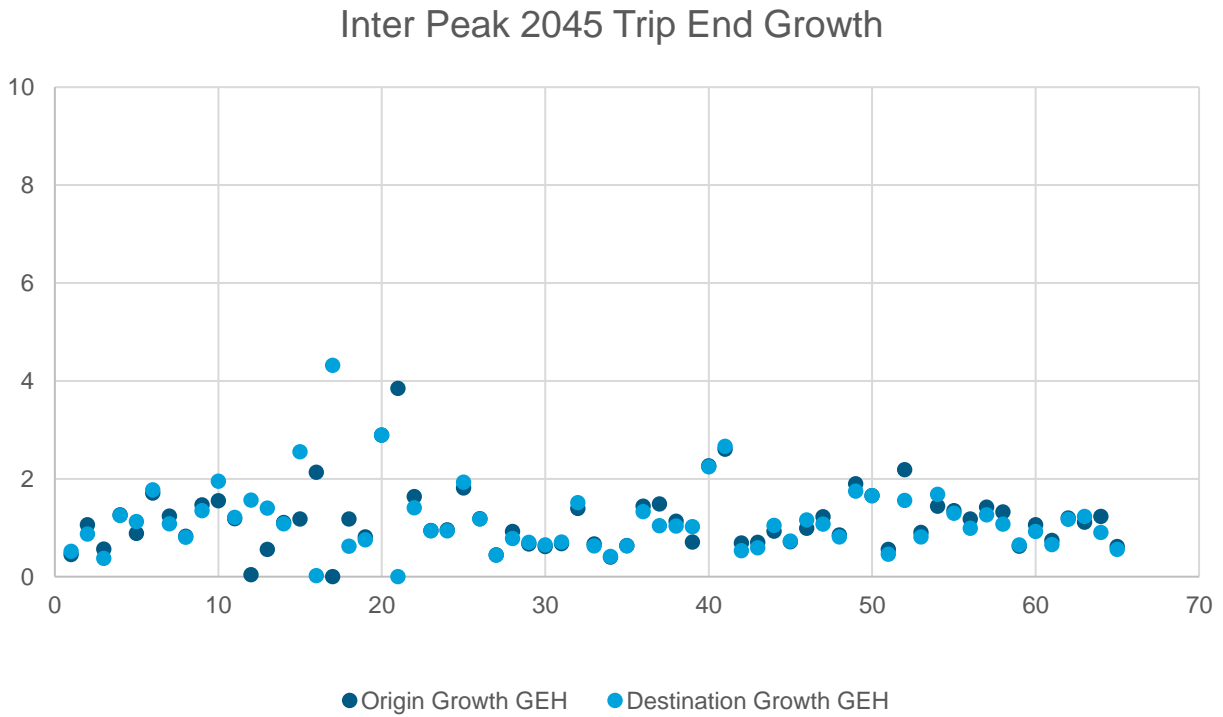
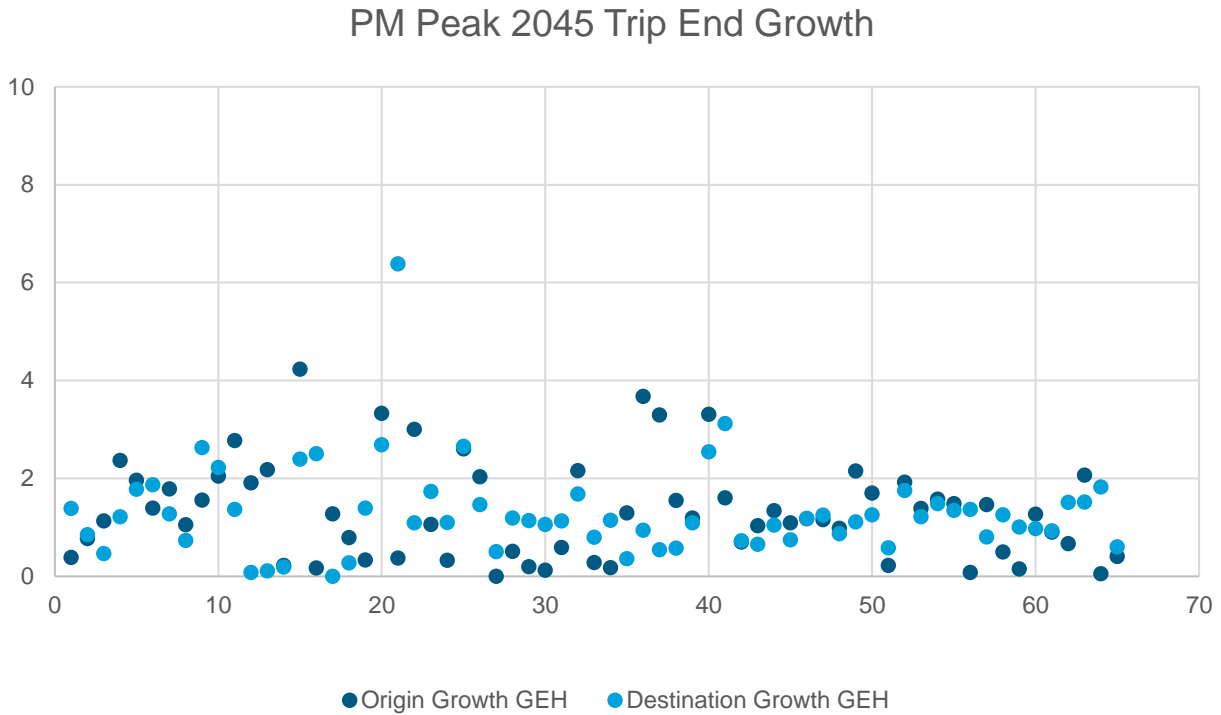


Figure 5.5: Inter Peak Trip End Growth GEH



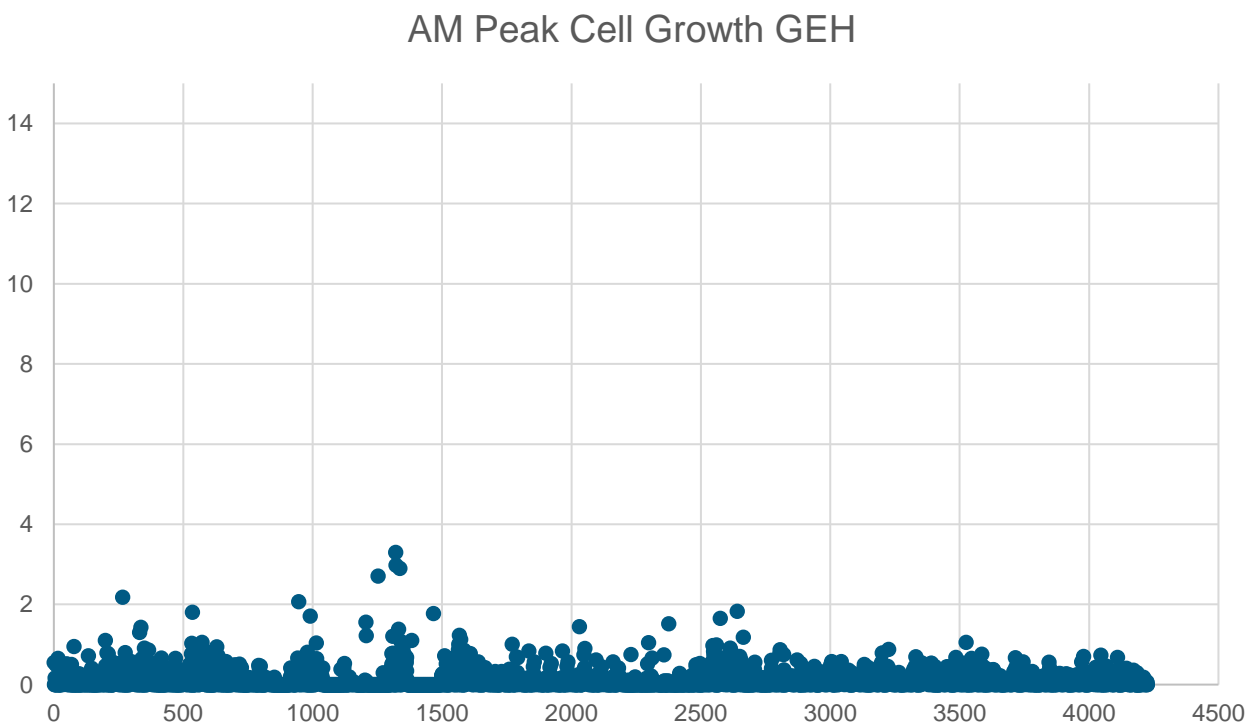
**Figure 5.6: PM Peak Trip End Growth GEH**



### 5.4.3. Zone to Zone Growth

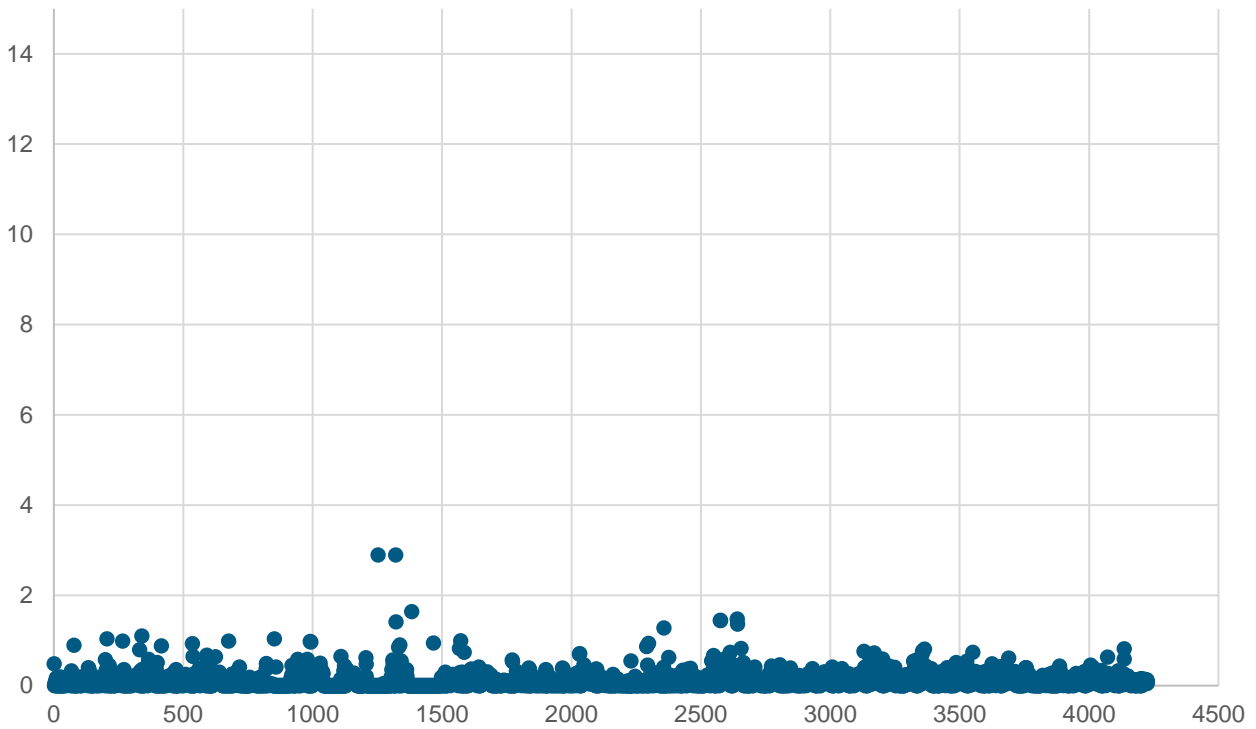
The same procedure for TEG was also undertaken for zone to zone growth. The GEH statistic for each origin-destination pair was assessed to show any significant outliers or issues in the modelled time periods. The GEH statistic on a zone to zone basis for each period is shown in the Figures below. The graphs show that there are no GEH values greater than 10 in any peak.

**Figure 5.7: AM Peak Zone to Zone Cell GEH**



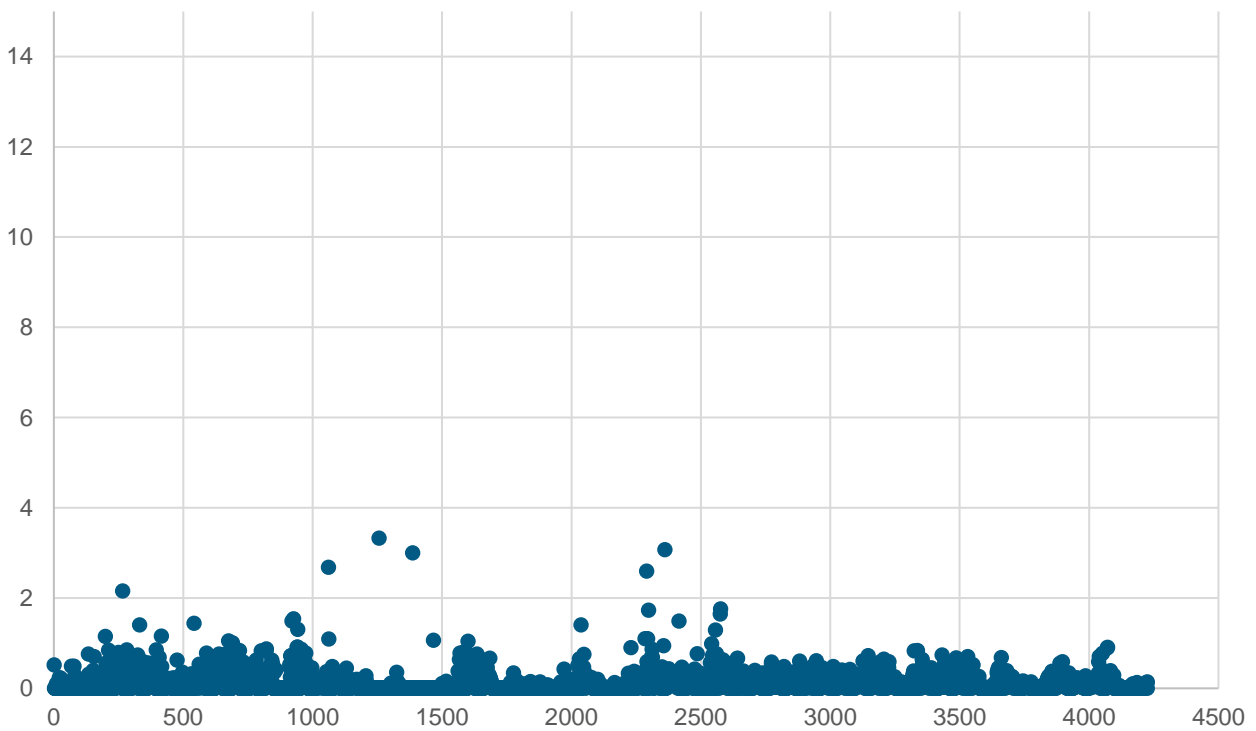
**Figure 5.8: Inter Peak Zone to Zone Cell GEH**

Inter Peak Cell Growth GEH



**Figure 5.9: PM Peak Zone to Zone Cell GEH**

PM Peak Cell Growth GEH



## 5.5. Forecast Do-Minimum Network Performance

### 5.5.1. Forecast Network Statistics

Network performance indicators for the 2030 (Opening Year) and 2045 (Design Year) are outlined in the tables below, extracted from each of the models and compared to the Base Year. For the purposes of this assessment the New Ross Bypass has been included in the 2020 Base Model in order to show a like-for-like comparison of network statistics.

As shown, there is a significant increase in vehicle kilometres and total travel time in each peak for light and heavy vehicles. This results in a decrease in average speed of between approximately 1.3%-2.9% by 2045. Though slight overall this equates to a more significant reduction in journey times along the N25 corridor as discussed further in Section 5.5.3.

**Table 5.3: Vehicle Kilometres Growth**

Time Period & Mode	Total Vehicle Kilometres (km)			Growth	
	2020	2030	2045	2030	2045
AM Peak LV	113074	127231	131484	12.5%	16.3%
AM Peak HV	10730	13429	15703	25.2%	46.4%
Inter Peak LV	82172	91437	94069	11.3%	14.5%
Inter Peak HV	10649	12741	15045	19.6%	41.3%
PM Peak LV	114551	128364	132472	12.1%	15.6%
PM Peak HV	8800	11150	13147	26.7%	49.4%

**Table 5.4: Travel Time Growth**

Time Period & Mode	Total Travel Time (Hrs)			Growth	
	2020	2030	2045	2030	2045
AM Peak LV	1957	2242	2339	14.6%	19.5%
AM Peak HV	176	224	264	27.2%	49.7%
Inter Peak LV	1465	1651	1711	12.8%	16.9%
Inter Peak HV	173	209	247	21.1%	43.4%
PM Peak LV	1989	2275	2368	14.4%	19.1%
PM Peak HV	145	187	222	29.0%	53.1%

**Table 5.5: Average Speed Reduction**

Time Period & Mode	Average Speed (kph)			Growth	
	2020	2030	2045	2030	2045
AM Peak LV	57.7	56.7	56.2	-1.8%	-2.7%
AM Peak HV	60.8	59.9	59.5	-1.6%	-2.3%
Inter Peak LV	56.1	55.3	54.9	-1.3%	-2.0%
Inter Peak HV	61.7	60.9	60.8	-1.2%	-1.5%
PM Peak LV	57.5	56.4	55.9	-2.0%	-2.9%
PM Peak HV	60.7	59.6	59.2	-1.8%	-2.4%

### 5.5.2. Forecast AADTs

Using the AADT formulae outlined in Section 4.6 the forecast AADT has been calculated for the opening and design years and is shown in Figures 5.10 & 5.11 respectively. As shown, the opening and design year AADT along the N25 Waterford to Glenmore is significantly over the 11,600 AADT capacity for Level of Service D reaching 16,100 AADT by 2045.

Figure 5.10: 2030 Opening Year AADT

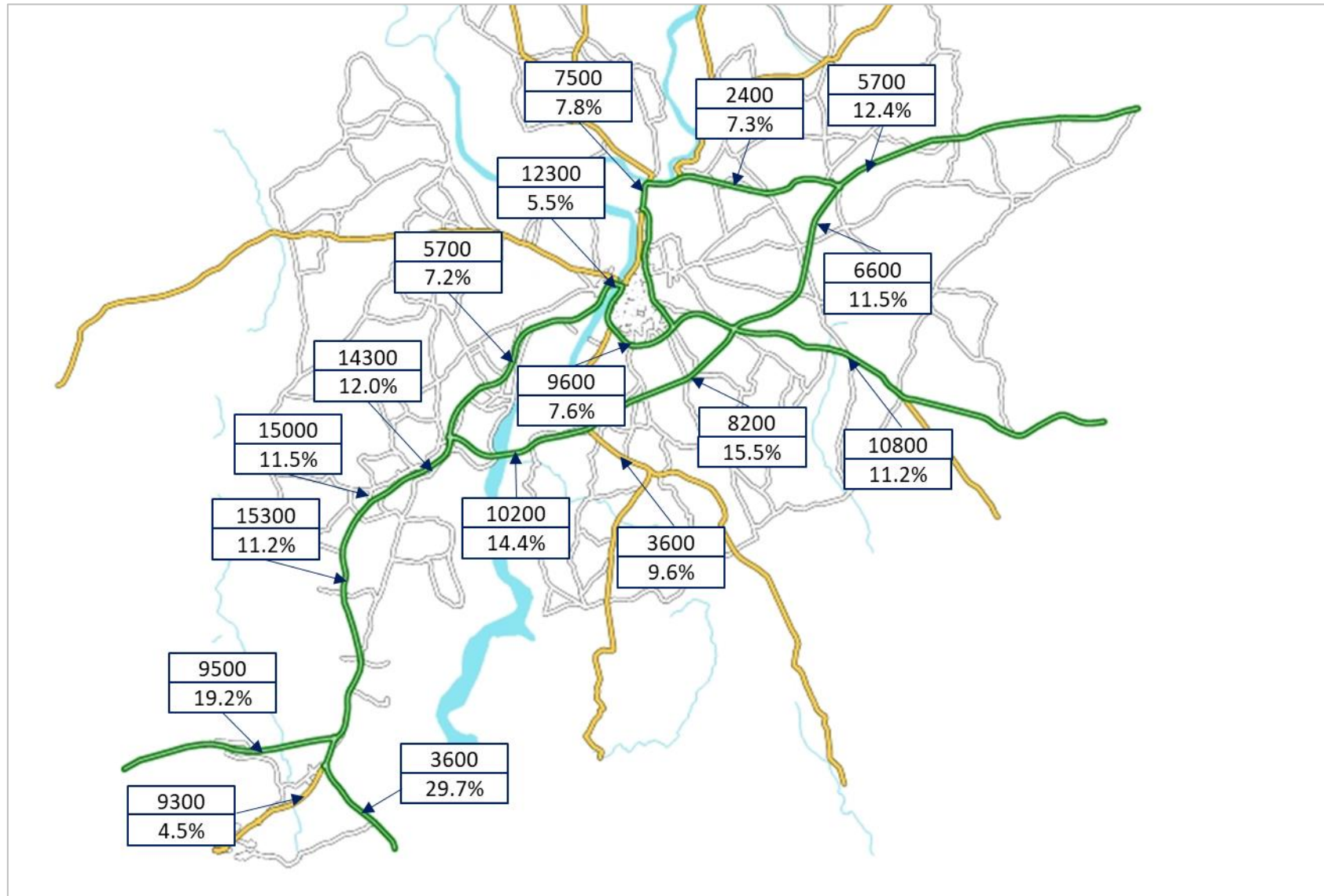
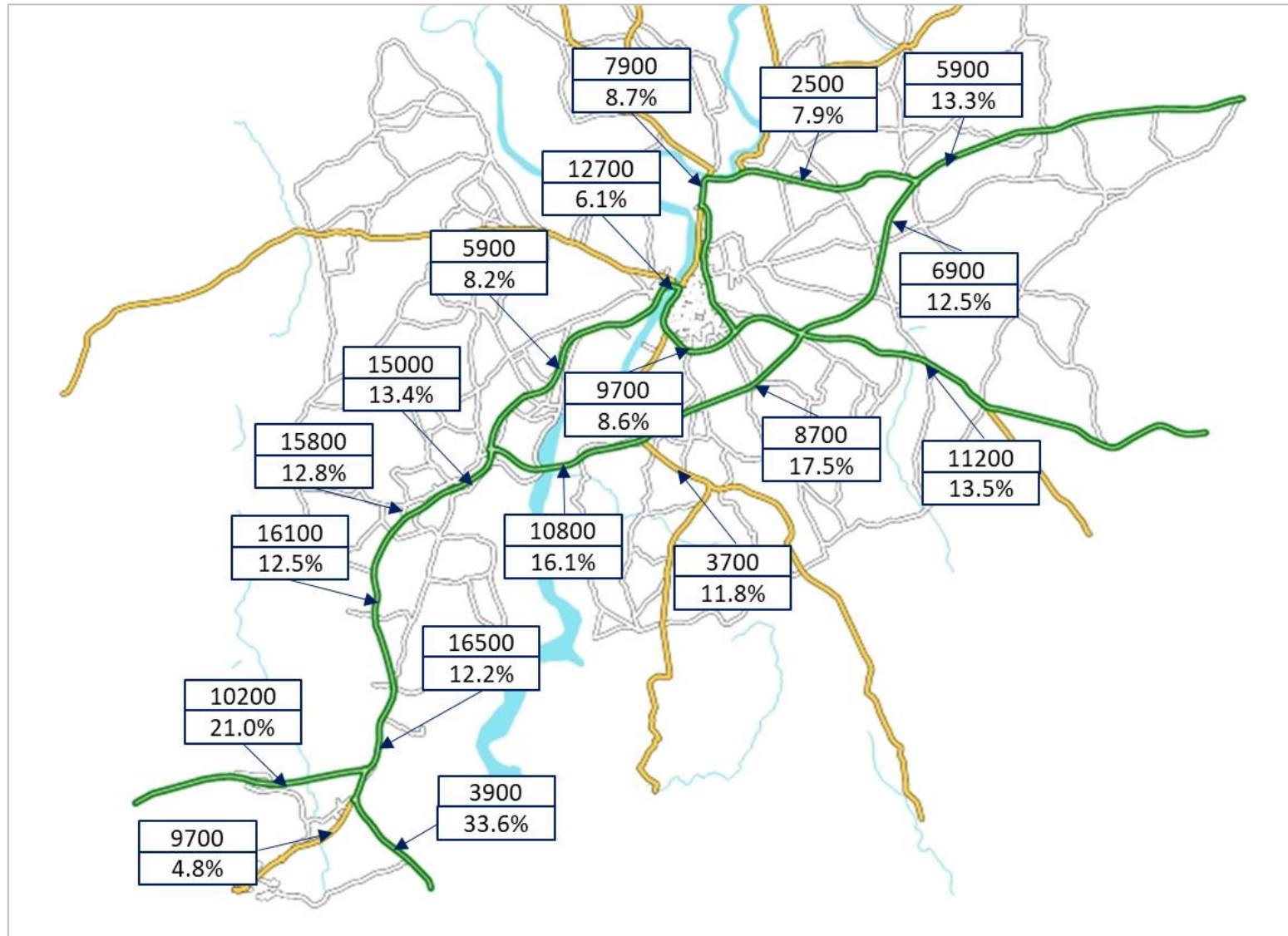


Figure 5.11: 2045 Design Year AADT



### 5.5.3. Forecast Journey Times

The journey times along the N25 corridor (between the New Ross Bypass and Waterford Bypass) have been extracted for each year and time period from the LAMs and are outlined below in Table 5.6. As shown, journey times increase by up 9.0% in the 2045 design year with approximately 41 seconds of additional delay in the peak direction during the morning and evening peak.

**Table 5.6: N25 Do-Nothing Journey Times**

Peak	Direction	2020	2030	2045	2030	2045
AM	SB	07:33	08:00	08:14	6.0%	9.1%
	NB	06:19	06:28	06:34	2.4%	4.0%
IP	SB	06:24	06:32	06:37	2.1%	3.4%
	NB	06:23	06:30	06:37	1.8%	3.7%
PM	SB	06:23	06:30	06:36	1.8%	3.4%
	NB	07:39	08:05	08:21	5.7%	9.2%

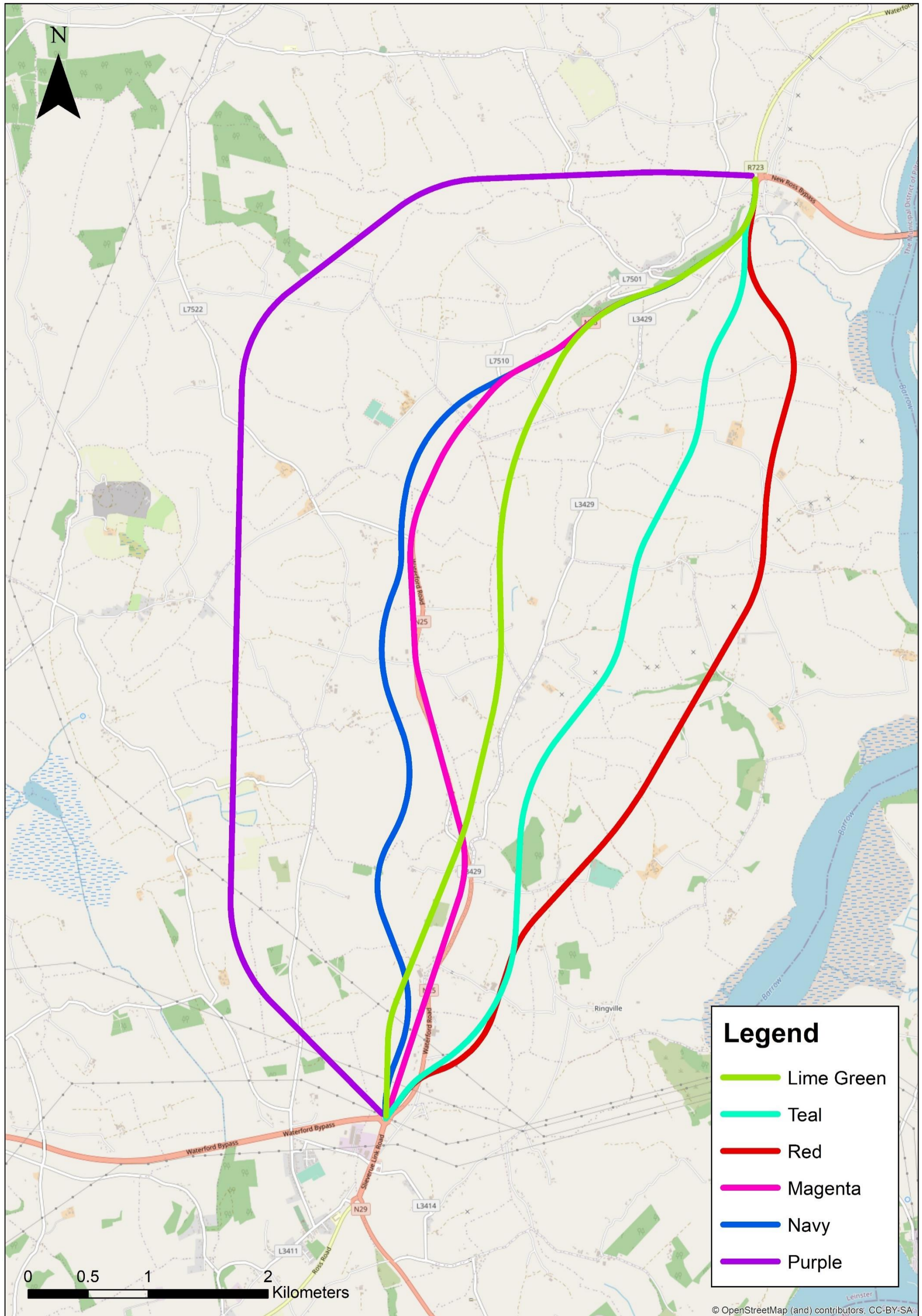
## 6. Route Options Modelling

### 6.1. Overview of Stage ii Options

A total of 6 routes were brought forward to stage II for detailed modelling following the stage I assessment. These routes are outlined in Figure 6.1 and include an online upgrade option, Magenta Route.



Figure 6.1: Stage II Route Options



For the purposes of the initial modelling of the routes it was assumed that the red, purple and teal routes did not have an interim junction along the route. However, the lime green and navy route, which are online to the north, include a grade separated junction to tie with the existing N25. For the online option, Magenta Route, it was assumed that a number of the existing accesses would be closed, and remaining accesses combined into two single junctions along the route. For each offline route option, it has been assumed that the speed limit on the existing N25 will be reduced to 80kph.

## 6.2. Network Statistics

The 6 options were coded into the Local Area model and ran in the opening and design year for each peak period. To assess the relative benefits of each route the network statistics were extracted and compared against the 'Do-Nothing' scenario. The key network statistics extracted were:

- Total Network Travel Time (hrs) for all vehicles;
- Total Network Vehicle Kilometres (vkms) for all vehicles; and
- Average Vehicle Speed (km/hr).

The 2045 design year network statistics are presented below in Tables 6.1-6.3 for each peak period. This covers the entire modelled area, including New Ross. As shown, The Teal route is the best performing option in terms of reduced vehicle hours and vehicle kilometres and resulting average speed. The Lime Green route is the next best performing based on the network statistics followed by the Red route. The Navy and Magenta are the 3<sup>rd</sup> and 2<sup>nd</sup> worst performing routes respectively. The Purple route is the worst performing route. Though it has some benefits in the AM & PM peak, the interpeak results in some disbenefits for the Purple route. This is due to the fact the route is significantly longer than the existing N25 and travel time increase as a result, see Section 6.3. A significant proportion of traffic remains on the existing N25 as a result of this, see section 6.4.

**Table 6.1: 2045 AM Peak – Network Statistics**

AM Peak	Total Trips	Total Vehicle Kilometres	Total Vehicle Hours	Average Speed
Do-Nothing	8047	147187	2603.2	56.5
Purple Route		149240	2590.7	57.6
Navy Route		147368	2550.7	57.8
Magenta Route		147411	2556.9	57.7
Red Route		146613	2543.7	57.6
Teal Route		146105	2539.7	57.5
Lime Green Route		146487	2540.9	57.7

**Table 6.2: 2045 Inter Peak – Network Statistics**

Inter Peak	Total Trips	Total Vehicle Kilometres	Total Vehicle Hours	Average Speed
Do-Nothing	7259	109115	1958.9	55.7
Purple Route		109785	1968.5	55.8
Navy Route		109197	1941.3	56.2
Magenta Route		109357	1944.8	56.2
Red Route		108702	1937.3	56.1
Teal Route		108362	1933.8	56.0
Lime Green Route		108615	1935.3	56.1

**Table 6.3: 2045 PM Peak – Network Statistics**

PM Peak	Total Trips	Total Vehicle Kilometres	Total Vehicle Hours	Average Speed
Do-Nothing	8189	145619	2590.4	56.2
Purple Route		147030	2576.4	57.1
Navy Route		145694	2535.9	57.5
Magenta Route		146114	2542.8	57.5
Red Route		144968	2529.9	57.3
Teal Route		144433	2524.2	57.2
Lime Green Route		144829	2527.1	57.3

### 6.3. Journey Times

Journey time analysis has been undertaken along the N25 between the roundabout with New Ross to the North and Luffany Roundabout to the South, in order to compare the performance of each option. The tables below present the journey time analysis for the 2045 design year in each of the three modelled time periods.

The journey time analysis shows that the Teal route performs best in terms of journey time saving along the route saving between 1min15sec and 2min53sec (a 19% - 34.5% reduction) on the northbound direction and between 1min18sec and 2min47sec (a 19.7% - 33.8% reduction) on the southbound direction when compared to the Do-Nothing (DN) scenario.

The Lime Green and Red routes perform similarly well with reduction in journey times of 16%-32% approximately, with marginally quicker journey times modelled along the Lime Green Route. The Navy and Magenta routes also perform similarly with only a very marginal differences in journey times along these routes. Overall, the reduction on the Navy and Magenta Routes is between 11%-28% approximately.

The Purple is the worst performing route comparatively and whilst there are journey time savings in the busiest direction during the morning and evening peaks, journey times actually increase when compared to the Do-Nothing scenario during the interpeak. This is due to the length of Purple route which, despite the increased road capacity, results in longer journey times when traffic volumes are lower during the interpeak.

**Table 6.4: 2045 N25 Peak Hour Journey Times**

Peak	Direction	Do-Nothing	Purple	Navy	Magenta	Red	Teal	Lime Green
AM	SB	08:14	07:08	06:00	05:59	05:41	05:27	05:37
	NB	06:34	07:02	05:50	05:49	05:32	05:19	05:28
IP	SB	06:37	06:57	05:50	05:49	05:31	05:18	05:27
	NB	06:37	07:01	05:51	05:50	05:32	05:19	05:28
PM	SB	06:36	06:57	05:49	05:49	05:31	05:18	05:27
	NB	08:21	07:10	06:01	06:01	05:42	05:28	05:38

**Table 6.5: 2045 N25 Peak Hour Journey Times – Percentage Difference**

Peak	Direction	Do-Nothing	Purple	Navy	Magenta	Red	Teal	Lime Green
AM	SB	08:14	-13.4%	-27.1%	-27.3%	-31.0%	-33.8%	-31.8%
	NB	06:34	7.1%	-11.2%	-11.4%	-15.7%	-19.0%	-16.8%
IP	SB	06:37	5.0%	-11.8%	-12.1%	-16.6%	-19.9%	-17.6%
	NB	06:37	6.0%	-11.6%	-11.8%	-16.4%	-19.6%	-17.4%
PM	SB	06:36	5.3%	-11.9%	-11.9%	-16.4%	-19.7%	-17.4%
	NB	08:21	-14.2%	-27.9%	-27.9%	-31.7%	-34.5%	-32.5%

## 6.4. Traffic Volumes

In addition to the network statistics the estimated AADT along each route option has been calculated for each of the modelled scenarios using the AADT factors outlined in Section 4.6. These are presented in Figures 6.2-6.7 for each route option. As shown, the lowest levels of AADT are along the Purple Route, Figure 6.2, where less than half of the traffic transfers from the existing N25 due to the length of proposed route option and resulting journey times. The highest AADTs are modelled along the Magenta Route, Figure 6.4, which is the online option. The highest AADT along an offline route option is 15,400 which is along the Lime Green route, Figure 6.7, followed by 15,300 along the Navy Route, Figure 6.3. Both the Red and Teal Route carry 14,600 AADT in the design year.

Figure 6.2: Purple Route – 2045 AADT

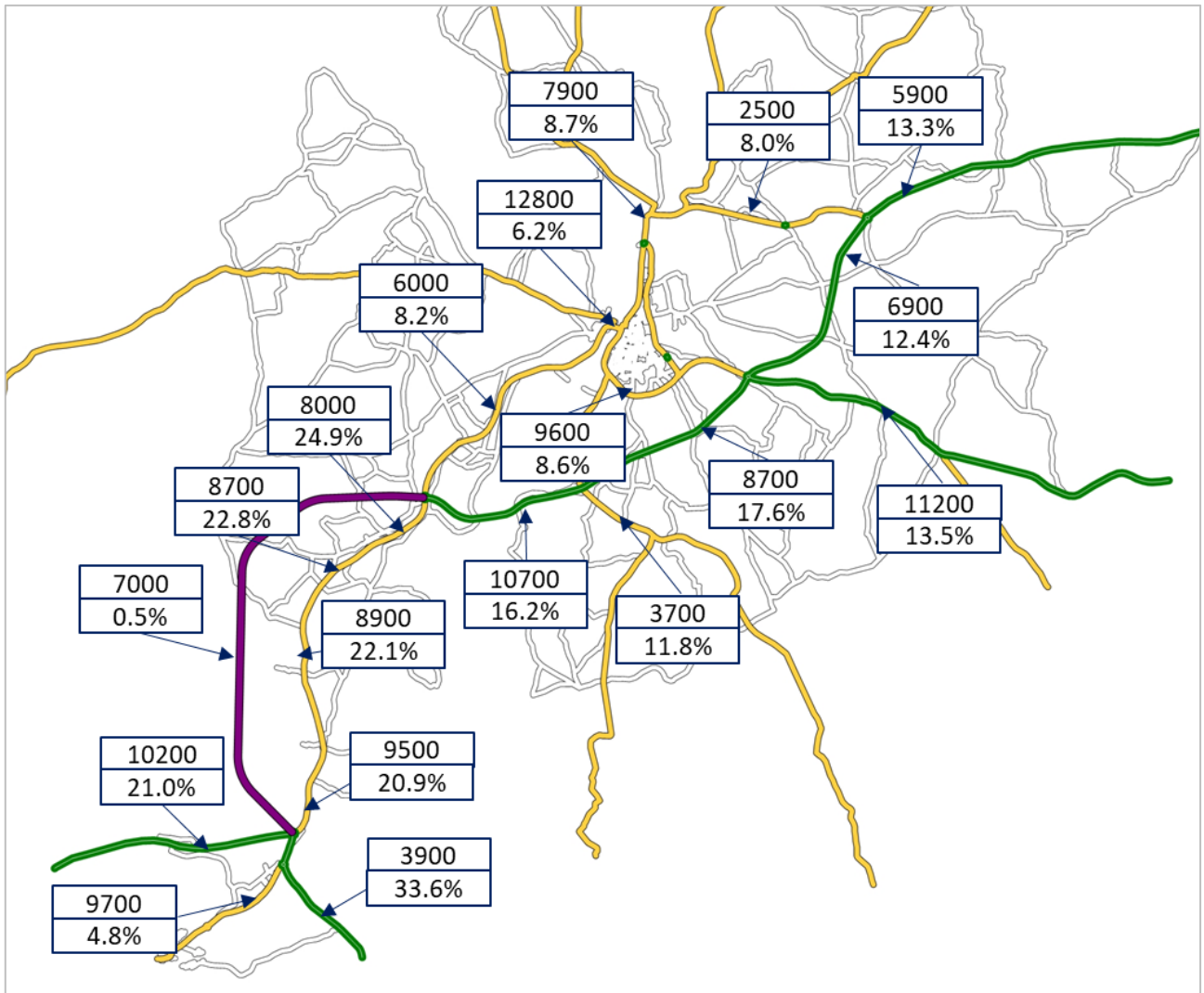


Figure 6.3: Navy Route – 2045 AADT

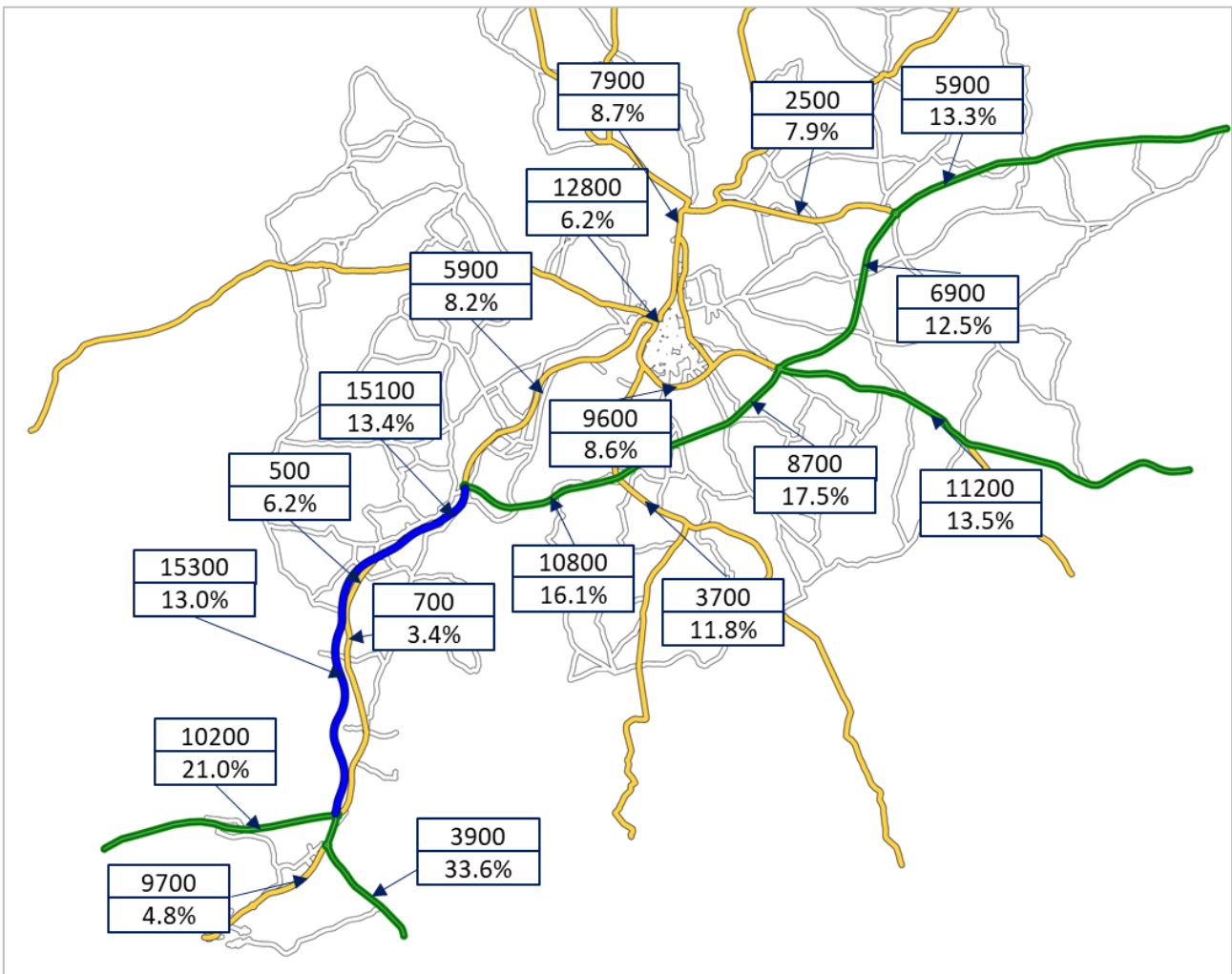


Figure 6.4: Magenta Route – 2045 AADT

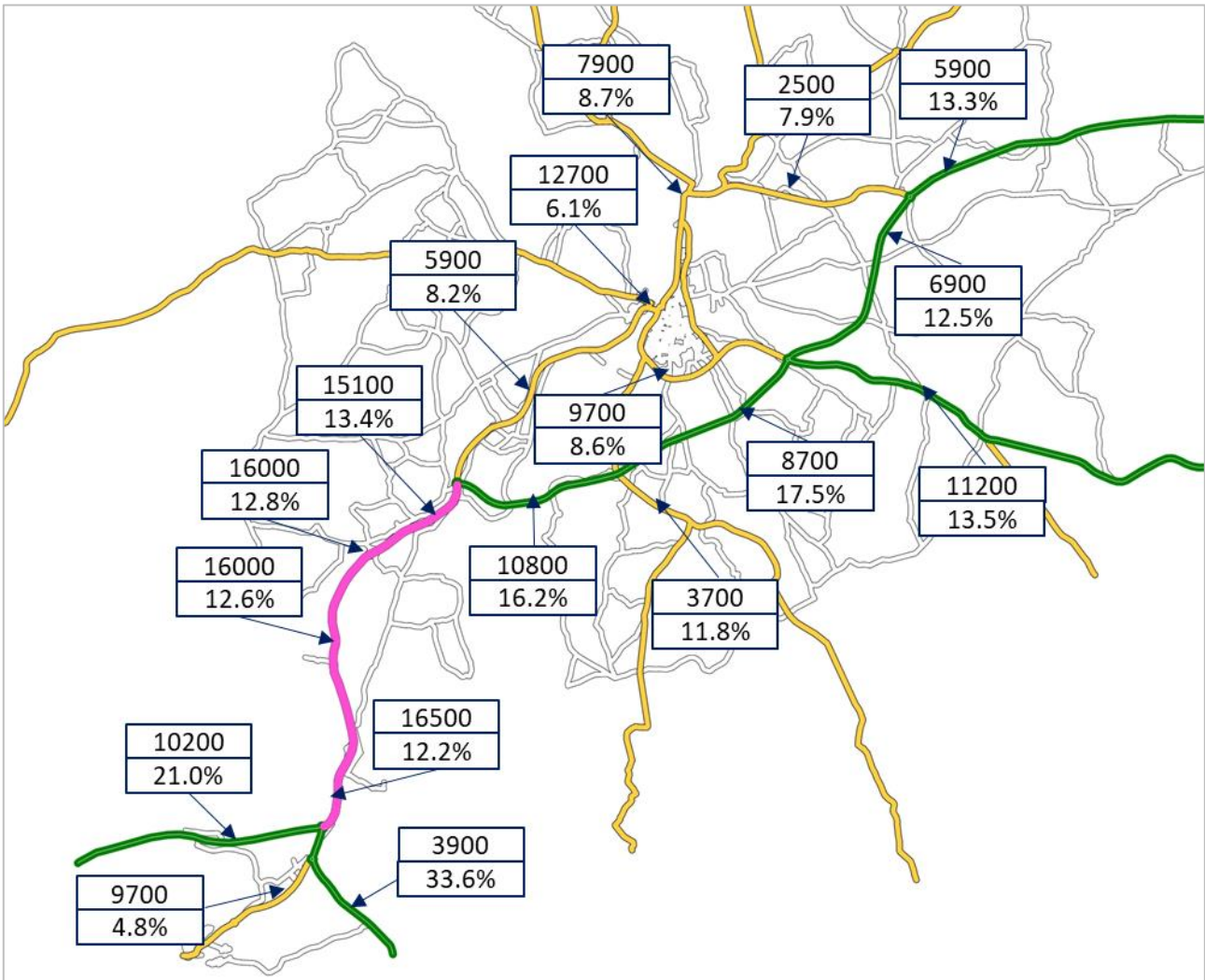


Figure 6.5: Red Route – 2045 AADT

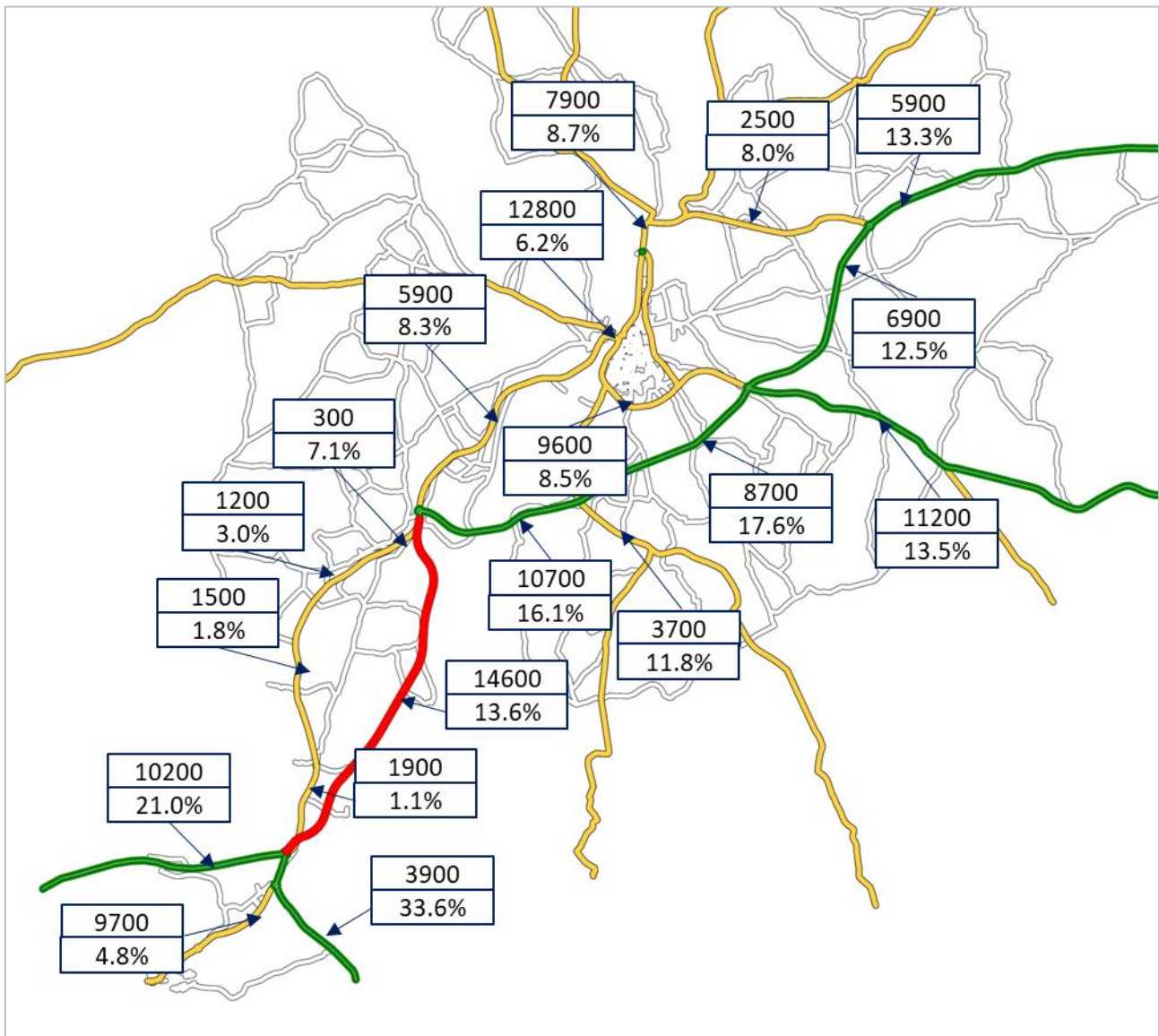




Figure 6.6: Teal Route – 2045 AADT

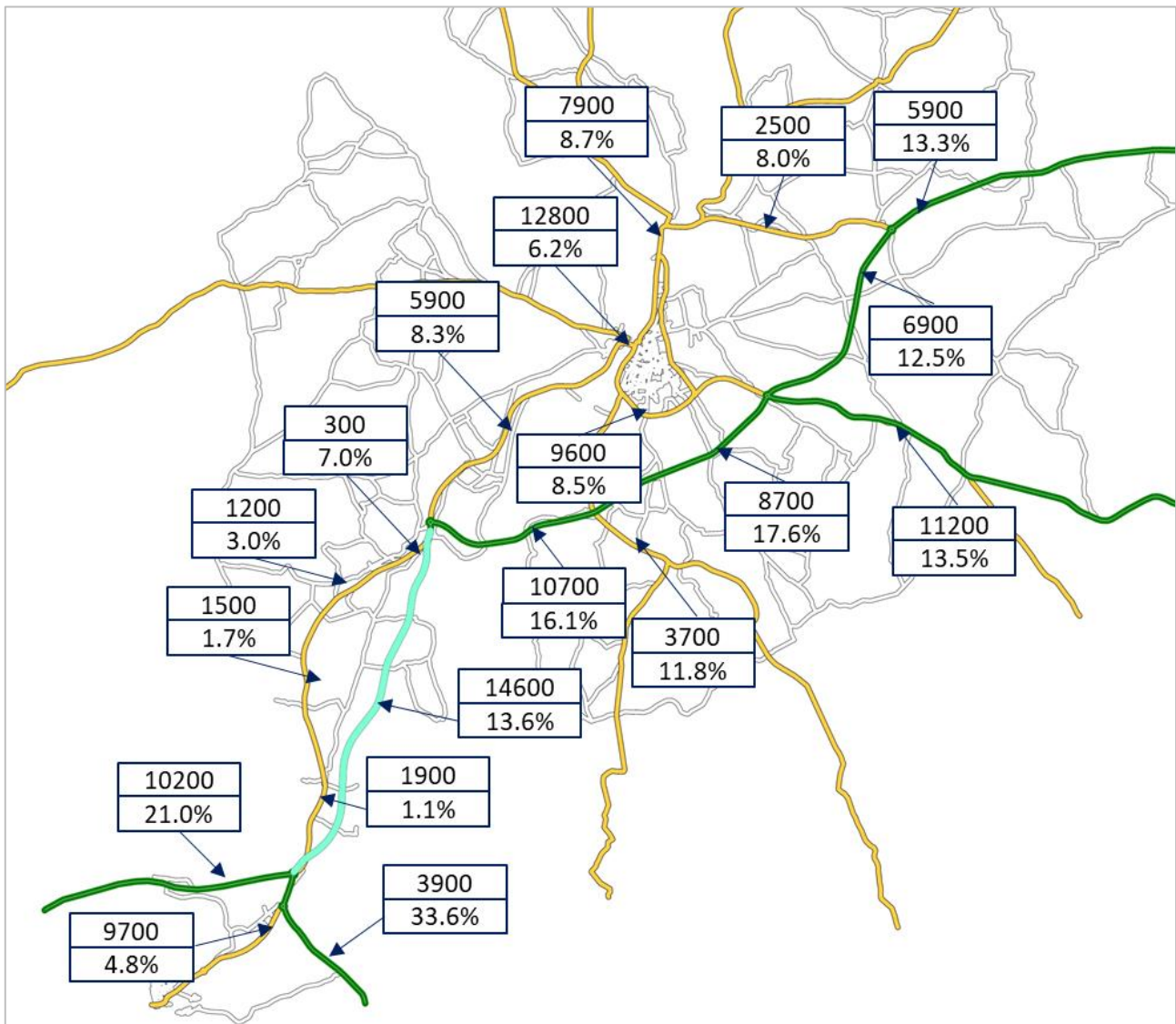
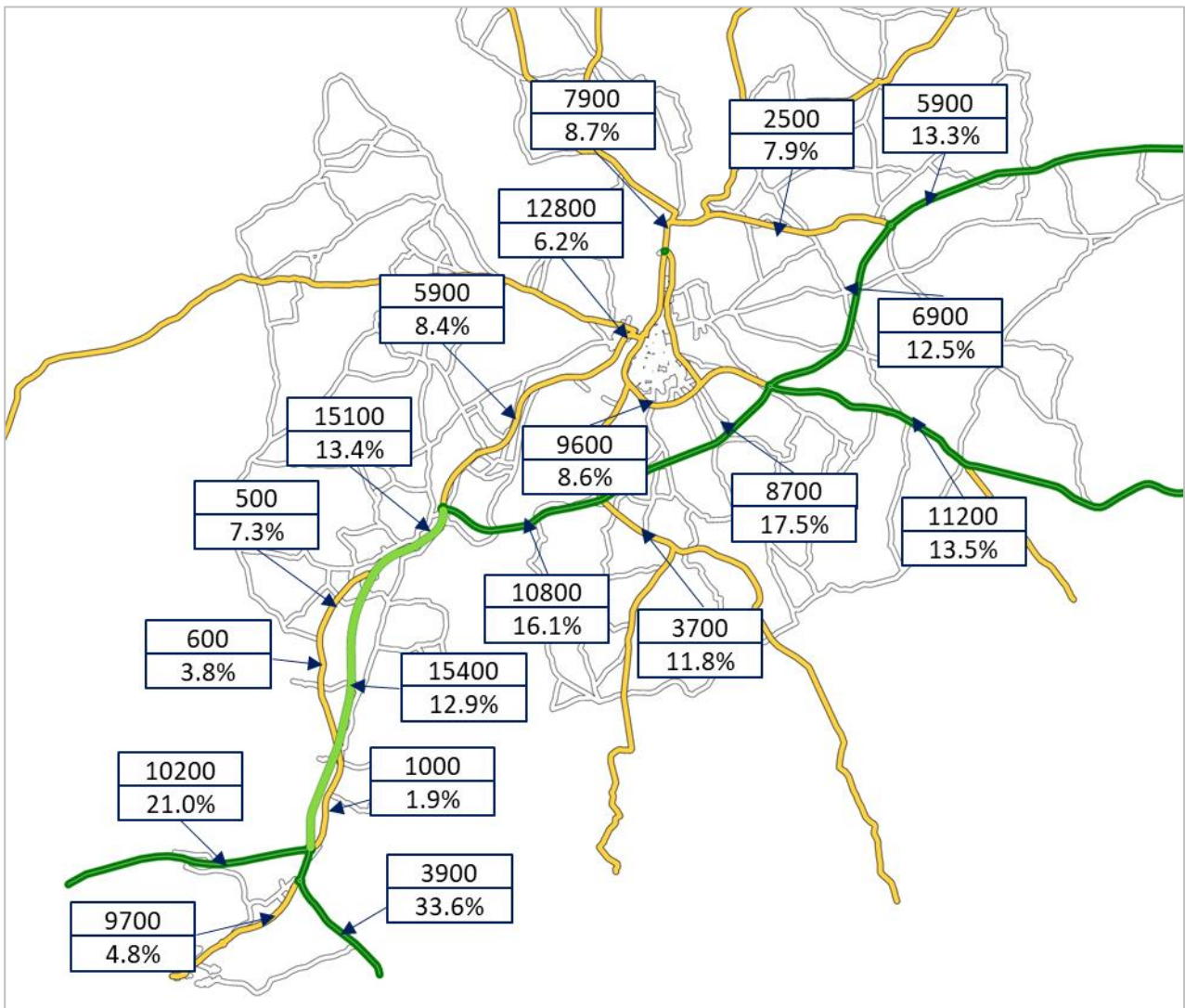


Figure 6.7: Lime Green Route – 2045 AADT



## 7. Summary

### 7.1. Purpose of the Report

This Traffic Modelling Report documents the development of the N25 Local Area Traffic Model in accordance with TII Project Appraisal Guidance. This LAM has been developed to inform the Phase 2 Option Selection process for the upgrade of the N25 between Waterford and Glenmore, forecasting the traffic flows and associated impacts of different scheme options. Outputs from the model have also be used to inform the economic and environmental appraisal of the options tested.

### 7.2. Base Year Models

The LAM has been developed, calibrated and validated to reflect the observed base year (2020) traffic conditions for the following time periods:

- AM Morning peak period:
- PM Evening peak period:
- Inter peak period:

The model has been calibrated and validated in-line with TII Project Appraisal Guidelines and conforms to all calibration and validation criteria specified in PAG Unit 5.1 for each period modelled. The N25 LAM is therefore considered fit for purpose and provides a robust basis for assessing the proposed route options.

### 7.3. Future Year Models

The report also details the development of the future year models used in the Phase 2 Route Options Selection. Again, the model meets all TII requirements and criteria with regard to forecasting and future year model development. The Future Year models were developed for an opening year of 2030 and design year of 2045.

Initial outputs from the model show the AADT demand along the corridor will grow by approximately 22% by 2045, significantly above the AADT capacity required to deliver LOS D or above. This in turn will lead to increases journey times and delays along the corridor.

### 7.4. Option Assessment

Six route options have been brought forward from the Stage i appraisal and assessed against the Do-Nothing Scenario using the Future Year Local Area Models. The following indicators have been used to assess the performance of each option –

- Network Performance Statistics;
- Journey Times; and
- Traffic Volumes.

The Network Performance Statistics indicate that all options, with the exception of the Purple Route, reduce the total travel time throughout the study area relative to the Do-Nothing Scenario. The Teal route delivers the greatest reduction in vehicle hours and vehicle kilometres and resultant increase in average speed. This is followed by the Red and Lime Green routes which perform similarly well. The Navy and Magenta routes are the 2<sup>nd</sup> and 3<sup>rd</sup> worst performing routes in terms of overall time savings. The Purple route performs the worst of all the route options in terms of the Network Statistics due to the longer route length. The performance of each route in terms of time savings is outlined in Table 7.1.

**Table 7.1: 2045 Time Savings by Route Option & Time Period**

Route	Modelled Time Savings (Hrs)		
	AM	IP	PM
Purple Route	12.5	-9.6	14.0
Navy Route	52.5	17.6	54.5
Magenta Route	46.3	14.1	47.6
Red Route	59.5	21.6	60.5
Teal Route	63.5	25.1	66.2
Lime Green Route	62.3	23.6	63.3

The journey time analysis shows that the Teal route performs best in terms of journey time saving along the route compared to the Do-Nothing with a 19% - 34.5% reduction in the northbound direction and a 19.7% - 33.8% reduction in the southbound direction across all time periods. The Lime Green and Red routes perform similarly well with reduction in journey times of 16%-32% approximately, with marginally quicker journey times modelled along the Lime Green Route. The Navy and Magenta routes also perform similarly with only very marginal differences in journey times along these routes. Overall, the reduction on the Navy and Magenta Routes is between 11%-28% approximately. The Purple is again the worst performing route comparatively and only provides journey time savings in the southbound direction during the AM peak and the northbound direction in the PM period. A summary of the percentage reduction in journey times along each route option compared to the Do-Nothing Scenario is presented in Table 7.2.

**Table 7.2: 2045 N25 Journey Time Savings by Route Option & Time Period**

Peak	Direction	Do-Nothing	Purple	Navy	Magenta	Red	Teal	Lime Green
AM	SB	08:14	-13.40%	-27.10%	-27.30%	-31.00%	-33.80%	-31.80%
	NB	06:34	7.10%	-11.20%	-11.40%	-15.70%	-19.00%	-16.80%
IP	SB	06:37	5.00%	-11.80%	-12.10%	-16.60%	-19.90%	-17.60%
	NB	06:37	6.00%	-11.60%	-11.80%	-16.40%	-19.60%	-17.40%
PM	SB	06:36	5.30%	-11.90%	-11.90%	-16.40%	-19.70%	-17.40%
	NB	08:21	-14.20%	-27.90%	-27.90%	-31.70%	-34.50%	-32.50%

In terms of AADT and transference of traffic from the existing N25, the highest AADTs are modelled along the Magenta Route, the online option. The highest AADT along an offline route option is 15,400 which is along the Lime Green route, followed by 15,300 along the Navy Route. Both the Red and Teal Route carry approximately 14,600 AADT in the design year. The Lime Green and Navy Route experience higher levels of AADT as there is an interim junction with the N25 and some traffic travelling to or from locations along the route utilise the new road. The Red and Teal have slightly lower level of AADT as there is no interim junction assumed as they are further removed from the existing carriageway. The Purple route has an AADT of 7,000 as traffic, particular HGV and car traffic in the IP, fails to transfer due to the higher journey times. The AADT for each route option level of transference from the existing N25 is outlined in Table 7.3.

**Table 7.3: 2045 AADT & Transference by Route Option**

Route	AADT	Transference
Purple Route	7000	43.8%
Navy Route	15300	95.6%
Magenta Route	16000	100.0%
Red Route	14600	91.3%
Teal Route	14600	91.3%
Lime Green Route	15400	96.3%

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## Appendix B. COBALT Output Files



[Section 1.1] Economic Summary

Total Without-Scheme Collision Costs =	68,891.8
Total With-Scheme Collision Costs =	65,913.5
Total Collision Benefits Saved by Scheme =	2,978.4

Costs and benefits discounted to 2011 in multiples of a thousand euros.

[Section 1.2] Collision Summary

Total Without-Scheme Collisions =	1,192.0
Total With-Scheme Collisions =	1,185.8
Total Collisions Saved by Scheme =	6.2

This analysis includes 229 serious error(s).  
These results should not be considered usable.

This analysis includes 117 warning(s).  
These results should be considered carefully before using.

[Section 1.3] Casualty Summary

Total Without-Scheme Casualties (Fatal) =	37.1
(Serious) =	90.0
(Slight) =	1,726.8
Total With-Scheme Casualties (Fatal) =	34.9
(Serious) =	85.3
(Slight) =	1,702.8
Total Casualties Saved by Scheme (Fatal) =	2.2
(Serious) =	4.7
(Slight) =	23.9

This analysis includes 229 serious error(s).  
These results should not be considered usable.

This analysis includes 117 warning(s).  
These results should be considered carefully before using.

[Section 2] Combined Link and Junction Collision Statistics

Scheme	*----- Without-Scheme -----*			*----- With-			
	*----- Benefits -----*			*-----			
Collisions -*	Total*	*-- Number of Collisions -*	Total*	*-- Number of	Total*		
Link Name	*	2030	2045	Total*	Cost* *	2030	2045



Total*	Cost* *	2030	2045	Total*	Benefit*		
897		0.1	0.1	1.7	50.4	0.1	0.1
1.7	50.4	0.0	0.0	0.0	0.0		
900		0.1	0.1	2.0	57.9	0.1	0.1
2.0	57.9	0.0	0.0	0.0	0.0		
901		0.2	0.2	5.1	146.9	0.0	0.0
0.0	0.0	0.2	0.2	5.1	146.9		
906		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
923		0.2	0.2	6.2	407.4	0.2	0.2
6.2	407.4	0.0	0.0	0.0	0.0		
1495		0.1	0.1	1.8	120.0	0.1	0.1
1.8	120.0	0.0	0.0	0.0	0.0		
1497		0.0	0.0	1.4	93.6	0.0	0.0
1.4	93.6	0.0	0.0	0.0	0.0		
1499		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1504		0.1	0.1	2.8	186.3	0.1	0.1
2.8	186.3	0.0	0.0	0.0	0.0		
1505		0.4	0.4	11.0	730.1	0.4	0.4
11.0	730.1	0.0	0.0	0.0	0.0		
1506		0.1	0.1	4.2	275.5	0.1	0.1
4.2	275.5	0.0	0.0	0.0	0.0		
1515		1.1	1.1	33.9	1,217.0	1.1	1.1
33.9	1,217.0	0.0	0.0	0.0	0.0		
1590		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1591		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
44747		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
45876		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48840		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48953		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49089		0.1	0.1	3.4	97.4	0.1	0.1
3.4	97.7	0.0	0.0	0.0	-0.3		
49185		0.8	0.7	22.0	638.3	0.8	0.7
22.1	639.7	0.0	0.0	-0.1	-1.4		
49353		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49552		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49560		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49630		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49684		0.1	0.1	3.9	257.4	0.1	0.1
3.9	256.2	0.0	0.0	0.0	1.2		
49717		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49842		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
50060		0.3	0.3	9.4	272.7	0.3	0.3
9.4	272.8	0.0	0.0	0.0	-0.1		
50401		1.0	1.0	28.7	831.7	1.0	1.0
28.6	827.8	0.0	0.0	0.1	3.9		

50515		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50542		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50600		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50648		0.3	0.2	7.3	486.2	0.3	0.2	
7.3	486.2	0.0	0.0	0.0	0.0			
50653		0.1	0.1	3.1	89.1	0.1	0.1	
3.1	89.5	0.0	0.0	0.0	-0.3			
50686		0.3	0.3	9.5	275.3	0.3	0.3	
9.6	278.2	0.0	0.0	-0.1	-3.0			
554437085		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554437089		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445417		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445421		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445424		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445434		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445603		0.3	0.3	8.9	258.0	0.3	0.3	
8.9	258.1	0.0	0.0	0.0	-0.1			
554445605		0.1	0.1	3.2	91.5	0.1	0.1	
3.2	91.5	0.0	0.0	0.0	0.0			
554445606		0.1	0.1	2.1	59.7	0.1	0.1	
2.1	59.9	0.0	0.0	0.0	-0.2			
554445611		0.1	0.1	2.0	58.0	0.1	0.1	
2.0	58.4	0.0	0.0	0.0	-0.4			
554445616		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445660		0.1	0.1	3.8	110.9	0.1	0.1	
3.8	111.2	0.0	0.0	0.0	-0.3			
554445681		0.0	0.0	0.7	19.6	0.0	0.0	
0.7	19.7	0.0	0.0	0.0	-0.1			
554451601		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451604		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451606		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451619		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451621		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469301		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469376		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469377		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469379		0.1	0.1	4.0	114.9	0.1	0.1	
4.0	115.6	0.0	0.0	0.0	-0.7			
554469380		0.1	0.1	2.8	81.8	0.1	0.1	
2.8	82.1	0.0	0.0	0.0	-0.3			
554469383		0.1	0.1	2.9	83.5	0.1	0.1	

2.9	83.8	0.0	0.0	0.0	-0.3		
	554469386	0.1	0.1	2.5	73.8	0.1	0.1
2.6	73.9	0.0	0.0	0.0	-0.1		
	554469390	0.0	0.0	1.0	67.5	0.0	0.0
1.0	67.4	0.0	0.0	0.0	0.1		
	554476250	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476251	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476254	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476255	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476258	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476263	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476268	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476273	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476275	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476276	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476314	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476317	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476318	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476321	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476331	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476332	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476337	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476339	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476344	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476347	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554478297	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554478964	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554478965	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554479189	0.0	0.0	0.7	43.7	0.0	0.0
0.7	43.7	0.0	0.0	0.0	0.0		
	554479190	0.0	0.0	0.1	9.2	0.0	0.0
0.1	9.2	0.0	0.0	0.0	0.0		
	554499930	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554499931	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

554499943	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
559752177	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
562717850	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578082733	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578088741	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814444	0.1	0.1	1.7	47.9	0.1	0.1	
1.7	48.0	0.0	0.0	0.0	-0.2		
587814449	0.1	0.1	2.2	62.9	0.1	0.1	
2.2	63.1	0.0	0.0	0.0	-0.2		
587814450	0.0	0.0	0.6	18.2	0.0	0.0	
0.6	18.3	0.0	0.0	0.0	-0.1		
587814454	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814456	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814797	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814807	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814808	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814809	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814811	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814819	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814822	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814825	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814826	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815160	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815163	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815170	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815171	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815173	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815174	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815269	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815274	0.0	0.0	0.0	0.0	0.0	0.0	0.0





0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817228	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817230	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817231	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817234	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817269	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817271	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817272	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817274	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817275	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817314	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817316	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817318	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817319	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817447	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817448	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817453	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015491	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015493	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015494	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589626976	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481852	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481853	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481868	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2.1	590522243	0.1	0.1	2.1	60.1	0.1	0.1
0.9	60.1	0.0	0.0	0.0	0.0		
0.0	590522244	0.0	0.0	0.9	25.3	0.0	0.0
0.0	25.3	0.0	0.0	0.0	0.0		
0.0	590522245	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1139400830	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1148054292	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1164076472	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

1165618763	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1167345578	0.0	0.0	1.0	69.2	0.0	0.0	0.0
1.0	69.2	0.0	0.0	0.0	0.0	0.0	0.0
1176181443	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1176242672	0.1	0.1	4.2	280.6	0.1	0.1	0.1
4.2	280.6	0.0	0.0	0.0	0.0	0.0	0.0
1186121768	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2122362473	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147474988	1.1	1.1	31.6	2,096.4	1.1	1.1	1.1
31.6	2,096.4	0.0	0.0	0.0	0.0	0.0	0.0
2147475007	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147475798	0.5	0.5	14.7	973.5	0.5	0.5	0.5
14.7	973.5	0.0	0.0	0.0	0.0	0.0	0.0
2147475799	0.3	0.3	8.1	539.8	0.3	0.3	0.3
8.1	539.8	0.0	0.0	0.0	0.0	0.0	0.0
2147475801	0.2	0.2	5.3	354.4	0.2	0.2	0.2
5.3	352.7	0.0	0.0	0.0	1.7	0.0	0.0
2147475949	0.2	0.2	5.2	342.9	0.2	0.2	0.2
5.2	342.9	0.0	0.0	0.0	0.0	0.0	0.0
2147481733	0.0	0.0	0.1	3.5	0.0	0.0	0.0
0.1	3.5	0.0	0.0	0.0	0.0	0.0	0.0
2147481754	0.0	0.0	1.2	79.0	0.0	0.0	0.0
1.2	79.0	0.0	0.0	0.0	0.0	0.0	0.0
2147481911	0.3	0.3	8.1	535.8	0.3	0.3	0.3
8.1	535.8	0.0	0.0	0.0	0.0	0.0	0.0
2147481977	0.5	0.4	13.1	869.9	0.5	0.4	0.4
13.1	869.9	0.0	0.0	0.0	0.0	0.0	0.0
2147482906	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482907	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482908	0.1	0.1	3.5	231.7	0.1	0.1	0.1
3.5	230.2	0.0	0.0	0.0	1.5	0.0	0.0
2147482912	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482916	0.0	0.0	1.2	34.7	0.0	0.0	0.0
1.2	34.7	0.0	0.0	0.0	0.0	0.0	0.0
2147482917	0.0	0.0	1.3	38.6	0.0	0.0	0.0
1.3	38.7	0.0	0.0	0.0	0.0	0.0	0.0
2147482919	0.3	0.3	8.1	538.5	0.3	0.3	0.3
8.1	538.5	0.0	0.0	0.0	0.0	0.0	0.0
2147482922	0.2	0.2	5.0	329.9	0.2	0.2	0.2
4.9	327.5	0.0	0.0	0.0	2.4	0.0	0.0
2147482923	0.0	0.0	0.6	41.2	0.0	0.0	0.0
0.6	40.9	0.0	0.0	0.0	0.3	0.0	0.0
2147482924	0.0	0.0	0.9	62.7	0.0	0.0	0.0
0.9	62.4	0.0	0.0	0.0	0.3	0.0	0.0
2147482925	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482926	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482927	0.0	0.0	0.0	0.2	0.0	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482928	0.0	0.0	0.1	6.6	0.0	0.0	0.0



0.1	6.6	0.0	0.0	0.0	0.1		
	2147482930	0.0	0.0	1.5	96.5	0.0	0.0
1.4	95.7	0.0	0.0	0.0	0.8		
	2147482931	0.1	0.1	3.6	237.6	0.1	0.1
3.6	235.6	0.0	0.0	0.0	2.0		
	2147482932	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482933	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482937	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482940	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482941	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482942	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482943	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482944	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482945	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482946	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482947	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482949	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482950	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482951	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482952	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482953	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482954	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482957	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482958	0.0	0.0	0.0	0.7	0.0	0.0
0.0	0.7	0.0	0.0	0.0	0.0		
	2147482959	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482960	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482963	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482964	0.2	0.2	6.3	416.6	0.2	0.2
6.3	416.8	0.0	0.0	0.0	-0.2		
	2147482966	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482967	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482968	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482969	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

2147482970	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482973	0.2	0.2	4.6	132.1	0.2	0.2	0.2
4.6	132.1	0.0	0.0	0.0	0.0	0.0	0.0
2147482974	0.1	0.1	3.0	86.2	0.1	0.1	0.1
3.0	86.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482975	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482976	1.1	1.1	32.5	2,157.5	1.1	1.1	1.1
32.5	2,157.5	0.0	0.0	0.0	0.0	0.0	0.0
2147482977	1.2	1.2	35.6	2,360.6	1.2	1.2	1.2
35.6	2,360.8	0.0	0.0	0.0	-0.2	0.0	0.0
2147482979	0.0	0.0	1.3	86.9	0.0	0.0	0.0
1.3	86.8	0.0	0.0	0.0	0.1	0.0	0.0
2147482980	0.0	0.0	1.1	72.3	0.0	0.0	0.0
1.1	72.2	0.0	0.0	0.0	0.1	0.0	0.0
2147482981	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482982	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482985	0.0	0.0	1.3	85.3	0.0	0.0	0.0
1.3	85.3	0.0	0.0	0.0	0.0	0.0	0.0
2147482989	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482990	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482992	0.0	0.0	0.6	37.7	0.0	0.0	0.0
0.6	37.7	0.0	0.0	0.0	0.0	0.0	0.0
2147482993	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482994	0.6	0.6	17.9	1,187.2	0.6	0.6	0.6
17.9	1,187.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482995	0.2	0.2	5.4	357.6	0.2	0.2	0.2
5.4	357.6	0.0	0.0	0.0	0.0	0.0	0.0
2147482996	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482997	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482998	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482999	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483004	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483005	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483006	0.6	0.5	16.1	1,067.0	0.6	0.5	0.5
16.1	1,067.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483007	0.0	0.0	0.6	40.6	0.0	0.0	0.0
0.6	40.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483008	0.0	0.0	0.0	0.0	0.0	0.0	0.0



2147483045	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483046	0.0	0.0	0.0	0.9	62.6	0.0	0.0
0.9	62.7	0.0	0.0	0.0	-0.2	0.0	0.0
2147483047	0.0	0.0	0.0	0.4	26.6	0.0	0.0
0.4	26.7	0.0	0.0	0.0	-0.1	0.0	0.0
2147483048	0.1	0.1	2.5	167.8	0.1	0.1	
2.5	168.0	0.0	0.0	0.0	-0.2		
2147483049	0.1	0.1	1.6	104.6	0.1	0.1	
1.6	104.6	0.0	0.0	0.0	0.0		
2147483050	0.0	0.0	0.1	8.3	0.0	0.0	
0.1	8.2	0.0	0.0	0.0	0.0		
2147483051	0.0	0.0	1.0	64.2	0.0	0.0	
1.0	64.2	0.0	0.0	0.0	0.0		
2147483052	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483054	0.2	0.2	7.2	476.1	0.2	0.2	
7.1	473.9	0.0	0.0	0.0	2.3		
2147483055	0.2	0.2	4.6	301.5	0.2	0.2	
4.5	301.1	0.0	0.0	0.0	0.3		
2147483058	0.0	0.0	0.9	61.1	0.0	0.0	
0.9	61.1	0.0	0.0	0.0	0.0		
2147483060	0.0	0.0	0.5	33.2	0.0	0.0	
0.5	33.2	0.0	0.0	0.0	0.0		
2147483061	0.5	0.5	13.6	904.6	0.5	0.5	
13.6	904.5	0.0	0.0	0.0	0.1		
2147483062	0.9	0.9	26.1	1,733.1	0.9	0.9	
26.1	1,733.1	0.0	0.0	0.0	0.0		
2147483063	0.3	0.2	7.2	479.9	0.3	0.2	
7.2	479.3	0.0	0.0	0.0	0.5		
2147483066	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483067	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483071	0.0	0.0	0.7	45.0	0.0	0.0	
0.7	45.0	0.0	0.0	0.0	0.0		
2147483073	0.1	0.1	3.8	252.9	0.1	0.1	
3.8	252.9	0.0	0.0	0.0	0.0		
2147483074	0.7	0.7	20.2	1,340.0	0.7	0.7	
20.2	1,340.2	0.0	0.0	0.0	-0.2		
2147483075	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483076	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483077	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483078	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483079	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483080	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483081	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483083	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483084	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483085	0.0	0.0	0.0	0.0	0.0	0.0	0.0



2147483118	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483119	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483121	0.0	0.0	0.0	0.2	13.9	0.0	0.0
0.2	13.7	0.0	0.0	0.0	0.2	0.0	0.0
2147483122	0.0	0.0	0.0	0.2	10.0	0.0	0.0
0.1	9.9	0.0	0.0	0.0	0.1	0.0	0.0
2147483123	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483124	0.0	0.0	0.0	0.2	12.3	0.0	0.0
0.2	12.2	0.0	0.0	0.0	0.1	0.0	0.0
2147483125	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483126	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483127	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483128	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483129	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483131	0.1	0.1	3.0	200.2	0.1	0.1	0.1
3.0	199.3	0.0	0.0	0.0	1.0	0.0	0.0
2147483132	0.2	0.1	4.5	296.0	0.2	0.1	0.1
4.5	297.7	0.0	0.0	0.0	-1.7	0.0	0.0
2147483134	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483135	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483136	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483137	0.1	0.1	2.0	132.5	0.1	0.1	0.1
2.0	132.2	0.0	0.0	0.0	0.2	0.0	0.0
2147483139	0.0	0.0	0.6	41.5	0.0	0.0	0.0
0.6	41.4	0.0	0.0	0.0	0.1	0.0	0.0
2147483141	0.1	0.1	3.8	253.9	0.1	0.1	0.1
3.8	253.4	0.0	0.0	0.0	0.5	0.0	0.0
2147483143	1.1	1.1	33.1	2,190.8	1.1	1.1	1.1
33.1	2,190.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483145	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483146	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483147	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483148	0.0	0.0	0.8	51.2	0.0	0.0	0.0
0.8	51.4	0.0	0.0	0.0	-0.2	0.0	0.0
2147483149	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483150	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483151	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483152	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483153	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483154	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483155	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483156	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483157	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483158	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483159	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483161	0.1	0.1	2.5	164.7	0.1	0.1
2.5	165.0	0.0	0.0	0.0	-0.2		
	2147483162	0.2	0.2	5.7	376.0	0.2	0.2
5.7	376.6	0.0	0.0	0.0	-0.6		
	2147483163	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483164	0.2	0.2	5.1	336.3	0.2	0.2
5.1	336.8	0.0	0.0	0.0	-0.5		
	2147483165	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483166	0.0	0.0	0.6	42.3	0.0	0.0
0.6	42.5	0.0	0.0	0.0	-0.2		
	2147483168	0.0	0.0	0.6	40.6	0.0	0.0
0.6	40.8	0.0	0.0	0.0	-0.2		
	2147483169	0.2	0.2	5.6	369.1	0.2	0.2
5.6	370.6	0.0	0.0	0.0	-1.5		
	2147483170	0.1	0.1	1.9	127.2	0.1	0.1
1.9	126.8	0.0	0.0	0.0	0.4		
	2147483171	0.1	0.1	2.6	170.1	0.1	0.1
2.6	169.0	0.0	0.0	0.0	1.1		
	2147483172	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483173	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483174	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483175	0.9	0.8	25.3	1,680.0	0.9	0.8
25.3	1,680.0	0.0	0.0	0.0	0.0		
	2147483178	0.0	0.0	1.2	77.9	0.0	0.0
1.2	78.0	0.0	0.0	0.0	-0.2		
	2147483179	0.0	0.0	0.9	57.3	0.0	0.0
0.9	57.4	0.0	0.0	0.0	-0.1		
	2147483180	0.2	0.2	6.0	401.0	0.2	0.2
6.1	402.0	0.0	0.0	0.0	-1.0		
	2147483181	0.1	0.1	1.6	109.6	0.1	0.1
1.6	109.4	0.0	0.0	0.0	0.3		
	2147483182	0.1	0.1	3.1	203.4	0.1	0.1
3.1	203.0	0.0	0.0	0.0	0.5		
	2147483183	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483184	0.1	0.1	2.0	135.3	0.1	0.1
2.0	134.7	0.0	0.0	0.0	0.5		
	2147483185	0.1	0.1	1.6	106.9	0.1	0.1
1.6	106.4	0.0	0.0	0.0	0.4		
	2147483186	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483187	0.1	0.1	1.8	122.1	0.1	0.1
1.8	121.6	0.0	0.0	0.0	0.5		

2147483188	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483189	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483190	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483191	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483192	0.0	0.0	0.2	0.0	13.0	0.0	0.0
0.2	13.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483193	0.0	0.0	0.3	0.0	19.4	0.0	0.0
0.3	19.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483194	0.0	0.0	0.7	0.0	48.3	0.0	0.0
0.7	48.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483195	0.0	0.0	0.1	0.0	4.4	0.0	0.0
0.1	4.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483196	0.0	0.0	0.2	0.0	12.3	0.0	0.0
0.2	12.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483197	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483198	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483199	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483201	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483202	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483206	0.2	0.2	7.4	0.0	488.9	0.2	0.2
7.4	488.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483207	0.0	0.0	0.8	0.0	50.3	0.0	0.0
0.8	50.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483208	0.0	0.0	0.8	0.0	52.8	0.0	0.0
0.8	52.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483209	0.4	0.4	12.1	0.0	798.8	0.4	0.4
12.1	798.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483210	0.1	0.1	1.7	0.0	111.9	0.1	0.1
1.7	111.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483211	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483212	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483213	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483214	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483215	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483216	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483217	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483218	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483219	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483222	0.0	0.0	0.1	0.0	4.0	0.0	0.0





2147483265	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483266	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483267	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483270	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483274	0.0	0.0	1.4	0.0	90.1	0.0	0.0
1.4	90.1	0.0	0.0	0.0	0.0	0.0	0.0
2147483275	1.0	1.0	30.4	2,018.4	1.0	1.0	1.0
30.4	2,018.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483278	0.0	0.0	0.6	36.6	0.0	0.0	0.0
0.0	0.0	0.0	0.6	36.6	0.0	0.0	0.0
2147483280	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483281	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483282	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483283	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483284	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483285	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483286	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483290	0.1	0.1	2.7	183.3	0.0	0.0	0.0
0.0	0.0	0.1	0.1	2.7	183.3	0.0	0.0
2147483297	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483300	0.0	0.0	1.3	36.8	0.0	0.0	0.0
0.0	0.0	0.0	1.3	36.8	0.0	0.0	0.0
2147483303	0.2	0.2	4.9	327.3	0.2	0.2	0.2
5.0	332.5	0.0	0.0	-0.1	-5.2	0.0	0.0
2147483304	0.0	0.0	1.4	90.6	0.0	0.0	0.0
1.4	92.0	0.0	0.0	0.0	-1.4	0.0	0.0
2147483305	0.3	0.2	7.4	496.1	0.0	0.0	0.0
0.0	0.0	0.3	0.2	7.4	496.1	0.0	0.0
2147483306	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483308	0.2	0.2	5.0	333.6	0.2	0.2	0.2
5.1	338.7	0.0	0.0	-0.1	-5.1	0.0	0.0
2147483309	0.2	0.2	6.0	397.3	0.2	0.2	0.2
6.1	403.4	0.0	0.0	-0.1	-6.1	0.0	0.0
2147483311	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483312	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483316	0.1	0.1	1.9	127.1	0.1	0.1	0.1
1.9	127.1	0.0	0.0	0.0	0.0	0.0	0.0
2147483319	0.0	0.0	0.0	0.0	0.0	0.0	0.0



2147483350	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483352	0.1	0.1	2.1	136.2	0.1	0.1	0.1
2.1	136.2	0.0	0.0	0.0	0.0	0.0	0.0
2147483355	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483356	0.0	0.0	0.4	28.4	0.0	0.0	0.0
0.4	28.3	0.0	0.0	0.0	0.1	0.0	0.0
2147483357	0.0	0.0	0.2	10.6	0.0	0.0	0.0
0.2	10.3	0.0	0.0	0.0	0.3	0.0	0.0
2147483358	0.0	0.0	0.0	3.0	0.0	0.0	0.0
0.0	2.9	0.0	0.0	0.0	0.1	0.0	0.0
2147483359	0.0	0.0	0.1	9.5	0.0	0.0	0.0
0.1	9.2	0.0	0.0	0.0	0.3	0.0	0.0
2147483360	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483362	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483363	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483364	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483365	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483366	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483367	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483368	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483369	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483371	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483373	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483374	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483375	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483376	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483377	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483378	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483380	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483383DN	0.4	0.4	12.8	859.5	0.0	0.0	0.0
0.0	0.0	0.4	0.4	12.8	859.5	0.0	0.0
2147483383DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.3	19.2	0.0	0.0	-0.3	-19.2	0.0	0.0
2147483387	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483388	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.3	0.0	0.0
2147483389	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.1	0.0	0.0	0.0	-0.1	0.0	0.0
2147483390	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0		
	2147483391	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483392	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483393	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483394	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483395	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.3		
	2147483396	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.4	0.0	0.0	0.0	-0.3		
	2147483397	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.3		
	2147483398	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483400	0.0	0.0	0.0	1.4	0.0	0.0
0.0	1.4	0.0	0.0	0.0	0.0		
	2147483401	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483402	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483403	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483404	0.0	0.0	0.3	20.8	0.0	0.0
0.3	20.8	0.0	0.0	0.0	0.0		
	2147483405	0.0	0.0	0.0	0.7	0.0	0.0
0.0	0.7	0.0	0.0	0.0	0.0		
	2147483406	0.1	0.1	4.1	270.4	0.1	0.1
4.1	274.8	0.0	0.0	-0.1	-4.4		
	2147483408	0.0	0.0	0.6	38.0	0.0	0.0
0.6	37.5	0.0	0.0	0.0	0.5		
	2147483409	0.0	0.0	0.0	0.9	0.0	0.0
0.0	2.0	0.0	0.0	0.0	-1.1		
	2147483410	0.0	0.0	0.0	0.2	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0		
	2147483411	0.0	0.0	0.0	1.8	0.0	0.0
0.0	2.1	0.0	0.0	0.0	-0.4		
	2147483412	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483413	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483414	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483415	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483416	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483417	0.2	0.1	4.5	299.9	0.0	0.0
0.0	0.0	0.2	0.1	4.5	299.9		
	2147483418	0.4	0.4	11.3	756.1	0.0	0.0
0.0	0.0	0.4	0.4	11.3	756.1		
	2147483419	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483420	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483421	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

0.0	2147483423DN	0.7	0.7	20.3	1,361.2	0.0	0.0
0.0	0.0	0.7	0.7	20.3	1,361.2	0.0	0.0
0.7	2147483423DS	0.0	0.0	0.0	0.0	0.0	0.0
0.7	48.9	0.0	0.0	-0.7	-48.9	0.0	0.0
0.0	2147483424	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483425	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483426DN	0.4	0.4	11.9	799.7	0.0	0.0
0.0	0.0	0.4	0.4	11.9	799.7	0.0	0.0
0.3	2147483426DS	0.0	0.0	0.0	0.0	0.0	0.0
0.3	18.5	0.0	0.0	-0.3	-18.5	0.0	0.0
0.0	2147483428	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483429	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	2147483431	0.0	0.0	0.1	8.9	0.0	0.0
0.1	6.1	0.0	0.0	0.0	2.8	0.0	0.0
0.0	2147483432DN	0.0	0.0	0.1	7.4	0.0	0.0
0.0	0.0	0.0	0.0	0.1	7.4	0.0	0.0
0.2	2147483432DS	0.0	0.0	0.0	0.0	0.0	0.0
0.2	10.8	0.0	0.0	-0.2	-10.8	0.0	0.0
0.0	2147483433	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483434	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483435	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483436	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483437	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483438	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483439	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483440	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483441	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483442	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.8	2147483443	0.2	0.2	6.8	452.8	0.2	0.2
6.8	452.8	0.0	0.0	0.0	0.0	0.0	0.0
1.0	2147483444	0.0	0.0	1.0	68.2	0.0	0.0
1.0	68.2	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483445	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483446	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483447	0.0	0.0	0.0	0.3	0.0	0.0
0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483448	0.0	0.0	0.0	0.6	0.0	0.0
0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483449	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483450	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483451	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0		
	2147483452	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483453	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483454	0.0	0.0	0.0	0.0	0.4	0.0
0.0	0.4	0.0	0.0	0.0	0.0		
	2147483455	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483456	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483457	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483458	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483459	0.0	0.0	0.3	17.2	0.0	0.0
0.3	17.2	0.0	0.0	0.0	0.0		
	2147483460	0.0	0.0	0.0	1.6	0.0	0.0
0.0	1.6	0.0	0.0	0.0	0.0		
	2147483461	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483464	0.0	0.0	0.2	16.2	0.0	0.0
0.2	16.2	0.0	0.0	0.0	0.0		
	2147483465	0.0	0.0	0.3	20.1	0.0	0.0
0.3	20.1	0.0	0.0	0.0	0.0		
	2147483466	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483468	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483469	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483471	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483472	0.0	0.0	1.4	95.4	0.0	0.0
1.4	95.4	0.0	0.0	0.0	0.0		
	2147483473	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483474	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483475	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483476	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483477	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483478	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483479	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483480	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483481	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483482	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483483	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483484	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

2147483485	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483486	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483487	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483488	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483489	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483490	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483491	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483492	0.0	0.0	0.3	0.0	21.9	0.0	0.0
0.3	21.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483493	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483494	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483495	0.0	0.0	0.2	0.0	5.3	0.0	0.0
0.2	5.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483497	0.1	0.1	1.6	0.0	45.6	0.1	0.1
1.6	45.4	0.0	0.0	0.0	0.2	0.0	0.0
2147483498	0.1	0.1	1.7	0.0	48.2	0.1	0.1
1.7	48.0	0.0	0.0	0.0	0.3	0.0	0.0
2147483499	0.2	0.2	5.3	0.0	353.3	0.2	0.2
5.3	352.8	0.0	0.0	0.0	0.5	0.0	0.0
2147483501	0.1	0.1	3.0	0.0	198.7	0.1	0.1
3.0	198.3	0.0	0.0	0.0	0.4	0.0	0.0
2147483502	0.2	0.2	4.8	0.0	320.0	0.2	0.2
4.8	319.5	0.0	0.0	0.0	0.5	0.0	0.0
2147483504	0.2	0.2	5.0	0.0	145.4	0.2	0.2
5.0	145.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483505	0.4	0.4	11.7	0.0	339.3	0.4	0.4
11.7	339.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483506	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483507	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483508	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483510	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483511	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483512	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483513	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483517	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483518	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483519	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483520	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483521	0.0	0.0	0.0	0.0	0.0	0.0	0.0





	2147483562	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483563	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483564	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483565	0.1	0.1	2.8	183.7	0.1	0.1	
2.8	183.9	0.0	0.0	0.0	-0.2			
	2147483566	0.0	0.0	0.0	2.7	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	2.7			
	2147483567	0.0	0.0	0.1	5.8	0.0	0.0	
0.0	0.0	0.0	0.0	0.1	5.8			
	2147483568	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483569	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483572	0.3	0.3	7.6	503.6	0.3	0.3	
7.6	502.9	0.0	0.0	0.0	0.7			
	2147483573	0.0	0.0	0.1	4.6	0.0	0.0	
0.1	4.6	0.0	0.0	0.0	0.0			
	2147483575	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483576	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483577DN	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483577DS	0.0	0.0	0.0	0.0	0.0	0.0	
0.8	55.4	0.0	0.0	-0.8	-55.4			
	2147483578	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483579	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483580	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483581	0.2	0.2	5.8	385.5	0.2	0.2	
5.9	390.8	0.0	0.0	-0.1	-5.3			
	2147483582	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483585	0.0	0.0	0.7	21.4	0.0	0.0	
0.7	21.4	0.0	0.0	0.0	0.0			
	2147483588	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483590	0.1	0.0	1.5	42.7	0.1	0.0	
1.5	42.7	0.0	0.0	0.0	0.0			
	2147483593	0.1	0.1	2.4	68.9	0.1	0.1	
2.4	69.0	0.0	0.0	0.0	0.0			
	2147483595	0.7	0.7	20.0	718.0	0.7	0.7	
20.0	719.4	0.0	0.0	0.0	-1.5			
	2147483596	0.1	0.1	2.1	60.2	0.1	0.1	
2.1	61.6	0.0	0.0	0.0	-1.4			
	2147483599	0.4	0.4	12.8	847.2	0.4	0.4	
12.8	847.5	0.0	0.0	0.0	-0.3			
	2147483600	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483601	0.0	0.0	0.6	22.4	0.0	0.0	
0.6	22.4	0.0	0.0	0.0	0.0			
	2147483603	0.0	0.0	1.1	69.6	0.0	0.0	
1.1	69.9	0.0	0.0	0.0	-0.2			
	2147483605	0.0	0.0	0.0	0.0	0.0	0.0	

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483606	0.0	0.0	0.5	32.0	0.0	0.0	0.0
0.5	31.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	2147483608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483610	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483612	0.8	0.8	23.1	830.1	0.8	0.8	0.8
23.1	829.9	0.0	0.0	0.0	0.2	0.0	0.0	0.0
	2147483615	0.1	0.1	2.6	93.9	0.1	0.1	0.1
2.6	93.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483617	0.0	0.0	0.2	14.1	0.0	0.0	0.0
0.2	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483618	0.1	0.1	2.9	190.7	0.1	0.1	0.1
2.9	191.4	0.0	0.0	0.0	-0.7	0.0	0.0	0.0
	2147483619	0.1	0.1	1.9	124.5	0.1	0.1	0.1
1.9	124.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
	2147483621	0.0	0.0	0.2	15.7	0.0	0.0	0.0
0.2	15.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0
	2147483622	0.0	0.0	0.2	15.4	0.0	0.0	0.0
0.2	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483626	0.7	0.7	20.4	730.7	0.7	0.7	0.7
20.2	726.6	0.0	0.0	0.1	4.1	0.0	0.0	0.0
	2147483627	0.0	0.0	0.5	16.2	0.0	0.0	0.0
0.5	16.6	0.0	0.0	0.0	-0.4	0.0	0.0	0.0
	2147483630	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483631	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1	0.0	0.0	0.0	0.0	1.9	1.9	1.9
56.9	2,041.8	-1.9	-1.9	-56.9	-2,041.8	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.9	0.8	0.8
25.4	912.0	-0.9	-0.8	-25.4	-912.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.4	49.0	0.0	0.0	-1.4	-49.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	6.9	0.0	0.0	-0.1	-6.9	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.5	15.5	0.0	0.0	-0.5	-15.5	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.6	40.2	0.0	0.0	-0.6	-40.2	0.0	0.0	0.0
	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	31.8	0.0	0.0	-0.9	-31.8	0.0	0.0	0.0
	2147483597	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.7	19.6	0.0	0.0	-0.7	-19.6	0.0	0.0	0.0
	2147483633	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	25.2	0.0	0.0	-0.9	-25.2	0.0	0.0	0.0
	2147483637	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1.9	53.8	-0.1	-0.1	-1.9	-53.8	0.0	0.0	0.0
	2147483640	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	5.9	0.0	0.0	-0.2	-5.9	0.0	0.0	0.0
	2147483646	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483647	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.3	18.5	0.0	0.0	-0.3	-18.5	0.0	0.0	0.0
	Total	40.8	39.8	1,192.0	68,892.0	40.5	39.6	39.6
1,185.8	65,913.5	0.2	0.2	6.2	2,978.5			

euros. Costs and benefits discounted to 2011 in multiples of a thousand

[Section 3] Combined Link and Junction Collision Rates

Link Name	*----- Collision Rate -----*	
	* 2030	2045 *
897	0.387882	0.364630
900	0.387882	0.364630
901	0.387882	0.364630
906	0.000000	0.000000
923	0.132426	0.123735
1495	0.132426	0.123735
1497	0.132426	0.123735
1499	0.132426	0.123735
1504	0.132426	0.123735
1505	0.132426	0.123735
1506	0.132426	0.123735
1515	0.057490	0.053798
1590	0.132426	0.123735
1591	0.132426	0.123735
44747	0.000000	0.000000
45876	0.000000	0.000000
48840	0.000000	0.000000
48953	0.000000	0.000000
49089	0.387882	0.364630
49185	0.387882	0.364630
49353	0.000000	0.000000
49552	0.000000	0.000000
49560	0.000000	0.000000
49630	0.000000	0.000000
49684	0.132426	0.123735
49717	0.000000	0.000000
49842	0.000000	0.000000
50060	0.387882	0.364630
50401	0.387882	0.364630
50515	0.000000	0.000000
50542	0.000000	0.000000
50600	0.000000	0.000000
50648	0.132426	0.123735
50653	0.387882	0.364630
50686	0.387882	0.364630
554437085	0.000000	0.000000
554437089	0.000000	0.000000
554445417	0.000000	0.000000
554445421	0.000000	0.000000
554445424	0.000000	0.000000
554445434	0.000000	0.000000
554445603	0.387882	0.364630
554445605	0.387882	0.364630
554445606	0.387882	0.364630
554445611	0.387882	0.364630
554445616	0.000000	0.000000
554445660	0.387882	0.364630
554445681	0.387882	0.364630
554451601	0.000000	0.000000

554451604	0.000000	0.000000
554451606	0.000000	0.000000
554451619	0.000000	0.000000
554451621	0.000000	0.000000
554469301	0.000000	0.000000
554469376	0.000000	0.000000
554469377	0.000000	0.000000
554469379	0.387882	0.364630
554469380	0.387882	0.364630
554469383	0.387882	0.364630
554469386	0.387882	0.364630
554469390	0.132426	0.123735
554476250	0.000000	0.000000
554476251	0.000000	0.000000
554476254	0.000000	0.000000
554476255	0.000000	0.000000
554476258	0.000000	0.000000
554476263	0.000000	0.000000
554476268	0.000000	0.000000
554476273	0.000000	0.000000
554476275	0.000000	0.000000
554476276	0.000000	0.000000
554476314	0.000000	0.000000
554476317	0.000000	0.000000
554476318	0.000000	0.000000
554476321	0.000000	0.000000
554476331	0.000000	0.000000
554476332	0.000000	0.000000
554476337	0.000000	0.000000
554476339	0.000000	0.000000
554476344	0.000000	0.000000
554476347	0.000000	0.000000
554478297	0.000000	0.000000
554478964	0.000000	0.000000
554478965	0.000000	0.000000
554479189	0.132426	0.123735
554479190	0.132426	0.123735
554499930	0.000000	0.000000
554499931	0.000000	0.000000
554499943	0.000000	0.000000
559752177	0.000000	0.000000
562717850	0.000000	0.000000
578082733	0.000000	0.000000
578088741	0.000000	0.000000
587814444	0.387882	0.364630
587814449	0.387882	0.364630
587814450	0.387882	0.364630
587814454	0.000000	0.000000
587814456	0.000000	0.000000
587814797	0.000000	0.000000
587814807	0.000000	0.000000
587814808	0.000000	0.000000
587814809	0.000000	0.000000
587814811	0.000000	0.000000
587814819	0.000000	0.000000
587814822	0.000000	0.000000
587814825	0.000000	0.000000
587814826	0.000000	0.000000
587815160	0.000000	0.000000

587815163	0.000000	0.000000
587815170	0.000000	0.000000
587815171	0.000000	0.000000
587815173	0.000000	0.000000
587815174	0.000000	0.000000
587815269	0.000000	0.000000
587815271	0.000000	0.000000
587815272	0.000000	0.000000
587815273	0.000000	0.000000
587815274	0.000000	0.000000
587815275	0.000000	0.000000
587815277	0.000000	0.000000
587815278	0.000000	0.000000
587815280	0.000000	0.000000
587815285	0.000000	0.000000
587815287	0.000000	0.000000
587815295	0.387882	0.364630
587815303	0.000000	0.000000
587815773	0.387882	0.364630
587815780	0.387882	0.364630
587815785	0.000000	0.000000
587815787	0.000000	0.000000
587815790	0.000000	0.000000
587815791	0.000000	0.000000
587815792	0.000000	0.000000
587815795	0.000000	0.000000
587815802	0.000000	0.000000
587815824	0.000000	0.000000
587816038	0.000000	0.000000
587816039	0.000000	0.000000
587816041	0.000000	0.000000
587816057	0.000000	0.000000
587816058	0.000000	0.000000
587816063	0.387882	0.364630
587816177	0.000000	0.000000
587816186	0.000000	0.000000
587816709	0.387882	0.364630
587816710	0.387882	0.364630
587816711	0.000000	0.000000
587816712	0.000000	0.000000
587816713	0.387882	0.364630
587816714	0.000000	0.000000
587816718	0.000000	0.000000
587816721	0.000000	0.000000
587816722	0.000000	0.000000
587816725	0.000000	0.000000
587816971	0.000000	0.000000
587816972	0.000000	0.000000
587816973	0.000000	0.000000
587816974	0.000000	0.000000
587816975	0.000000	0.000000
587816978	0.000000	0.000000
587816980	0.000000	0.000000
587816981	0.000000	0.000000
587816984	0.000000	0.000000
587816985	0.000000	0.000000
587816986	0.000000	0.000000
587816988	0.000000	0.000000
587816989	0.000000	0.000000

587817206	0.000000	0.000000
587817207	0.000000	0.000000
587817216	0.000000	0.000000
587817217	0.000000	0.000000
587817219	0.000000	0.000000
587817221	0.000000	0.000000
587817223	0.000000	0.000000
587817225	0.000000	0.000000
587817226	0.000000	0.000000
587817227	0.000000	0.000000
587817228	0.000000	0.000000
587817230	0.000000	0.000000
587817231	0.000000	0.000000
587817234	0.000000	0.000000
587817269	0.000000	0.000000
587817271	0.000000	0.000000
587817272	0.000000	0.000000
587817274	0.000000	0.000000
587817275	0.000000	0.000000
587817314	0.000000	0.000000
587817316	0.000000	0.000000
587817318	0.000000	0.000000
587817319	0.000000	0.000000
587817447	0.000000	0.000000
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2147483479	0.132426	0.123735
2147483480	0.000000	0.000000
2147483481	0.132426	0.123735
2147483482	0.000000	0.000000
2147483483	0.000000	0.000000
2147483484	0.000000	0.000000
2147483485	0.000000	0.000000
2147483486	0.000000	0.000000
2147483487	0.132426	0.123735
2147483488	0.132426	0.123735
2147483489	0.132426	0.123735
2147483490	0.132426	0.123735
2147483491	0.132426	0.123735
2147483492	0.132426	0.123735
2147483493	0.000000	0.000000
2147483494	0.132426	0.123735
2147483495	0.387882	0.364630
2147483497	0.387882	0.364630
2147483498	0.387882	0.364630
2147483499	0.132426	0.123735
2147483501	0.132426	0.123735
2147483502	0.132426	0.123735
2147483504	0.387882	0.364630
2147483505	0.387882	0.364630
2147483506	0.000000	0.000000
2147483507	0.000000	0.000000

2147483508	0.000000	0.000000
2147483510	0.000000	0.000000
2147483511	0.000000	0.000000
2147483512	0.000000	0.000000
2147483513	0.000000	0.000000
2147483517	0.000000	0.000000
2147483518	0.000000	0.000000
2147483519	0.000000	0.000000
2147483520	0.000000	0.000000
2147483521	0.000000	0.000000
2147483522	0.000000	0.000000
2147483523	0.387882	0.364630
2147483524	0.387882	0.364630
2147483528	0.000000	0.000000
2147483531	0.000000	0.000000
2147483532	0.000000	0.000000
2147483533	0.000000	0.000000
2147483534	0.000000	0.000000
2147483537	0.000000	0.000000
2147483540	0.000000	0.000000
2147483543	0.132426	0.123735
2147483544	0.132426	0.123735
2147483545	0.132426	0.123735
2147483546	0.132426	0.123735
2147483547	0.132426	0.123735
2147483548	0.000000	0.000000
2147483549	0.132426	0.123735
2147483550	0.132426	0.123735
2147483551	0.132426	0.123735
2147483552	0.132426	0.123735
2147483553	0.132426	0.123735
2147483554	0.132426	0.123735
2147483555DN	0.069539	0.064975
2147483555DS	0.069539	0.064975
2147483556DN	0.069539	0.064975
2147483556DS	0.069539	0.064975
2147483557	0.132426	0.123735
2147483558	0.387882	0.364630
2147483561	0.132426	0.123735
2147483562	0.132426	0.123735
2147483563	0.132426	0.123735
2147483564	0.000000	0.000000
2147483565	0.132426	0.123735
2147483566	0.132426	0.123735
2147483567	0.132426	0.123735
2147483568	0.132426	0.123735
2147483569	0.000000	0.000000
2147483572	0.132426	0.123735
2147483573	0.132426	0.123735
2147483575	0.000000	0.000000
2147483576	0.000000	0.000000
2147483577DN	0.000000	0.000000
2147483577DS	0.132426	0.123735
2147483578	0.000000	0.000000
2147483579	0.000000	0.000000
2147483580	0.000000	0.000000
2147483581	0.132426	0.123735
2147483582	0.000000	0.000000
2147483585	0.387882	0.364630



2147483588	0.000000	0.000000
2147483590	0.387882	0.364630
2147483593	0.387882	0.364630
2147483595	0.057490	0.053798
2147483596	0.387882	0.364630
2147483599	0.132426	0.123735
2147483600	0.000000	0.000000
2147483601	0.057490	0.053798
2147483603	0.132426	0.123735
2147483605	0.132426	0.123735
2147483606	0.132426	0.123735
2147483608	0.000000	0.000000
2147483610	0.000000	0.000000
2147483612	0.057490	0.053798
2147483615	0.057490	0.053798
2147483617	0.132426	0.123735
2147483618	0.132426	0.123735
2147483619	0.132426	0.123735
2147483621	0.132426	0.123735
2147483622	0.132426	0.123735
2147483626	0.057490	0.053798
2147483627	0.057490	0.053798
2147483630	0.000000	0.000000
2147483631	0.132426	0.123735
1	0.057490	0.053798
2	0.057490	0.053798
3	0.057490	0.053798
4	0.132426	0.123735
5	0.387882	0.364630
6	0.132426	0.123735
18	0.057490	0.053798
2147483597	0.387882	0.364630
2147483633	0.387882	0.364630
2147483637	0.387882	0.364630
2147483640	0.387882	0.364630
2147483646	0.000000	0.000000
2147483647	0.132426	0.123735

Collision rates are in collisions per million vehicle kilometres.

[Section 4] Input Data - Scheme File

Scheme Name  
N25 Glenmore to Waterford

Years Subsection

Current Year           2020  
Base Year               2020  
Without-Scheme  
Year 1                  2030  
Year 2                  2045  
Year 3                  2060  
Year 4                  0  
Year 5                  0  
With-Scheme  
Year 1                  2030

Year 2                    2045  
 Year 3                    2060  
 Year 4                    0  
 Year 5                    0

Scheme Opening Year 2030

Link and Junction Combined Input Section

Combined Classification Subsection

Link Name	Road Type	Length (km)	Speed Limit (km/h)	Error/Warning Summary (!=Error, #=Warning)
897	3	0.06	50	
900	3	0.08	50	
901	3	0.13	50	
906	11	0.55	65	#Unusual speed limit (65) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link.
923	2	1.17	100	
1495	2	1.12	70	
1497	2	0.88	70	
1499	2	0.32	70	
1504	2	0.22	70	
1505	2	0.68	100	
1506	2	0.79	100	
1515	4	5.69	100	
1590	2	0.65	70	
1591	2	0.25	70	
44747	4	0.10	40	!Speed limit is too low for a fast dual carriageway.
45876	4	0.04	40	!Speed limit is too low for a fast dual carriageway.
48840	2	0.42	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
48953	4	0.44	50	!Speed limit is too low for a fast dual carriageway.
49089	3	0.15	60	
49185	3	0.70	50	
49353	3	0.87	80	!Speed limit is high. Care should be taken using the results of the calculation for this link.
49552	3	0.31	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
49560	3	0.50	80	!Speed limit is high. Care should be taken using the results of the calculation for this link.
49630	2	0.37	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
49684	2	0.45	80	
49717	3	0.23	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
49842	2	0.23	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
50060	3	0.23	50	
50401	3	1.87	50	
50515	3	0.18	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
50542	3	0.28	40	
50600	2	0.17	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
50648	2	4.01	80	

50653	3	0.16	60	
50686	3	0.41	60	
554437085	3	0.05	40	
554437089	2	0.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554445417	4	0.07	40	!Speed limit is too low for a
fast dual carriageway.				
554445421	3	0.04	40	
554445424	3	0.06	40	
554445434	3	0.03	40	
554445603	3	0.24	50	
554445605	3	0.09	50	
554445606	3	0.10	50	
554445611	3	0.05	50	
554445616	3	0.11	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554445660	3	0.11	50	
554445681	3	0.03	60	
554451601	3	0.07	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451604	3	0.13	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451606	3	0.02	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451619	3	0.01	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451621	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554469301	3	0.08	40	
554469376	3	0.12	40	
554469377	2	0.04	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554469379	3	0.10	50	
554469380	3	0.07	50	
554469383	3	0.09	50	
554469386	3	0.06	50	
554469390	2	0.08	100	
554476250	3	0.07	40	
554476251	3	0.17	40	
554476254	3	0.05	40	
554476255	3	0.13	40	
554476258	3	0.04	40	
554476263	3	0.08	40	
554476268	3	0.01	40	
554476273	3	0.04	40	
554476275	3	0.12	40	
554476276	3	0.04	40	
554476314	3	0.08	40	
554476317	3	0.06	40	
554476318	4	0.03	40	!Speed limit is too low for a
fast dual carriageway.				
554476321	4	0.01	40	!Speed limit is too low for a
fast dual carriageway.				
554476331	4	0.04	40	!Speed limit is too low for a
fast dual carriageway.				
554476332	3	0.04	40	
554476337	3	0.07	40	
554476339	3	0.05	40	
554476344	3	0.02	40	

554476347	3	0.01	40	
554478297	3	0.08	40	
554478964	3	0.07	40	
554478965	3	0.03	40	
554479189	2	0.17	70	
554479190	2	0.04	70	
554499930	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554499931	2	0.03	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554499943	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
559752177	3	0.39	40	
562717850	3	0.23	40	
578082733	2	0.09	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
578088741	2	0.06	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814444	3	0.09	60	
587814449	3	0.10	60	
587814450	3	0.03	60	
587814454	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814456	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814797	3	0.19	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587814807	10	0.01	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814808	3	0.05	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587814809	3	0.04	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587814811	4	0.04	10	!Speed limit is too low for a
fast dual carriageway.				
587814819	3	0.02	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814822	3	0.05	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814825	3	0.03	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814826	3	0.03	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587815160	3	0.13	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587815163	3	0.03	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587815170	3	0.30	23	#Unusual speed limit (23) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				

587815171 3 0.15 23 #Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815173 3 0.02 23 #Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815174 3 0.12 23 #Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815269 3 0.09 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815271 3 0.13 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815272 3 0.09 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815273 3 0.19 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815274 3 0.08 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815275 3 0.07 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815277 3 0.12 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815278 3 0.04 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815280 3 0.13 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815285 3 0.05 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815287 3 0.06 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815295 3 0.44 50

587815303 3 0.02 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815773 3 0.04 50

587815780 3 0.16 50

587815785 2 0.07 25 #Unusual speed limit (25) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. !Speed limit is low. Care should be taken using the results of the calculation for this link.

587815787 3 0.02 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815790 3 0.14 40

587815791 3 0.16 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815792 3 0.20 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815795 3 0.04 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815802 3 0.04 30 #Speed limit is low. Care

should be taken using the results of the calculation for this link.					
587815824	3	0.04	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816038	3	0.20	40		
587816039	3	0.08	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816041	3	0.02	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816057	3	0.06	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816058	3	0.02	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816063	3	0.05	50		
587816177	3	0.02	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816186	3	0.08	40		
587816709	3	0.10	50		
587816710	3	0.02	50		
587816711	3	0.22	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816712	3	0.16	40		
587816713	3	0.04	50		
587816714	3	0.34	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816718	3	0.19	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816721	3	0.08	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816722	3	0.02	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816725	3	0.04	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816971	3	0.05	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816972	3	0.12	40		
587816973	3	0.10	40		
587816974	3	0.19	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816975	4	0.07	30	!Speed limit is	too low for a
fast dual carriageway.					
587816978	4	0.06	30	!Speed limit is	too low for a
fast dual carriageway.					
587816980	4	0.06	30	!Speed limit is	too low for a
fast dual carriageway.					
587816981	4	0.06	30	!Speed limit is	too low for a
fast dual carriageway.					
587816984	10	0.04	10	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816985	3	0.09	40		
587816986	3	0.29	20	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816988	3	0.25	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587816989	3	0.33	30	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587817206	3	0.06	20	#Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
587817207	3	0.48	40		
587817216	3	0.03	40		

587817217	3	0.16	40	
587817219	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817221	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817223	3	0.08	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817225	4	0.07	30	!Speed limit is too low for a
fast dual carriageway.				
587817226	4	0.06	30	!Speed limit is too low for a
fast dual carriageway.				
587817227	4	0.10	30	!Speed limit is too low for a
fast dual carriageway.				
587817228	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817230	3	0.06	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817231	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817234	4	0.02	30	!Speed limit is too low for a
fast dual carriageway.				
587817269	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817271	3	0.03	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817272	3	0.07	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817274	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817275	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817314	5	0.12	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817316	3	0.07	25	#Unusual speed limit (25) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587817318	3	0.01	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817319	3	0.10	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817447	3	0.09	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817448	3	0.08	25	#Unusual speed limit (25) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587817453	3	0.05	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015491	3	0.02	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015493	3	0.01	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015494	3	0.00	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589626976	2	0.13	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
590481852	3	0.05	40	
590481853	3	0.05	40	

590481868	3	0.06	40	
590522243	3	0.06	50	
590522244	3	0.02	50	
590522245	3	0.05	40	
1139400830	3	0.35	40	
1148054292	3	0.62	40	
1164076472	3	0.12	40	
1165618763	3	0.20	40	
1167345578	2	0.27	70	
1176181443	3	0.13	40	
1176242672	2	0.32	70	
1186121768	3	0.39	40	
2122362473	4	0.14	40	!Speed limit is too low for a
fast dual carriageway.				
2147474988	2	3.36	80	
2147475007	2	0.07	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147475798	2	1.12	70	
2147475799	2	0.65	70	
2147475801	2	0.61	80	
2147475949	2	0.73	70	
2147481733	2	0.88	70	
2147481754	2	0.77	70	
2147481911	2	0.89	100	
2147481977	2	3.42	70	
2147482906	3	0.06	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482907	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482908	2	0.86	80	
2147482912	2	0.40	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482916	3	0.07	50	
2147482917	3	0.08	50	
2147482919	2	1.01	100	
2147482922	2	1.60	80	
2147482923	2	0.20	80	
2147482924	2	0.16	80	
2147482925	2	1.59	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482926	2	1.00	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482927	2	0.07	70	
2147482928	2	0.03	80	
2147482930	2	0.43	80	
2147482931	2	1.06	80	
2147482932	2	1.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482933	2	1.46	30	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482937	3	0.17	40	
2147482940	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482941	3	0.42	40	
2147482942	3	0.02	40	
2147482943	2	2.76	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482944	2	1.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				



2147482945	2	1.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482946	2	1.06	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482947	2	1.52	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482949	2	2.39	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482950	2	0.75	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482951	2	0.31	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482952	2	0.28	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482953	2	0.25	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482954	2	1.53	70	
2147482957	2	0.05	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482958	2	2.45	70	
2147482959	2	1.66	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482960	2	3.36	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482963	2	1.90	15	#Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. !Speed limit is low. Care should be taken using the results of the calculation for this link.
2147482964	2	0.49	80	
2147482966	2	1.01	25	#Unusual speed limit (25) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. !Speed limit is low. Care should be taken using the results of the calculation for this link.
2147482967	2	0.16	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482968	2	0.73	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482969	2	0.57	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482970	2	0.81	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482973	3	0.11	60	
2147482974	3	0.08	60	
2147482975	2	2.53	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482976	2	2.64	100	
2147482977	2	3.02	100	
2147482979	2	2.38	70	
2147482980	2	1.98	70	
2147482981	2	1.54	70	
2147482982	2	0.22	70	
2147482985	2	0.15	100	
2147482989	2	3.07	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482990	2	1.90	70	
2147482992	2	0.06	100	
2147482993	2	1.37	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482994	2	2.04	100	

2147482995	2	0.62	100	
2147482996	2	1.93	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482997	2	0.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482998	2	0.62	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482999	2	0.28	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483000	2	0.42	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483001	2	0.55	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483002	2	2.37	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483003	2	1.43	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483004	2	1.66	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483005	2	0.92	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483006	2	1.84	100	
2147483007	2	0.07	100	
2147483008	2	1.29	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483009	2	0.70	80	
2147483011	2	0.27	80	
2147483012	2	1.67	80	
2147483015	2	0.11	80	
2147483016	2	0.21	80	
2147483017	2	2.23	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation for this link.				
2147483019	2	9.88	80	
2147483020	2	1.23	80	
2147483021	2	1.14	100	
2147483024	2	0.28	100	
2147483025	2	0.64	100	
2147483026	2	0.21	100	
2147483027	2	0.75	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483028	2	0.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483029	2	1.00	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483030	2	1.27	70	
2147483031	2	0.51	70	
2147483032	2	0.16	70	
2147483033	2	0.30	70	
2147483034	2	2.85	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483035	2	0.89	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483037	2	0.48	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483038	2	0.72	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483039	2	0.32	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				

2147483040	2	0.52	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483041	2	0.27	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483042	2	0.31	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483043	2	2.19	70		
2147483044	2	0.72	70		
2147483045	2	0.57	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483046	2	1.00	80		
2147483047	2	0.43	80		
2147483048	2	1.51	80		
2147483049	2	2.16	80		
2147483050	2	0.05	80		
2147483051	2	1.32	70		
2147483052	2	1.11	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483054	2	0.82	80		
2147483055	2	0.76	80		
2147483058	2	0.26	80		
2147483060	2	0.14	80		
2147483061	2	3.20	80		
2147483062	2	3.79	80		
2147483063	2	0.57	100		
2147483066	2	0.21	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483067	3	0.03	40		
2147483071	2	0.04	100		
2147483073	2	0.24	100		
2147483074	2	1.50	100		
2147483075	2	1.26	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483076	2	1.66	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483077	2	1.31	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483078	2	0.90	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483079	2	0.69	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483080	2	0.32	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483081	2	0.70	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483083	2	0.04	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483084	2	3.65	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483085	2	0.23	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483086	2	0.08	100		
2147483088	2	0.17	100		
2147483089	2	0.32	100		
2147483090	2	0.02	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483091	2	0.33	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483092	2	0.77	60	!Speed limit is	low. Care

should be taken using the results of the calculation for this link.	2147483093	2	1.54	50	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483094	2	0.89	50	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483095	2	1.40	50	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483096	2	0.73	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483097	2	1.03	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483098	2	0.68	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483099	2	0.19	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483101	2	0.64	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483102	2	0.45	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483103	2	0.46	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483104	2	0.61	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483105	2	0.59	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483106	2	1.24	60	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483107	2	1.13	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483108	2	0.55	50	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483109	2	0.75	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483110	2	0.14	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483111	2	0.93	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483112	2	0.28	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483113	2	0.20	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483114	2	0.52	60	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483115	2	0.95	40	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483117	2	1.74	60	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483118	2	1.57	60	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483119	2	0.10	60	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483121	2	1.29	70			
	2147483122	2	0.93	70			
	2147483123	2	0.75	60	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483124	2	1.14	70			
	2147483125	2	0.60	60	!Speed limit is	low.	Care
should be taken using the results of the calculation for this link.	2147483126	2	1.41	60	!Speed limit is	low.	Care

should be taken using the results of the calculation for this link.					
2147483127	2	1.32	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483128	2	0.26	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483129	2	1.48	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483131	2	0.34	80		
2147483132	2	0.88	80		
2147483134	2	0.72	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483135	2	0.25	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483136	2	0.54	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483137	2	0.64	70		
2147483139	2	0.20	70		
2147483141	2	1.24	70		
2147483143	2	4.98	70		
2147483145	2	1.74	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483146	2	1.51	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483147	2	1.06	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483148	2	0.21	70		
2147483149	2	0.22	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483150	2	0.36	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483151	2	0.20	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483152	2	0.02	70		
2147483153	2	0.95	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483154	2	0.82	70		
2147483155	2	0.16	70		
2147483156	2	0.58	70		
2147483157	2	2.22	70		
2147483158	2	0.05	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483159	2	0.18	70		
2147483161	2	0.53	70		
2147483162	2	1.20	70		
2147483163	2	1.38	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483164	2	1.08	70		
2147483165	2	1.16	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483166	2	0.18	70		
2147483168	2	0.17	70		
2147483169	2	1.54	70		
2147483170	2	0.46	70		
2147483171	2	1.19	70		
2147483172	2	1.29	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483173	2	1.38	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483174	2	1.73	40	!Speed limit is	low. Care

should be taken using the results of the calculation for this link.  
2147483175 2 8.21 75 #Unusual speed limit (75) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link.

2147483178 2 0.64 80  
2147483179 2 0.47 80  
2147483180 2 3.31 80  
2147483181 2 1.11 80  
2147483182 2 2.06 80  
2147483183 2 3.32 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483184 2 1.62 70  
2147483185 2 1.28 70  
2147483186 2 0.96 70  
2147483187 2 1.46 70  
2147483188 2 0.74 70  
2147483189 2 0.90 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483190 2 0.39 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483191 2 1.50 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483192 2 0.21 70  
2147483193 2 0.31 80  
2147483194 2 0.77 80  
2147483195 2 0.07 80  
2147483196 2 0.20 80  
2147483197 2 0.40 70  
2147483198 2 0.21 70  
2147483199 2 1.80 75 #Unusual speed limit (75) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link.

2147483200 2 0.52 75 #Unusual speed limit (75) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link.

2147483201 2 1.68 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483202 2 0.91 70  
2147483206 2 1.82 70  
2147483207 2 0.22 70  
2147483208 2 0.24 70  
2147483209 2 1.69 70  
2147483210 2 0.24 70  
2147483211 2 1.54 40 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483212 2 1.53 40 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483213 2 0.65 40 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483214 2 1.03 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483215 2 0.22 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483216 2 1.21 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483217 2 0.48 70  
2147483218 2 0.18 70  
2147483219 2 1.73 65 #Unusual speed limit (65) is  
not multiple of 10km/h. Care should be taken using the results of the calculation

for this link. !Speed limit is low. Care should be taken using the results of the calculation for this link.

2147483222	2	0.02	70	
2147483224	2	0.04	70	
2147483226	2	1.42	70	
2147483227	2	0.24	70	
2147483229	2	1.72	70	
2147483230	2	0.41	70	
2147483231	2	1.75	70	
2147483234	2	13.41	70	
2147483236	2	1.52	70	
2147483237	2	6.67	70	
2147483238	2	0.26	70	
2147483239	2	0.26	70	
2147483240	2	0.48	70	
2147483241	2	1.03	70	
2147483242	2	1.89	70	
2147483243	2	1.78	70	
2147483244	2	1.25	70	
2147483245	2	1.01	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483246	2	0.46	70	
2147483247	2	0.43	70	
2147483248	2	1.11	70	
2147483249	2	0.29	70	
2147483250	2	1.00	70	
2147483251	2	1.14	70	
2147483252	2	1.24	70	
2147483254	2	0.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483256	2	0.55	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483258	2	1.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483260	2	0.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483264	2	0.66	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483265	2	0.34	70	
2147483266	2	1.16	70	
2147483267	2	3.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483270	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483271	2	0.69	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483272	2	0.23	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483273	2	1.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483274	2	0.35	70	
2147483275	2	7.92	70	
2147483278	2	0.81	70	
2147483280	2	0.11	80	
2147483281	2	0.26	80	
2147483282	2	1.88	80	
2147483283	2	0.43	80	
2147483284	2	0.13	80	
2147483285	2	0.87	80	

2147483286	2	1.88	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483290	11	0.26	100	
2147483297	11	0.15	50	
2147483300	3	0.04	50	
2147483303	2	0.72	90	
2147483304	2	0.20	100	
2147483305	11	0.69	100	
2147483306	11	0.25	60	
2147483308	2	0.73	100	
2147483309	2	0.87	100	
2147483311	2	0.56	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483312	2	0.14	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483316	2	0.56	70	
2147483319	2	2.13	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483320	2	0.08	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483321	2	0.07	80	
2147483323	2	1.44	70	
2147483325DN	2	0.55	70	
2147483325DS	2	0.54	70	
2147483326	2	0.39	70	
2147483327DN	11	0.48	100	
2147483327DS	11	0.33	60	
2147483330	2	2.37	70	
2147483331DN	2	0.10	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483331DS	2	0.10	70	
2147483333	2	0.18	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483334	2	0.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483335DN	2	0.95	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483335DS	2	0.95	70	
2147483336	2	0.57	70	
2147483337	2	0.09	70	
2147483338	2	1.01	70	
2147483339	2	2.08	70	
2147483340	2	1.31	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483341	2	1.11	80	
2147483342	2	0.19	80	
2147483343	2	0.89	80	
2147483344	2	0.59	80	
2147483345	2	0.22	80	
2147483346	2	1.92	80	
2147483347	2	1.15	80	
2147483348	2	0.32	80	
2147483349	2	0.94	80	
2147483350	2	1.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483352	2	0.60	70	
2147483355	2	1.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				



2147483356	2	0.80	70	
2147483357	2	1.31	80	
2147483358	2	0.37	80	
2147483359	2	1.17	70	
2147483360	2	0.23	70	
2147483362	2	0.20	70	
2147483363	2	1.76	70	
2147483364	2	0.77	70	
2147483365	2	0.78	70	
2147483366	2	1.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483367	2	0.92	80	
2147483368	2	0.70	80	
2147483369	2	0.61	80	
2147483371	2	0.29	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483373	2	0.75	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483374	2	0.84	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483375	2	0.40	70	
2147483376	2	0.93	70	
2147483377	2	0.45	70	
2147483378	2	0.14	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483380	2	0.18	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483383DN	11	1.12	100	
2147483383DS	11	1.12	80	
2147483387	2	0.51	80	
2147483388	2	0.37	70	
2147483389	2	0.16	70	
2147483390	2	0.82	70	
2147483391	2	0.06	70	
2147483392	2	0.19	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483393	2	0.50	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483394	2	0.38	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483395	2	0.34	70	
2147483396	2	0.43	70	
2147483397	2	0.39	70	
2147483398	2	0.86	70	
2147483400	2	0.05	70	
2147483401	2	1.73	70	
2147483402	2	0.34	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483403	2	0.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483404	2	0.70	80	
2147483405	2	0.02	80	
2147483406	2	0.63	100	
2147483408	2	0.54	80	
2147483409	2	1.32	80	
2147483410	2	0.29	80	
2147483411	2	2.93	80	

2147483412	2	0.24	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483413	2	0.05	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483414	2	1.65	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483415	2	0.55	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483416	2	0.07	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483417	11	0.42	100		
2147483418	11	1.04	100		
2147483419	2	1.07	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483420	2	0.77	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483421	2	0.36	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483423DN	11	1.79	100		
2147483423DS	11	1.79	80		
2147483424	2	1.77	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483425	2	1.08	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483426DN	11	1.06	100		
2147483426DS	11	1.08	80		
2147483428	2	0.34	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483429	2	2.00	70		
2147483431	2	0.48	70		
2147483432DN	2	0.84	80		
2147483432DS	2	0.84	80		
2147483433	2	0.61	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483434	2	0.90	70		
2147483435	2	0.67	70		
2147483436	2	0.15	70		
2147483437	2	0.66	70		
2147483438	2	1.47	70		
2147483439	2	1.22	70		
2147483440	2	0.54	70		
2147483441	2	0.05	70		
2147483442	2	1.26	70		
2147483443	2	1.98	70		
2147483444	2	0.30	70		
2147483445	2	0.03	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483446	2	0.32	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483447	2	0.95	80		
2147483448	2	2.19	70		
2147483449	2	0.22	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483450	2	0.10	70		
2147483451	2	0.25	70		
2147483452	2	0.06	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483453	2	0.10	70		
2147483454	2	1.29	70		

2147483455	2	1.25	70	
2147483456	2	2.21	70	
2147483457	2	1.67	70	
2147483458	2	1.13	70	
2147483459	2	1.07	70	
2147483460	2	0.10	70	
2147483461	2	0.49	70	
2147483464	2	1.01	70	
2147483465	2	1.25	70	
2147483466	2	0.86	70	
2147483468	2	0.56	70	
2147483469	2	0.29	70	
2147483471	2	0.71	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483472	2	0.42	70	
2147483473	2	0.11	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483474	2	0.43	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483475	2	0.30	70	
2147483476	2	0.44	70	
2147483477	2	0.14	70	
2147483478	2	0.63	70	
2147483479	2	0.27	70	
2147483480	2	0.80	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483481	2	0.34	70	
2147483482	2	0.86	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483483	2	0.22	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483484	2	0.31	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483485	2	0.48	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483486	2	0.32	30	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483487	2	1.08	70	
2147483488	2	0.26	70	
2147483489	2	1.12	70	
2147483490	2	1.58	70	
2147483491	2	2.24	70	
2147483492	2	1.36	70	
2147483493	2	0.58	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483494	2	0.17	70	
2147483495	3	0.06	60	
2147483497	3	0.12	50	
2147483498	3	0.13	50	
2147483499	2	0.40	100	
2147483501	2	0.23	100	
2147483502	2	0.36	100	
2147483504	3	0.14	50	
2147483505	3	0.32	50	
2147483506	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483507	3	0.04	40	
2147483508	3	0.02	40	
2147483510	3	0.21	40	

2147483511	3	0.05	40	
2147483512	3	0.08	40	
2147483513	3	0.29	40	
2147483517	3	0.05	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483518	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483519	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483520	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483521	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483522	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483523	3	0.09	50	
2147483524	3	0.11	50	
2147483528	3	0.11	40	
2147483531	3	0.08	40	
2147483532	3	0.15	40	
2147483533	3	0.04	40	
2147483534	3	0.39	40	
2147483537	3	0.17	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483540	4	0.05	20	!Speed limit is too low for a
fast dual carriageway.				
2147483543	2	0.98	100	
2147483544	2	0.52	100	
2147483545	2	0.55	80	
2147483546	2	0.33	80	
2147483547	2	1.29	80	
2147483548	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483549	2	0.22	100	
2147483550	2	0.37	100	
2147483551	2	0.40	80	
2147483552	2	0.70	70	
2147483553	2	0.63	70	
2147483554	2	0.75	70	
2147483555DN	11	0.83	100	
2147483555DS	11	0.83	80	
2147483556DN	11	0.78	100	
2147483556DS	11	0.78	80	
2147483557	2	1.25	70	
2147483558	3	0.05	50	
2147483561	2	0.17	70	
2147483562	2	0.19	70	
2147483563	2	0.09	70	
2147483564	2	1.80	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483565	2	1.33	80	
2147483566	2	0.17	80	
2147483567	2	0.37	80	
2147483568	2	0.10	70	
2147483569	2	0.68	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483572	2	0.72	70	
2147483573	2	0.11	70	
2147483575	3	0.04	40	

2147483576	3	0.04	40	
2147483577DN	2	0.78	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483577DS	2	0.78	70	
2147483578	2	0.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483579	2	0.09	30	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483580	2	0.84	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483581	2	0.95	80	
2147483582	3	0.41	40	
2147483585	3	0.04	50	
2147483588	2	0.23	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483590	3	0.05	50	
2147483593	3	0.07	50	
2147483595	4	4.93	100	
2147483596	3	0.07	50	
2147483599	2	0.84	80	
2147483600	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483601	4	0.17	100	
2147483603	2	0.33	80	
2147483605	2	3.35	70	
2147483606	2	0.13	70	
2147483608	2	0.02	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483610	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483612	4	4.51	100	
2147483615	4	0.61	100	
2147483617	2	0.26	80	
2147483618	2	0.29	80	
2147483619	2	0.20	80	
2147483621	2	0.07	80	
2147483622	2	0.22	80	
2147483626	4	3.21	100	
2147483627	4	0.14	80	
2147483630	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483631	2	0.02	70	
1	4	6.27	100	
2	4	2.88	100	
3	4	0.15	100	
4	2	0.08	80	
5	3	0.20	60	
6	2	1.25	70	
18	4	0.15	100	
2147483597	3	0.06	50	
2147483633	3	0.03	50	
2147483637	3	0.05	50	
2147483640	3	0.21	60	
2147483646	2	0.37	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483647	2	0.30	80	

Combined Flow Subsection

Link	Base Year	Without-Scheme Flows	With-
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Scheme Flows			Flows		Year 1	Year 2	Year 3	Year 4	Year 5	Year 1
Name	Year 2	Year 3	Year 4	Year 5						
897			6,307		7,056	7,438	7,520	0	0	7,056
7,438	7,520	0	0							
900			5,177		5,838	6,163	6,196	0	0	5,838
6,163	6,196	0	0							
901			8,277		9,238	9,771	9,917	0	0	0
0	0	0	0							
906			14,012		15,649	16,479	16,635	0	0	974
1,032	1,052	0	0							
923			2,975		3,566	3,912	4,049	0	0	3,566
3,912	4,049	0	0							
1495			990		1,133	1,190	1,202	0	0	1,133
1,190	1,202	0	0							
1497			990		1,133	1,190	1,202	0	0	1,133
1,190	1,202	0	0							
1499			0		0	0	0	0	0	0
0	0	0	0							
1504			8,107		8,882	9,223	9,201	0	0	8,882
9,223	9,201	0	0							
1505			10,172		11,426	12,108	12,220	0	0	11,426
12,108	12,220	0	0							
1506			2,975		3,566	3,912	4,049	0	0	3,566
3,912	4,049	0	0							
1515			8,447		9,537	10,165	10,388	0	0	9,537
10,165	10,388	0	0							
1590			0		0	0	0	0	0	0
0	0	0	0							
1591			0		0	0	0	0	0	0
0	0	0	0							
44747			5,177		5,852	6,113	6,101	0	0	5,852
6,113	6,101	0	0							
45876			4,258		4,625	4,802	4,795	0	0	4,625
4,802	4,795	0	0							
48840			6,240		6,868	7,129	7,149	0	0	6,956
7,176	7,186	0	0							
48953			0		0	0	0	0	0	0
0	0	0	0							
49089			4,701		5,469	5,835	5,897	0	0	5,481
5,857	5,912	0	0							
49185			6,950		7,732	7,878	7,878	0	0	7,740
7,894	7,919	0	0							
49353			4,548		5,180	5,366	5,365	0	0	5,153
5,347	5,369	0	0							
49552			3,216		3,545	3,606	3,567	0	0	3,545
3,607	3,572	0	0							
49560			7,102		7,775	7,974	8,020	0	0	7,711
7,962	8,002	0	0							
49630			4,375		5,044	5,404	5,456	0	0	5,054
5,418	5,462	0	0							
49684			5,729		6,242	6,390	6,421	0	0	6,179
6,379	6,403	0	0							
49717			1,954		2,162	2,186	2,168	0	0	2,166
2,175	2,158	0	0							
49842			1,372		1,531	1,560	1,547	0	0	1,530
1,560	1,546	0	0							
50060			9,129		10,039	10,233	10,208	0	0	10,035
10,236	10,229	0	0							

50401			3,481	3,756	3,840	3,862	0	0	3,722
3,827	3,863	0	0						
50515			1,185	1,594	1,722	1,880	0	0	1,579
1,692	1,709	0	0						
50542			918	1,302	1,414	1,570	0	0	1,277
1,383	1,398	0	0						
50600			4,162	4,561	4,704	4,730	0	0	4,561
4,704	4,730	0	0						
50648			1,162	1,310	1,344	1,344	0	0	1,310
1,344	1,344	0	0						
50653			4,060	4,610	4,760	4,806	0	0	4,624
4,783	4,816	0	0						
50686			5,104	5,614	5,865	5,896	0	0	5,707
5,913	5,934	0	0						
554437085			5,960	6,627	6,754	6,754	0	0	6,654
6,766	6,778	0	0						
554437089			8,487	9,207	9,265	9,207	0	0	9,183
9,256	9,220	0	0						
554445417			3,919	4,376	4,575	4,541	0	0	4,376
4,575	4,541	0	0						
554445421			0	0	0	0	0	0	0
0	0	0	0						
554445424			1,011	1,186	1,240	1,260	0	0	1,186
1,240	1,260	0	0						
554445434			5,245	6,028	6,220	6,243	0	0	6,032
6,215	6,246	0	0						
554445603			8,498	9,054	9,100	8,980	0	0	9,028
9,091	9,076	0	0						
554445605			7,578	8,409	8,594	8,578	0	0	8,395
8,591	8,593	0	0						
554445606			4,663	5,275	5,437	5,478	0	0	5,289
5,460	5,488	0	0						
554445611			8,753	9,938	10,262	10,288	0	0	9,998
10,329	10,363	0	0						
554445616			3,349	3,572	3,660	3,646	0	0	3,599
3,672	3,667	0	0						
554445660			7,786	8,754	8,952	8,963	0	0	8,775
8,974	9,006	0	0						
554445681			4,455	5,188	5,540	5,600	0	0	5,200
5,559	5,612	0	0						
554451601			2,585	2,611	2,637	2,632	0	0	2,640
2,644	2,627	0	0						
554451604			0	0	0	0	0	0	0
0	0	0	0						
554451606			2,585	2,611	2,637	2,632	0	0	2,640
2,644	2,627	0	0						
554451619			3,716	3,920	3,957	3,936	0	0	3,946
3,970	3,946	0	0						
554451621			2,585	2,611	2,637	2,632	0	0	2,640
2,644	2,627	0	0						
554469301			8,177	9,001	9,377	9,335	0	0	9,001
9,377	9,335	0	0						
554469376			1,402	1,554	1,582	1,571	0	0	1,554
1,582	1,571	0	0						
554469377			7,354	8,097	8,371	8,378	0	0	8,185
8,418	8,414	0	0						
554469379			8,753	9,938	10,262	10,288	0	0	9,998
10,329	10,363	0	0						
554469380			8,473	9,521	9,847	9,909	0	0	9,561

9,879	9,923	0	0						
	554469383		7,104	7,933	8,096	8,109	0	0	7,955
8,124	8,157	0	0						
	554469386		8,969	9,946	10,101	10,080	0	0	9,963
10,107	10,113	0	0						
	554469390		8,505	9,238	9,302	9,241	0	0	9,214
9,293	9,254	0	0						
	554476250		0	0	0	0	0	0	0
0	0	0	0						
	554476251		0	0	0	0	0	0	0
0	0	0	0						
	554476254		0	0	0	0	0	0	0
0	0	0	0						
	554476255		0	0	0	0	0	0	0
0	0	0	0						
	554476258		0	0	0	0	0	0	0
0	0	0	0						
	554476263		0	0	0	0	0	0	0
0	0	0	0						
	554476268		0	0	0	0	0	0	0
0	0	0	0						
	554476273		0	0	0	0	0	0	0
0	0	0	0						
	554476275		0	0	0	0	0	0	0
0	0	0	0						
	554476276		0	0	0	0	0	0	0
0	0	0	0						
	554476314		8,177	9,001	9,377	9,335	0	0	9,001
9,377	9,335	0	0						
	554476317		0	0	0	0	0	0	0
0	0	0	0						
	554476318		3,919	4,376	4,575	4,541	0	0	4,376
4,575	4,541	0	0						
	554476321		3,919	4,376	4,575	4,541	0	0	4,376
4,575	4,541	0	0						
	554476331		10,004	11,099	11,498	11,535	0	0	11,099
11,498	11,535	0	0						
	554476332		4,470	4,814	4,975	4,993	0	0	4,810
4,981	4,989	0	0						
	554476337		9,714	10,842	11,195	11,235	0	0	10,842
11,195	11,235	0	0						
	554476339		9,714	10,842	11,195	11,235	0	0	10,842
11,195	11,235	0	0						
	554476344		9,714	10,842	11,195	11,235	0	0	10,842
11,195	11,235	0	0						
	554476347		0	0	0	0	0	0	0
0	0	0	0						
	554478297		4,974	5,547	5,730	5,745	0	0	5,547
5,730	5,745	0	0						
	554478964		0	0	0	0	0	0	0
0	0	0	0						
	554478965		0	0	0	0	0	0	0
0	0	0	0						
	554479189		2,456	2,777	2,809	2,792	0	0	2,777
2,809	2,792	0	0						
	554479190		2,456	2,777	2,809	2,792	0	0	2,777
2,809	2,792	0	0						
	554499930		2,794	3,045	3,161	3,198	0	0	3,045
3,160	3,198	0	0						



554499931			2,794	3,045	3,161	3,198	0	0	3,045
3,160	3,198	0	0						
554499943			118	132	131	133	0	0	127
131	132	0	0						
559752177			1,742	1,948	2,028	2,050	0	0	1,948
2,028	2,050	0	0						
562717850			11,199	12,305	12,709	12,744	0	0	12,393
12,756	12,781	0	0						
578082733			4,455	5,188	5,540	5,600	0	0	5,200
5,559	5,612	0	0						
578088741			118	132	131	133	0	0	127
131	132	0	0						
587814444			4,060	4,610	4,760	4,806	0	0	4,624
4,783	4,816	0	0						
587814449			4,663	5,275	5,437	5,478	0	0	5,289
5,460	5,488	0	0						
587814450			4,663	5,275	5,437	5,478	0	0	5,289
5,460	5,488	0	0						
587814454			3,216	3,545	3,606	3,567	0	0	3,545
3,607	3,572	0	0						
587814456			3,216	3,545	3,606	3,567	0	0	3,545
3,607	3,572	0	0						
587814797			2,603	2,907	2,978	2,974	0	0	2,935
3,008	2,974	0	0						
587814807			0	0	0	0	0	0	0
0	0	0	0						
587814808			3,238	3,804	4,112	4,124	0	0	3,827
4,132	4,123	0	0						
587814809			3,238	3,804	4,112	4,124	0	0	3,827
4,132	4,123	0	0						
587814811			0	0	0	0	0	0	0
0	0	0	0						
587814819			0	0	0	0	0	0	0
0	0	0	0						
587814822			0	0	0	0	0	0	0
0	0	0	0						
587814825			0	0	0	0	0	0	0
0	0	0	0						
587814826			0	0	0	0	0	0	0
0	0	0	0						
587815160			3,238	3,804	4,112	4,124	0	0	3,827
4,132	4,123	0	0						
587815163			2,585	2,611	2,637	2,632	0	0	2,640
2,644	2,627	0	0						
587815170			642	859	1,075	1,091	0	0	857
1,075	1,096	0	0						
587815171			642	859	1,075	1,091	0	0	857
1,075	1,096	0	0						
587815173			642	859	1,075	1,091	0	0	857
1,075	1,096	0	0						
587815174			642	859	1,075	1,091	0	0	857
1,075	1,096	0	0						
587815269			2,391	2,809	3,023	3,054	0	0	2,799
2,999	3,011	0	0						
587815271			2,391	2,809	3,023	3,054	0	0	2,799
2,999	3,011	0	0						
587815272			420	742	886	898	0	0	747
917	926	0	0						
587815273			2,380	3,079	3,433	3,481	0	0	3,074

3,440	3,464	0	0						
	587815274		2,585	2,611	2,637	2,632	0	0	2,640
2,644	2,627	0	0						
	587815275		2,585	2,611	2,637	2,632	0	0	2,640
2,644	2,627	0	0						
	587815277		0	0	0	0	0	0	0
0	0	0	0						
	587815278		420	742	886	898	0	0	747
917	926	0	0						
	587815280		2,380	3,079	3,433	3,481	0	0	3,074
3,440	3,464	0	0						
	587815285		0	0	0	0	0	0	0
0	0	0	0						
	587815287		0	0	0	0	0	0	0
0	0	0	0						
	587815295		8,428	9,273	9,463	9,443	0	0	9,269
9,466	9,464	0	0						
	587815303		0	0	0	0	0	0	0
0	0	0	0						
	587815773		5,528	6,231	6,278	6,476	0	0	6,142
6,286	6,279	0	0						
	587815780		5,248	5,869	6,008	6,105	0	0	5,867
6,011	6,011	0	0						
	587815785		2	142	284	308	0	0	136
277	306	0	0						
	587815787		5,773	6,403	6,629	6,629	0	0	6,449
6,654	6,633	0	0						
	587815790		5,354	5,907	6,067	6,080	0	0	5,934
6,076	6,047	0	0						
	587815791		5,438	5,996	6,156	6,170	0	0	6,023
6,165	6,137	0	0						
	587815792		0	0	0	0	0	0	0
0	0	0	0						
	587815795		918	1,302	1,414	1,570	0	0	1,277
1,383	1,398	0	0						
	587815802		0	0	0	0	0	0	0
0	0	0	0						
	587815824		0	0	0	0	0	0	0
0	0	0	0						
	587816038		3,554	4,038	4,257	4,251	0	0	4,004
4,255	4,232	0	0						
	587816039		4,032	4,546	4,749	4,739	0	0	4,513
4,746	4,720	0	0						
	587816041		4,032	4,546	4,749	4,739	0	0	4,513
4,746	4,720	0	0						
	587816057		0	0	0	0	0	0	0
0	0	0	0						
	587816058		1,020	1,133	1,148	1,141	0	0	1,133
1,148	1,141	0	0						
	587816063		2,636	3,048	3,249	3,253	0	0	3,015
3,243	3,236	0	0						
	587816177		0	0	0	0	0	0	0
0	0	0	0						
	587816186		966	1,361	1,480	1,633	0	0	1,339
1,454	1,467	0	0						
	587816709		2,636	3,048	3,249	3,253	0	0	3,015
3,243	3,236	0	0						
	587816710		3,108	3,577	3,789	3,787	0	0	3,543
3,783	3,770	0	0						

587816711	830	921	936	927	0	0	921
936 927	0 0						
587816712	3,247	3,685	3,889	3,888	0	0	3,651
3,888 3,871	0 0						
587816713	3,460	3,977	4,199	4,194	0	0	3,943
4,192 4,176	0 0						
587816714	228	315	333	328	0	0	314
328 328	0 0						
587816718	228	315	333	328	0	0	314
328 328	0 0						
587816721	228	315	333	328	0	0	314
328 328	0 0						
587816722	228	315	333	328	0	0	314
328 328	0 0						
587816725	228	315	333	328	0	0	314
328 328	0 0						
587816971	1,954	2,162	2,186	2,168	0	0	2,166
2,175 2,158	0 0						
587816972	1,470	1,799	1,904	1,898	0	0	1,812
1,912 1,920	0 0						
587816973	1,242	1,484	1,571	1,570	0	0	1,498
1,585 1,591	0 0						
587816974	1,242	1,484	1,571	1,570	0	0	1,498
1,585 1,591	0 0						
587816975	0	0	0	0	0	0	0
0 0	0 0						
587816978	0	0	0	0	0	0	0
0 0	0 0						
587816980	0	0	0	0	0	0	0
0 0	0 0						
587816981	0	0	0	0	0	0	0
0 0	0 0						
587816984	0	0	0	0	0	0	0
0 0	0 0						
587816985	1,470	1,799	1,904	1,898	0	0	1,812
1,912 1,920	0 0						
587816986	0	0	0	0	0	0	0
0 0	0 0						
587816988	2,203	2,425	2,471	2,456	0	0	2,428
2,461 2,444	0 0						
587816989	0	0	0	0	0	0	0
0 0	0 0						
587817206	0	0	0	0	0	0	0
0 0	0 0						
587817207	830	921	936	927	0	0	921
936 927	0 0						
587817216	3,807	4,071	4,135	4,152	0	0	4,110
4,143 4,112	0 0						
587817217	2,174	2,396	2,531	2,575	0	0	2,400
2,530 2,529	0 0						
587817219	2,320	2,698	2,869	2,912	0	0	2,741
2,905 2,899	0 0						
587817221	2,320	2,698	2,869	2,912	0	0	2,741
2,905 2,899	0 0						
587817223	2,387	2,742	2,821	2,809	0	0	2,754
2,828 2,822	0 0						
587817225	0	0	0	0	0	0	0
0 0	0 0						
587817226	0	0	0	0	0	0	0



1164076472	8,425	9,282	9,661	9,612	0	0	9,282
9,661 9,612 0	0						
1165618763	956	1,092	1,147	1,157	0	0	1,092
1,147 1,157 0	0						
1167345578	2,456	2,777	2,809	2,792	0	0	2,777
2,809 2,792 0	0						
1176181443	9,714	10,842	11,195	11,235	0	0	10,842
11,195 11,235 0	0						
1176242672	8,425	9,282	9,661	9,612	0	0	9,282
9,661 9,612 0	0						
1186121768	846	938	958	954	0	0	938
958 954 0	0						
2122362473	5,269	5,812	6,042	6,055	0	0	5,812
6,042 6,055 0	0						
2147474988	6,000	6,684	6,947	6,964	0	0	6,684
6,947 6,964 0	0						
2147475007	8,525	9,340	9,379	9,370	0	0	9,349
9,389 9,352 0	0						
2147475798	8,460	9,322	9,704	9,657	0	0	9,322
9,704 9,657 0	0						
2147475799	8,107	8,882	9,223	9,201	0	0	8,882
9,223 9,201 0	0						
2147475801	5,729	6,242	6,390	6,421	0	0	6,179
6,379 6,403 0	0						
2147475949	4,128	4,915	5,307	5,439	0	0	4,915
5,307 5,439 0	0						
2147481733	35	41	44	45	0	0	41
44 45 0	0						
2147481754	956	1,092	1,147	1,157	0	0	1,092
1,147 1,157 0	0						
2147481911	5,431	6,343	6,722	6,842	0	0	6,343
6,722 6,842 0	0						
2147481977	2,456	2,777	2,809	2,792	0	0	2,777
2,809 2,792 0	0						
2147482906	3,481	3,756	3,840	3,862	0	0	3,722
3,827 3,863 0	0						
2147482907	3,481	3,756	3,840	3,862	0	0	3,722
3,827 3,863 0	0						
2147482908	2,459	2,889	3,012	3,008	0	0	2,867
2,989 3,008 0	0						
2147482912	486	641	678	679	0	0	641
674 677 0	0						
2147482916	3,729	4,207	4,361	4,376	0	0	4,216
4,355 4,389 0	0						
2147482917	3,585	4,168	4,365	4,388	0	0	4,177
4,359 4,401 0	0						
2147482919	5,171	5,718	5,905	5,958	0	0	5,718
5,905 5,958 0	0						
2147482922	1,923	2,204	2,295	2,297	0	0	2,185
2,275 2,295 0	0						
2147482923	1,923	2,204	2,295	2,297	0	0	2,185
2,275 2,295 0	0						
2147482924	3,529	4,123	4,277	4,291	0	0	4,108
4,254 4,285 0	0						
2147482925	203	211	207	205	0	0	212
208 205 0	0						
2147482926	226	241	240	238	0	0	242
241 238 0	0						
2147482927	22	30	33	33	0	0	30

33	33	0	0						
	2147482928		2,003	2,423	2,559	2,567	0	0	2,403
2,533	2,561	0	0						
	2147482930		1,964	2,378	2,511	2,519	0	0	2,358
2,485	2,514	0	0						
	2147482931		1,964	2,378	2,511	2,519	0	0	2,358
2,485	2,514	0	0						
	2147482932		0	0	0	0	0	0	0
0	0	0	0						
	2147482933		22	30	33	33	0	0	30
33	33	0	0						
	2147482937		1,850	2,054	2,087	2,070	0	0	2,054
2,087	2,068	0	0						
	2147482940		3,216	3,545	3,606	3,567	0	0	3,545
3,607	3,572	0	0						
	2147482941		1,997	2,228	2,268	2,252	0	0	2,228
2,268	2,250	0	0						
	2147482942		1,442	1,606	1,632	1,619	0	0	1,606
1,632	1,619	0	0						
	2147482943		14	32	38	38	0	0	32
37	37	0	0						
	2147482944		283	430	471	474	0	0	429
466	472	0	0						
	2147482945		14	32	38	38	0	0	32
37	37	0	0						
	2147482946		337	413	444	455	0	0	413
442	454	0	0						
	2147482947		283	430	471	474	0	0	429
466	472	0	0						
	2147482949		322	381	406	417	0	0	381
405	417	0	0						
	2147482950		323	384	410	421	0	0	384
409	420	0	0						
	2147482951		323	384	410	421	0	0	384
409	420	0	0						
	2147482952		0	0	0	0	0	0	0
0	0	0	0						
	2147482953		0	0	0	0	0	0	0
0	0	0	0						
	2147482954		0	0	0	0	0	0	0
0	0	0	0						
	2147482957		378	543	584	592	0	0	542
579	587	0	0						
	2147482958		1	3	3	4	0	0	3
3	4	0	0						
	2147482959		378	540	581	588	0	0	539
575	584	0	0						
	2147482960		96	113	114	118	0	0	113
113	115	0	0						
	2147482963		0	1	1	4	0	0	1
1	2	0	0						
	2147482964		8,525	9,340	9,379	9,370	0	0	9,349
9,389	9,352	0	0						
	2147482966		2	142	284	308	0	0	136
277	306	0	0						
	2147482967		317	359	367	366	0	0	359
367	366	0	0						
	2147482968		169	185	186	184	0	0	184
186	184	0	0						

	2147482969		147	174	181	182	0	0	174
180	182	0	0						
	2147482970		147	174	181	182	0	0	174
180	182	0	0						
	2147482973		8,577	9,636	10,054	10,185	0	0	9,636
10,055	10,186	0	0						
	2147482974		8,521	9,566	9,974	10,101	0	0	9,566
9,975	10,102	0	0						
	2147482975		0	0	1	1	0	0	0
1	1	0	0						
	2147482976		7,738	8,709	9,119	9,261	0	0	8,709
9,119	9,261	0	0						
	2147482977		7,415	8,326	8,709	8,841	0	0	8,326
8,710	8,842	0	0						
	2147482979		323	383	409	420	0	0	383
408	420	0	0						
	2147482980		323	383	409	420	0	0	383
408	420	0	0						
	2147482981		0	0	0	0	0	0	0
0	0	0	0						
	2147482982		0	0	0	0	0	0	0
0	0	0	0						
	2147482985		5,644	6,242	6,441	6,497	0	0	6,242
6,441	6,497	0	0						
	2147482989		0	0	0	0	0	0	0
0	0	0	0						
	2147482990		0	0	0	0	0	0	0
0	0	0	0						
	2147482992		5,644	6,242	6,441	6,497	0	0	6,242
6,441	6,497	0	0						
	2147482993		0	0	0	0	0	0	0
0	0	0	0						
	2147482994		5,644	6,242	6,441	6,497	0	0	6,242
6,441	6,497	0	0						
	2147482995		5,644	6,242	6,441	6,497	0	0	6,242
6,441	6,497	0	0						
	2147482996		0	0	0	0	0	0	0
0	0	0	0						
	2147482997		0	0	0	0	0	0	0
0	0	0	0						
	2147482998		0	0	0	0	0	0	0
0	0	0	0						
	2147482999		0	0	0	0	0	0	0
0	0	0	0						
	2147483000		0	0	0	0	0	0	0
0	0	0	0						
	2147483001		0	0	0	0	0	0	0
0	0	0	0						
	2147483002		0	0	0	0	0	0	0
0	0	0	0						
	2147483003		0	0	0	0	0	0	0
0	0	0	0						
	2147483004		0	0	0	0	0	0	0
0	0	0	0						
	2147483005		0	0	0	0	0	0	0
0	0	0	0						
	2147483006		5,644	6,242	6,441	6,497	0	0	6,242
6,441	6,497	0	0						
	2147483007		5,644	6,242	6,441	6,497	0	0	6,242

6,441	6,497	0	0							
	2147483008		0	0	0	0	0	0	0	0
0	0	0	0							
	2147483009		2,157	2,369	2,437	2,441	0	0	0	2,365
2,440	2,444	0	0							
	2147483011		2,089	2,290	2,354	2,357	0	0	0	2,286
2,358	2,361	0	0							
	2147483012		2,089	2,290	2,354	2,357	0	0	0	2,286
2,358	2,361	0	0							
	2147483015		2,455	2,881	2,959	2,970	0	0	0	2,881
2,952	2,963	0	0							
	2147483016		2,258	2,559	2,621	2,628	0	0	0	2,558
2,619	2,626	0	0							
	2147483017		723	802	803	808	0	0	0	800
801	807	0	0							
	2147483019		1,335	1,481	1,494	1,501	0	0	0	1,481
1,494	1,501	0	0							
	2147483020		723	802	803	808	0	0	0	800
801	807	0	0							
	2147483021		5,171	5,718	5,905	5,958	0	0	0	5,718
5,905	5,958	0	0							
	2147483024		5,644	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483025		5,644	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483026		5,644	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483027		0	0	0	0	0	0	0	0
0	0	0	0							
	2147483028		29	34	36	36	0	0	0	34
35	36	0	0							
	2147483029		29	34	36	36	0	0	0	34
35	36	0	0							
	2147483030		39	45	47	48	0	0	0	45
47	48	0	0							
	2147483031		39	45	47	48	0	0	0	45
47	48	0	0							
	2147483032		68	79	83	83	0	0	0	79
83	83	0	0							
	2147483033		68	78	82	83	0	0	0	78
82	83	0	0							
	2147483034		0	1	1	0	0	0	0	1
1	0	0	0							
	2147483035		1,023	1,284	1,335	1,345	0	0	0	1,287
1,331	1,340	0	0							
	2147483037		1,023	1,283	1,335	1,344	0	0	0	1,286
1,330	1,339	0	0							
	2147483038		1,023	1,283	1,335	1,344	0	0	0	1,286
1,330	1,339	0	0							
	2147483039		1,023	1,283	1,335	1,344	0	0	0	1,286
1,330	1,339	0	0							
	2147483040		1,023	1,283	1,335	1,344	0	0	0	1,286
1,330	1,339	0	0							
	2147483041		0	0	0	0	0	0	0	0
0	0	0	0							
	2147483042		0	0	0	0	0	0	0	0
0	0	0	0							
	2147483043		0	0	0	0	0	0	0	0
0	0	0	0							





0	0	0	0							
	2147483085	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483086	9,732	0	10,792	11,196	11,301	0	0	0	10,793
11,203	11,306	0	0							
	2147483088	9,857	0	10,930	11,337	11,441	0	0	0	10,931
11,344	11,445	0	0							
	2147483089	9,857	0	10,930	11,337	11,441	0	0	0	10,931
11,344	11,445	0	0							
	2147483090	125	0	138	141	139	0	0	0	138
141	139	0	0							
	2147483091	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483092	207	0	251	261	263	0	0	0	251
259	259	0	0							
	2147483093	207	0	251	261	263	0	0	0	251
259	259	0	0							
	2147483094	125	0	138	141	139	0	0	0	138
141	139	0	0							
	2147483095	125	0	138	141	139	0	0	0	138
141	139	0	0							
	2147483096	207	0	251	261	263	0	0	0	251
259	259	0	0							
	2147483097	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483098	1,281	0	1,488	1,540	1,538	0	0	0	1,492
1,542	1,533	0	0							
	2147483099	1,281	0	1,488	1,540	1,538	0	0	0	1,492
1,542	1,533	0	0							
	2147483101	1,370	0	1,721	1,917	1,936	0	0	0	1,709
1,877	1,914	0	0							
	2147483102	1,370	0	1,721	1,917	1,936	0	0	0	1,709
1,877	1,914	0	0							
	2147483103	758	0	1,042	1,228	1,253	0	0	0	1,030
1,187	1,231	0	0							
	2147483104	428	0	479	488	474	0	0	0	478
485	480	0	0							
	2147483105	428	0	479	488	474	0	0	0	478
485	480	0	0							
	2147483106	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483107	428	0	479	488	474	0	0	0	478
485	480	0	0							
	2147483108	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483109	331	0	563	740	779	0	0	0	551
703	751	0	0							
	2147483110	331	0	563	740	779	0	0	0	551
703	751	0	0							
	2147483111	331	0	563	740	779	0	0	0	551
703	751	0	0							
	2147483112	50	0	56	58	58	0	0	0	56
58	58	0	0							
	2147483113	50	0	56	58	58	0	0	0	56
58	58	0	0							
	2147483114	50	0	56	58	58	0	0	0	56
58	58	0	0							
	2147483115	50	0	56	58	58	0	0	0	56
58	58	0	0							



0	0	0	0							
	2147483154	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483155	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483156	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483157	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483158	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483159	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483161	2,767	0	3,271	3,503	3,585	0	0	0	3,283
3,499	3,601	0	0							
	2147483162	2,767	0	3,271	3,503	3,585	0	0	0	3,283
3,499	3,601	0	0							
	2147483163	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483164	2,767	0	3,271	3,503	3,585	0	0	0	3,283
3,499	3,601	0	0							
	2147483165	531	0	697	853	910	0	0	0	700
840	906	0	0							
	2147483166	2,236	0	2,574	2,650	2,675	0	0	0	2,583
2,659	2,695	0	0							
	2147483168	2,236	0	2,574	2,650	2,675	0	0	0	2,583
2,659	2,695	0	0							
	2147483169	2,236	0	2,574	2,650	2,675	0	0	0	2,583
2,659	2,695	0	0							
	2147483170	2,368	0	2,809	3,172	3,297	0	0	0	2,800
3,164	3,276	0	0							
	2147483171	1,191	0	1,461	1,620	1,679	0	0	0	1,452
1,612	1,658	0	0							
	2147483172	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483173	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483174	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483175	1,860	0	2,173	2,285	2,305	0	0	0	2,173
2,285	2,305	0	0							
	2147483178	1,198	0	1,295	1,349	1,354	0	0	0	1,295
1,354	1,359	0	0							
	2147483179	1,198	0	1,295	1,349	1,354	0	0	0	1,295
1,354	1,359	0	0							
	2147483180	1,198	0	1,295	1,349	1,354	0	0	0	1,295
1,354	1,359	0	0							
	2147483181	959	0	1,074	1,088	1,086	0	0	0	1,070
1,086	1,085	0	0							
	2147483182	959	0	1,074	1,088	1,086	0	0	0	1,070
1,086	1,085	0	0							
	2147483183	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483184	662	0	877	937	951	0	0	0	877
931	946	0	0							
	2147483185	662	0	877	937	951	0	0	0	877
931	946	0	0							
	2147483186	0	0	0	0	0	0	0	0	0
0	0	0	0							

	2147483187		662		877	937	951	0	0	877
931	946	0	0							
	2147483188		0		0	0	0	0	0	0
0	0	0	0							
	2147483189		0		0	0	0	0	0	0
0	0	0	0							
	2147483190		612		679	691	693	0	0	680
693	695	0	0							
	2147483191		612		679	691	693	0	0	680
693	695	0	0							
	2147483192		612		679	691	693	0	0	680
693	695	0	0							
	2147483193		612		679	691	693	0	0	680
693	695	0	0							
	2147483194		612		679	691	693	0	0	680
693	695	0	0							
	2147483195		612		679	691	693	0	0	680
693	695	0	0							
	2147483196		612		679	691	693	0	0	680
693	695	0	0							
	2147483197		0		0	0	0	0	0	0
0	0	0	0							
	2147483198		0		0	0	0	0	0	0
0	0	0	0							
	2147483199		0		0	0	0	0	0	0
0	0	0	0							
	2147483200		0		0	0	0	0	0	0
0	0	0	0							
	2147483201		0		0	0	0	0	0	0
0	0	0	0							
	2147483202		0		0	0	0	0	0	0
0	0	0	0							
	2147483206		2,348		2,785	3,024	3,097	0	0	2,785
3,024	3,097	0	0							
	2147483207		1,958		2,338	2,527	2,582	0	0	2,338
2,527	2,582	0	0							
	2147483208		1,958		2,338	2,527	2,582	0	0	2,338
2,527	2,582	0	0							
	2147483209		4,128		4,915	5,307	5,439	0	0	4,915
5,307	5,439	0	0							
	2147483210		4,128		4,915	5,307	5,439	0	0	4,915
5,307	5,439	0	0							
	2147483211		0		0	0	0	0	0	0
0	0	0	0							
	2147483212		0		0	0	0	0	0	0
0	0	0	0							
	2147483213		0		0	0	0	0	0	0
0	0	0	0							
	2147483214		0		0	0	0	0	0	0
0	0	0	0							
	2147483215		0		0	0	0	0	0	0
0	0	0	0							
	2147483216		0		0	0	0	0	0	0
0	0	0	0							
	2147483217		0		0	0	0	0	0	0
0	0	0	0							
	2147483218		0		0	0	0	0	0	0
0	0	0	0							
	2147483219		0		0	0	0	0	0	0

0	0	0	0						
	2147483222		1,380	1,678	1,770	1,810	0	0	1,678
1,770	1,810	0	0						
	2147483224		1,385	1,681	1,777	1,818	0	0	1,681
1,777	1,818	0	0						
	2147483226		182	222	249	258	0	0	222
249	258	0	0						
	2147483227		1,780	2,130	2,282	2,342	0	0	2,130
2,282	2,342	0	0						
	2147483229		1,780	2,130	2,282	2,342	0	0	2,130
2,282	2,342	0	0						
	2147483230		1,780	2,130	2,282	2,342	0	0	2,130
2,282	2,342	0	0						
	2147483231		1,380	1,678	1,770	1,810	0	0	1,678
1,770	1,810	0	0						
	2147483234		1,380	1,678	1,770	1,810	0	0	1,678
1,770	1,810	0	0						
	2147483236		1,958	2,338	2,527	2,582	0	0	2,338
2,527	2,582	0	0						
	2147483237		1,958	2,338	2,527	2,582	0	0	2,338
2,527	2,582	0	0						
	2147483238		1,958	2,338	2,527	2,582	0	0	2,338
2,527	2,582	0	0						
	2147483239		1,380	1,678	1,770	1,810	0	0	1,678
1,770	1,810	0	0						
	2147483240		1,380	1,678	1,770	1,810	0	0	1,678
1,770	1,810	0	0						
	2147483241		0	0	0	0	0	0	0
0	0	0	0						
	2147483242		0	0	0	0	0	0	0
0	0	0	0						
	2147483243		0	0	0	0	0	0	0
0	0	0	0						
	2147483244		0	0	0	0	0	0	0
0	0	0	0						
	2147483245		0	0	0	0	0	0	0
0	0	0	0						
	2147483246		0	0	0	0	0	0	0
0	0	0	0						
	2147483247		0	0	0	0	0	0	0
0	0	0	0						
	2147483248		0	0	0	0	0	0	0
0	0	0	0						
	2147483249		0	0	0	0	0	0	0
0	0	0	0						
	2147483250		0	0	0	0	0	0	0
0	0	0	0						
	2147483251		0	0	0	0	0	0	0
0	0	0	0						
	2147483252		0	0	0	0	0	0	0
0	0	0	0						
	2147483254		2,794	3,045	3,161	3,198	0	0	3,045
3,160	3,198	0	0						
	2147483256		2,794	3,045	3,161	3,198	0	0	3,045
3,160	3,198	0	0						
	2147483258		3,112	3,408	3,547	3,593	0	0	3,408
3,547	3,593	0	0						
	2147483260		3,112	3,408	3,547	3,593	0	0	3,408
3,547	3,593	0	0						

2147483264	2,254	2,447	2,534	2,562	0	0	2,447
2,534 2,562	0 0						
2147483265	0	0	0	0	0	0	0
0 0	0 0						
2147483266	0	0	0	0	0	0	0
0 0	0 0						
2147483267	0	0	0	0	0	0	0
0 0	0 0						
2147483270	118	132	131	133	0	0	127
131 132	0 0						
2147483271	318	363	387	395	0	0	363
387 396	0 0						
2147483272	0	0	0	0	0	0	0
0 0	0 0						
2147483273	0	0	0	0	0	0	0
0 0	0 0						
2147483274	2,521	2,732	2,827	2,857	0	0	2,732
2,827 2,857	0 0						
2147483275	2,521	2,733	2,827	2,858	0	0	2,733
2,827 2,858	0 0						
2147483278	439	489	498	507	0	0	0
0 0	0 0						
2147483280	0	0	0	0	0	0	0
0 0	0 0						
2147483281	0	0	0	0	0	0	0
0 0	0 0						
2147483282	0	0	0	0	0	0	0
0 0	0 0						
2147483283	0	0	0	0	0	0	0
0 0	0 0						
2147483284	0	0	0	0	0	0	0
0 0	0 0						
2147483285	0	0	0	0	0	0	0
0 0	0 0						
2147483286	0	0	0	0	0	0	0
0 0	0 0						
2147483290	12,894	14,322	15,038	15,162	0	0	0
0 0	0 0						
2147483297	8,394	9,201	9,657	9,740	0	0	0
0 0	0 0						
2147483300	6,860	7,623	8,018	8,111	0	0	0
0 0	0 0						
2147483303	4,397	4,813	5,048	5,069	0	0	4,903
5,121 5,138	0 0						
2147483304	4,424	4,845	5,082	5,103	0	0	4,934
5,153 5,170	0 0						
2147483305	12,843	14,309	15,042	15,170	0	0	0
0 0	0 0						
2147483306	12,751	14,204	14,936	15,064	0	0	0
0 0	0 0						
2147483308	4,424	4,845	5,082	5,103	0	0	4,934
5,153 5,170	0 0						
2147483309	4,424	4,845	5,082	5,103	0	0	4,934
5,153 5,170	0 0						
2147483311	3,112	3,408	3,547	3,593	0	0	3,408
3,547 3,593	0 0						
2147483312	2,405	2,617	2,713	2,744	0	0	2,617
2,713 2,744	0 0						
2147483316	2,254	2,447	2,534	2,562	0	0	2,447

2,534	2,562	0	0							
	2147483319	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483320	16	0	21	42	44	0	0	0	170
181	184	0	0							
	2147483321	16	0	21	42	44	0	0	0	170
181	184	0	0							
	2147483323	16	0	21	42	44	0	0	0	170
181	184	0	0							
	2147483325DN	16	0	19	22	37	0	0	0	0
0	0	0	0							
	2147483325DS	0	0	0	0	0	0	0	0	759
834	856	0	0							
	2147483326	16	0	19	22	37	0	0	0	759
834	856	0	0							
	2147483327DN	13,437	0	14,998	15,790	15,922	0	0	0	0
0	0	0	0							
	2147483327DS	0	0	0	0	0	0	0	0	595
638	650	0	0							
	2147483330	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483331DN	478	0	630	716	729	0	0	0	0
0	0	0	0							
	2147483331DS	0	0	0	0	0	0	0	0	759
834	856	0	0							
	2147483333	395	0	515	578	597	0	0	0	473
528	547	0	0							
	2147483334	395	0	515	578	597	0	0	0	473
528	547	0	0							
	2147483335DN	447	0	527	574	590	0	0	0	0
0	0	0	0							
	2147483335DS	0	0	0	0	0	0	0	0	473
528	547	0	0							
	2147483336	369	0	418	430	431	0	0	0	423
430	431	0	0							
	2147483337	369	0	418	430	431	0	0	0	423
430	431	0	0							
	2147483338	369	0	418	430	431	0	0	0	423
430	431	0	0							
	2147483339	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483340	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483341	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483342	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483343	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483344	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483345	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483346	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483347	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483348	0	0	0	0	0	0	0	0	0
0	0	0	0							



	2147483349	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483350	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483352	2,254	2,254	2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0						
	2147483355	334	334	378	394	400	0	0	374
393	400	0	0						
	2147483356	334	334	378	394	400	0	0	374
393	400	0	0						
	2147483357	82	82	91	88	88	0	0	86
87	86	0	0						
	2147483358	82	82	91	88	88	0	0	86
87	86	0	0						
	2147483359	82	82	91	88	88	0	0	86
87	86	0	0						
	2147483360	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483362	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483363	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483364	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483365	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483366	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483367	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483368	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483369	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483371	261	261	253	256	260	0	0	0
0	0	0	0						
	2147483373	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483374	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483375	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483376	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483377	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483378	475	475	558	608	623	0	0	1,058
1,118	1,136	0	0						
	2147483380	475	475	558	608	623	0	0	862
921	941	0	0						
	2147483383DN	13,719	13,719	15,294	16,083	16,231	0	0	0
0	0	0	0						
	2147483383DS	0	0	0	0	0	0	0	340
360	367	0	0						
	2147483387	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483388	1	1	1	1	1	0	0	7
10	11	0	0						
	2147483389	1	1	1	1	1	0	0	7

10	11	0	0							
	2147483390	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483391	0	1	1	1	1	1	0	0	7
10	11	0	0							
	2147483392	0	28	33	34	34	0	0	0	262
270	269	0	0							
	2147483393	0	28	33	34	34	0	0	0	38
42	43	0	0							
	2147483394	0	28	33	34	34	0	0	0	38
42	43	0	0							
	2147483395	0	1	1	1	1	0	0	0	7
10	11	0	0							
	2147483396	0	1	1	1	1	0	0	0	7
10	11	0	0							
	2147483397	0	1	1	1	1	0	0	0	7
10	11	0	0							
	2147483398	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483400	0	273	311	332	339	0	0	0	312
332	339	0	0							
	2147483401	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483402	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483403	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483404	0	273	311	332	339	0	0	0	312
332	339	0	0							
	2147483405	0	273	311	332	339	0	0	0	312
332	339	0	0							
	2147483406	0	4,172	4,558	4,776	4,791	0	0	0	4,647
4,847	4,857	0	0							
	2147483408	0	662	743	784	799	0	0	0	735
774	787	0	0							
	2147483409	0	6	7	8	8	0	0	0	15
18	19	0	0							
	2147483410	0	5	6	7	7	0	0	0	8
8	8	0	0							
	2147483411	0	5	6	7	7	0	0	0	8
8	8	0	0							
	2147483412	0	153	178	183	183	0	0	0	70
72	72	0	0							
	2147483413	0	153	177	182	182	0	0	0	0
0	0	0	0							
	2147483414	0	9	13	15	15	0	0	0	70
72	72	0	0							
	2147483415	0	9	13	15	15	0	0	0	70
72	72	0	0							
	2147483416	0	35	71	94	96	0	0	0	10
10	10	0	0							
	2147483417	0	12,977	14,391	15,100	15,234	0	0	0	0
0	0	0	0							
	2147483418	0	13,062	14,495	15,209	15,343	0	0	0	0
0	0	0	0							
	2147483419	0	35	71	94	96	0	0	0	10
10	10	0	0							
	2147483420	0	35	71	94	96	0	0	0	10
10	10	0	0							

	2147483421	35		71	94	96	0	0	10
10	10	0	0						
	2147483423DN	13,623		15,195	15,980	16,126	0	0	0
0	0	0	0						
	2147483423DS	0		0	0	0	0	0	543
574	586	0	0						
	2147483424	256		308	343	350	0	0	285
302	308	0	0						
	2147483425	96		99	103	105	0	0	138
145	148	0	0						
	2147483426DN	13,550		15,104	15,862	16,005	0	0	0
0	0	0	0						
	2147483426DS	0		0	0	0	0	0	340
360	367	0	0						
	2147483428	463		611	695	692	0	0	0
0	0	0	0						
	2147483429	0		0	0	0	0	0	0
0	0	0	0						
	2147483431	199		213	202	200	0	0	139
142	142	0	0						
	2147483432DN	114		108	92	89	0	0	0
0	0	0	0						
	2147483432DS	0		0	0	0	0	0	139
142	142	0	0						
	2147483433	85		105	110	110	0	0	0
0	0	0	0						
	2147483434	0		0	0	0	0	0	0
0	0	0	0						
	2147483435	0		0	0	0	0	0	0
0	0	0	0						
	2147483436	0		0	0	0	0	0	0
0	0	0	0						
	2147483437	0		0	0	0	0	0	0
0	0	0	0						
	2147483438	0		0	0	0	0	0	0
0	0	0	0						
	2147483439	0		0	0	0	0	0	0
0	0	0	0						
	2147483440	0		0	0	0	0	0	0
0	0	0	0						
	2147483441	0		0	0	0	0	0	0
0	0	0	0						
	2147483442	0		0	0	0	0	0	0
0	0	0	0						
	2147483443	2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0						
	2147483444	2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0						
	2147483445	3		3	3	3	0	0	3
3	3	0	0						
	2147483446	3		3	3	3	0	0	3
3	3	0	0						
	2147483447	3		3	3	3	0	0	3
3	3	0	0						
	2147483448	3		3	3	3	0	0	3
3	3	0	0						
	2147483449	3		3	3	3	0	0	3
3	3	0	0						
	2147483450	0		0	0	0	0	0	0

0	0	0	0							
	2147483451	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483452	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483453	3	3	3	3	3	0	0	3	3
3	3	0	0							
	2147483454	3	3	3	3	3	0	0	3	3
3	3	0	0							
	2147483455	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483456	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483457	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483458	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483459	152	152	170	179	182	0	0	170	170
179	182	0	0							
	2147483460	152	152	170	179	182	0	0	170	170
179	182	0	0							
	2147483461	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483464	152	152	170	179	182	0	0	170	170
179	182	0	0							
	2147483465	152	152	170	179	182	0	0	170	170
179	182	0	0							
	2147483466	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483468	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483469	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483471	2,254	2,254	2,447	2,534	2,562	0	0	2,447	2,447
2,534	2,562	0	0							
	2147483472	2,254	2,254	2,447	2,534	2,562	0	0	2,447	2,447
2,534	2,562	0	0							
	2147483473	2,254	2,254	2,447	2,534	2,562	0	0	2,447	2,447
2,534	2,562	0	0							
	2147483474	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483475	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483476	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483477	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483478	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483479	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483480	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483481	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483482	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483483	0	0	0	0	0	0	0	0	0
0	0	0	0							

0	2147483484	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	2147483485	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	2147483486	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	2147483487	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	2147483488	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	2147483489	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	2147483490	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	2147483491	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
179	2147483492	152	170	179	182	0	0	170	
179	182	0	0	0	0	0	0	0	
0	2147483493	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	2147483494	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
745	2147483495	663	737	745	740	0	0	737	
745	740	0	0	0	0	0	0	0	
3,243	2147483497	2,636	3,048	3,249	3,253	0	0	3,015	
3,243	3,236	0	0	0	0	0	0	0	
3,243	2147483498	2,636	3,048	3,249	3,253	0	0	3,015	
3,243	3,236	0	0	0	0	0	0	0	
9,646	2147483499	8,714	9,579	9,677	9,638	0	0	9,576	
9,646	9,648	0	0	0	0	0	0	0	
9,382	2147483501	8,475	9,303	9,424	9,366	0	0	9,300	
9,382	9,375	0	0	0	0	0	0	0	
9,646	2147483502	8,714	9,579	9,677	9,638	0	0	9,576	
9,646	9,648	0	0	0	0	0	0	0	
8,910	2147483504	8,430	8,917	8,919	8,808	0	0	8,898	
8,910	8,896	0	0	0	0	0	0	0	
9,058	2147483505	8,497	9,025	9,067	8,948	0	0	8,999	
9,058	9,044	0	0	0	0	0	0	0	
9,058	2147483506	8,497	9,025	9,067	8,948	0	0	8,999	
9,058	9,044	0	0	0	0	0	0	0	
1,454	2147483507	966	1,361	1,480	1,633	0	0	1,339	
1,454	1,467	0	0	0	0	0	0	0	
1,454	2147483508	966	1,361	1,480	1,633	0	0	1,339	
1,454	1,467	0	0	0	0	0	0	0	
1,454	2147483510	966	1,361	1,480	1,633	0	0	1,339	
1,454	1,467	0	0	0	0	0	0	0	
1,879	2147483511	1,337	1,785	1,885	2,040	0	0	1,766	
1,879	1,880	0	0	0	0	0	0	0	
1,879	2147483512	1,337	1,785	1,885	2,040	0	0	1,766	
1,879	1,880	0	0	0	0	0	0	0	
2,189	2147483513	1,935	2,144	2,189	2,174	0	0	2,144	
2,189	2,174	0	0	0	0	0	0	0	
2,189	2147483517	1,935	2,144	2,189	2,174	0	0	2,144	
2,189	2,174	0	0	0	0	0	0	0	
2,189	2147483518	1,935	2,144	2,189	2,174	0	0	2,144	
2,189	2,174	0	0	0	0	0	0	0	
2,189	2147483519	1,935	2,144	2,189	2,174	0	0	2,144	
2,189	2,174	0	0	0	0	0	0	0	
	2147483520	1,935	2,144	2,189	2,174	0	0	2,144	

2,189	2,174	0	0						
	2147483521		1,935	2,144	2,189	2,174	0	0	2,144
2,189	2,174	0	0						
	2147483522		1,935	2,144	2,189	2,174	0	0	2,144
2,189	2,174	0	0						
	2147483523		2,814	3,241	3,406	3,411	0	0	3,208
3,402	3,396	0	0						
	2147483524		2,814	3,241	3,406	3,411	0	0	3,208
3,402	3,396	0	0						
	2147483528		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,066	0	0						
	2147483531		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,066	0	0						
	2147483532		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,066	0	0						
	2147483533		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,066	0	0						
	2147483534		0	0	0	0	0	0	0
0	0	0	0						
	2147483537		2,533	2,798	2,850	2,829	0	0	2,798
2,853	2,830	0	0						
	2147483540		1,067	1,313	1,454	1,469	0	0	1,353
1,498	1,500	0	0						
	2147483543		9,732	10,792	11,196	11,301	0	0	10,793
11,203	11,306	0	0						
	2147483544		9,732	10,792	11,196	11,301	0	0	10,793
11,203	11,306	0	0						
	2147483545		8,125	9,043	9,224	9,243	0	0	9,047
9,226	9,223	0	0						
	2147483546		8,125	9,043	9,224	9,243	0	0	9,047
9,226	9,223	0	0						
	2147483547		710	789	803	796	0	0	789
803	796	0	0						
	2147483548		27	32	34	34	0	0	33
34	34	0	0						
	2147483549		4,424	4,845	5,082	5,103	0	0	4,934
5,153	5,170	0	0						
	2147483550		4,424	4,845	5,082	5,103	0	0	4,934
5,153	5,170	0	0						
	2147483551		1	2	20	34	0	0	0
0	0	0	0						
	2147483552		0	0	0	0	0	0	340
359	366	0	0						
	2147483553		0	0	0	0	0	0	0
0	0	0	0						
	2147483554		0	0	0	0	0	0	0
0	0	0	0						
	2147483555DN		14,012	15,649	16,479	16,635	0	0	0
0	0	0	0						
	2147483555DS		0	0	0	0	0	0	974
1,032	1,052	0	0						
	2147483556DN		13,878	15,503	16,322	16,476	0	0	0
0	0	0	0						
	2147483556DS		0	0	0	0	0	0	828
876	893	0	0						
	2147483557		518	584	617	628	0	0	584
617	628	0	0						
	2147483558		7,596	8,561	9,065	9,158	0	0	8,561
9,065	9,158	0	0						

0	2147483561	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	2147483562	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	2147483563	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
1,542	2147483564	1,281	1,488	1,540	1,538	0	0	0	1,492
1,542	1,533	0	0	0	0	0	0	0	0
1,542	2147483565	1,281	1,488	1,540	1,538	0	0	0	1,492
1,542	1,533	0	0	0	0	0	0	0	0
0	2147483566	167	173	171	181	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	2147483567	167	173	171	181	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	2147483568	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
5,218	2147483569	4,231	4,868	5,206	5,259	0	0	0	4,877
5,218	5,263	0	0	0	0	0	0	0	0
7,855	2147483572	6,645	7,481	7,862	7,938	0	0	0	7,456
7,855	7,947	0	0	0	0	0	0	0	0
468	2147483573	416	462	468	465	0	0	0	462
468	465	0	0	0	0	0	0	0	0
4,667	2147483575	3,841	4,408	4,658	4,697	0	0	0	4,404
4,667	4,718	0	0	0	0	0	0	0	0
4,645	2147483576	3,822	4,387	4,636	4,677	0	0	0	4,382
4,645	4,697	0	0	0	0	0	0	0	0
0	2147483577DN	448	595	679	691	0	0	0	0
0	0	0	0	0	0	0	0	0	0
799	2147483577DS	0	0	0	0	0	0	0	726
799	821	0	0	0	0	0	0	0	0
799	2147483578	448	595	679	691	0	0	0	726
799	821	0	0	0	0	0	0	0	0
0	2147483579	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
5,913	2147483580	5,104	5,614	5,865	5,896	0	0	0	5,707
5,913	5,934	0	0	0	0	0	0	0	0
4,580	2147483581	3,982	4,333	4,534	4,542	0	0	0	4,428
4,580	4,580	0	0	0	0	0	0	0	0
2,307	2147483582	1,863	2,170	2,307	2,361	0	0	0	2,170
2,307	2,361	0	0	0	0	0	0	0	0
4,324	2147483585	3,560	4,130	4,328	4,354	0	0	0	4,139
4,324	4,367	0	0	0	0	0	0	0	0
9,159	2147483588	8,041	8,969	9,158	9,185	0	0	0	8,972
9,159	9,159	0	0	0	0	0	0	0	0
6,979	2147483590	5,935	6,739	6,977	7,006	0	0	0	6,760
6,979	7,003	0	0	0	0	0	0	0	0
8,514	2147483593	7,543	8,265	8,508	8,615	0	0	0	8,270
8,514	8,596	0	0	0	0	0	0	0	0
6,871	2147483595	5,900	6,642	6,858	6,920	0	0	0	6,667
6,871	6,914	0	0	0	0	0	0	0	0
7,545	2147483596	6,403	7,010	7,382	7,463	0	0	0	7,193
7,545	7,620	0	0	0	0	0	0	0	0
11,203	2147483599	9,732	10,792	11,196	11,301	0	0	0	10,793
11,203	11,306	0	0	0	0	0	0	0	0
8,829	2147483600	7,758	8,571	8,834	8,904	0	0	0	8,572
8,829	8,894	0	0	0	0	0	0	0	0
6,372	2147483601	5,232	6,020	6,378	6,488	0	0	0	6,001
6,372	6,487	0	0	0	0	0	0	0	0
	2147483603	1,974	2,221	2,362	2,398	0	0	0	2,221

2,374	2,412	0	0							
	2147483605		0		0	0	0	0	0	0
0	0	0	0							
	2147483606		2,293		2,514	2,670	2,720	0	0	2,516
2,662	2,708	0	0							
	2147483608		811		944	1,022	1,054	0	0	944
1,020	1,054	0	0							
	2147483610		323		380	399	405	0	0	380
399	405	0	0							
	2147483612		7,206		8,241	8,740	8,886	0	0	8,222
8,746	8,899	0	0							
	2147483615		6,126		6,955	7,327	7,420	0	0	6,936
7,337	7,434	0	0							
	2147483617		488		563	623	648	0	0	563
621	648	0	0							
	2147483618		6,175		6,894	7,225	7,337	0	0	6,902
7,266	7,368	0	0							
	2147483619		6,005		6,719	6,990	7,074	0	0	6,656
6,985	7,068	0	0							
	2147483621		2,055		2,457	2,624	2,664	0	0	2,386
2,576	2,626	0	0							
	2147483622		593		723	790	817	0	0	723
788	817	0	0							
	2147483626		9,041		10,227	10,798	10,927	0	0	10,139
10,751	10,890	0	0							
	2147483627		4,685		5,224	5,519	5,602	0	0	5,356
5,675	5,766	0	0							
	2147483630		1,651		1,775	1,884	1,911	0	0	1,776
1,872	1,898	0	0							
	2147483631		0		0	0	0	0	0	0
0	0	0	0							
	1		0		0	0	0	0	0	14,675
15,447	15,583	0	0							
	2		0		0	0	0	0	0	14,306
15,031	15,156	0	0							
	3		0		0	0	0	0	0	14,438
15,184	15,314	0	0							
	4		0		0	0	0	0	0	884
963	987	0	0							
	5		0		0	0	0	0	0	645
690	702	0	0							
	6		0		0	0	0	0	0	340
359	366	0	0							
	18		0		0	0	0	0	0	9,522
9,955	10,033	0	0							
	2147483597		0		0	0	0	0	0	2,690
2,796	2,800	0	0							
	2147483633		0		0	0	0	0	0	7,710
8,125	8,225	0	0							
	2147483637		0		0	0	0	0	0	9,238
9,771	9,917	0	0							
	2147483640		0		0	0	0	0	0	237
246	246	0	0							
	2147483646		0		0	0	0	0	0	0
0	0	0	0							
	2147483647		0		0	0	0	0	0	652
701	715	0	0							

Combined Local Collision Rate Subsection



Link Name	Observed Collisions	First Observed Collision Year	Local Severity Ratio	Split Year
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[Section 5] Input Data - Parameter File

COBALT Parameter File  
Version 2,019.10

Cost Base Year  
2011

Appraisal Period  
30

Discount Rate	Years from Current Year	Discount Rate (%)
	30	4.00
	60	3.50
	100	3.00

Cost per Casualty	Severity	Cost
	Fatal	2,310,500
	Serious	331,400
	Slight	31,100

Cost per Collision	Severity	Insurance Administration	Damage to Property		
			Urban	Rural	Motorway
	Fatal	375	13,952	13,952	13,952
	Serious	233	6,225	6,225	6,225
	Slight	142	3,713	3,713	3,713
	Damage	67	2,346	2,346	2,346
			Gardai Cost		
			Urban	Rural	Motorway
	Fatal		21,521	21,521	21,521
	Serious		2,519	2,519	2,519
	Slight		653	653	653
	Damage		42	42	42

Compound Annual Rates of Growth of Collision Values	Range of Years	Rate of Growth (%p.a.)
	2011-2015	1.040
	2015-2020	1.036
	2020-2025	1.022
	2025-2111	1.023

Number of Damage Only Collisions per PIA	Severity		
	Urban	Rural	Motorway
Damage	0.0	0.0	0.0

Link and Junction Combined Collision Proportions				
Base Year				
2011				
Road Type	Speed Limit (km/h)	Collision Proportions		
		Fatal	Serious	Slight
1	70	0.013	0.027	0.960

1	80	0.013	0.027	0.960
1	90	0.013	0.027	0.960
1	100	0.013	0.027	0.960
1	110	0.013	0.027	0.960
1	120	0.013	0.027	0.960
1	130	0.013	0.027	0.960
2	70	0.023	0.053	0.925
2	80	0.023	0.053	0.925
2	90	0.023	0.053	0.925
2	100	0.023	0.053	0.925
2	110	0.023	0.053	0.925
2	120	0.023	0.053	0.925
2	130	0.023	0.053	0.925
3	50	0.005	0.032	0.963
3	60	0.005	0.032	0.963
4	70	0.012	0.026	0.962
4	80	0.012	0.026	0.962
4	90	0.012	0.026	0.962
4	100	0.012	0.026	0.962
4	110	0.012	0.026	0.962
4	120	0.012	0.026	0.962
4	130	0.012	0.026	0.962
5	50	0.008	0.028	0.963
5	60	0.008	0.028	0.963
6	70	0.023	0.053	0.925
6	80	0.023	0.053	0.925
6	90	0.023	0.053	0.925
6	100	0.023	0.053	0.925
6	110	0.023	0.053	0.925
6	120	0.023	0.053	0.925
6	130	0.023	0.053	0.925
7	50	0.005	0.032	0.963
7	60	0.005	0.032	0.963
8	70	0.012	0.026	0.962
8	80	0.012	0.026	0.962
8	90	0.012	0.026	0.962
8	100	0.012	0.026	0.962
8	110	0.012	0.026	0.962
8	120	0.012	0.026	0.962
8	130	0.012	0.026	0.962
9	50	0.008	0.028	0.963
9	60	0.008	0.028	0.963
10	30	0.005	0.032	0.963
10	40	0.005	0.032	0.963
10	50	0.005	0.032	0.963
10	60	0.005	0.032	0.963
11	70	0.123	0.140	0.737
11	80	0.123	0.140	0.737
11	90	0.123	0.140	0.737
11	100	0.123	0.140	0.737
11	110	0.123	0.140	0.737
11	120	0.123	0.140	0.737
11	130	0.123	0.140	0.737

Link and Junction Combined Collision Rates and Change Factors  
Base Year

2011

Road Type	Speed Limit (km/h)	Collision Rate	Beta Factor
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1	70	0.057	0.956
1	80	0.057	0.956
1	90	0.057	0.956
1	100	0.057	0.956
1	110	0.057	0.956
1	120	0.057	0.956
1	130	0.057	0.956
2	70	0.219	0.955
2	80	0.219	0.955
2	90	0.219	0.955
2	100	0.219	0.955
2	110	0.219	0.955
2	120	0.219	0.955
2	130	0.219	0.955
3	50	0.613	0.959
3	60	0.613	0.959
4	70	0.094	0.956
4	80	0.094	0.956
4	90	0.094	0.956
4	100	0.094	0.956
4	110	0.094	0.956
4	120	0.094	0.956
4	130	0.094	0.956
5	50	0.402	0.967
5	60	0.402	0.967
6	70	0.219	0.955
6	80	0.219	0.955
6	90	0.219	0.955
6	100	0.219	0.955
6	110	0.219	0.955
6	120	0.219	0.955
6	130	0.219	0.955
7	50	0.613	0.959
7	60	0.613	0.959
8	70	0.094	0.955
8	80	0.094	0.955
8	90	0.094	0.955
8	100	0.094	0.955
8	110	0.094	0.955
8	120	0.094	0.955
8	130	0.094	0.955
9	50	0.402	0.959
9	60	0.402	0.959
10	30	0.449	0.959
10	40	0.449	0.959
10	50	0.449	0.959
10	60	0.449	0.959
11	70	0.115	0.955
11	80	0.115	0.955
11	90	0.115	0.955
11	100	0.115	0.955
11	110	0.115	0.955
11	120	0.115	0.955
11	130	0.115	0.955

Link and Junction Combined Collision Beta Factor Changes over Time

Range of Years	Change to Beta Factor
2011-2016	1.000
2017-2026	0.500

2027-2036            0.250  
 2037-2160            0.000

Link and Junction Combined Casualty Rates

Base Year

2011

Road Type	Speed Limit (km/h)	Casualties per P.I.A.		
		Fatal	Serious	Slight
1	70	0.025	0.033	1.393
1	80	0.025	0.033	1.393
1	90	0.025	0.033	1.393
1	100	0.025	0.033	1.393
1	110	0.025	0.033	1.393
1	120	0.025	0.033	1.393
1	130	0.025	0.033	1.393
2	70	0.050	0.106	1.451
2	80	0.050	0.106	1.451
2	90	0.050	0.106	1.451
2	100	0.050	0.106	1.451
2	110	0.050	0.106	1.451
2	120	0.050	0.106	1.451
2	130	0.050	0.106	1.451
3	50	0.007	0.051	1.325
3	60	0.007	0.051	1.325
4	70	0.018	0.043	1.342
4	80	0.018	0.043	1.342
4	90	0.018	0.043	1.342
4	100	0.018	0.043	1.342
4	110	0.018	0.043	1.342
4	120	0.018	0.043	1.342
4	130	0.018	0.043	1.342
5	50	0.008	0.045	1.233
5	60	0.008	0.045	1.233
6	70	0.050	0.106	1.451
6	80	0.050	0.106	1.451
6	90	0.050	0.106	1.451
6	100	0.050	0.106	1.451
6	110	0.050	0.106	1.451
6	120	0.050	0.106	1.451
6	130	0.050	0.106	1.451
7	50	0.007	0.051	1.325
7	60	0.007	0.051	1.325
8	70	0.018	0.043	1.342
8	80	0.018	0.043	1.342
8	90	0.018	0.043	1.342
8	100	0.018	0.043	1.342
8	110	0.018	0.043	1.342
8	120	0.018	0.043	1.342
8	130	0.018	0.043	1.342
9	50	0.008	0.045	1.233
9	60	0.008	0.045	1.233
10	30	0.007	0.051	1.325
10	40	0.007	0.051	1.325
10	50	0.007	0.051	1.325
10	60	0.007	0.051	1.325
11	70	0.050	0.106	1.451
11	80	0.050	0.106	1.451
11	90	0.050	0.106	1.451
11	100	0.050	0.106	1.451

11	110	0.050	0.106	1.451
11	120	0.050	0.106	1.451
11	130	0.050	0.106	1.451

Link and Junction Combined Casualty Change Factors

Base Year

2011

Road Type	Speed Limit (km/h)	Beta Factor		
		Fatal	Serious	Slight
1	70	0.978	0.979	1.002
1	80	0.978	0.979	1.002
1	90	0.978	0.979	1.002
1	100	0.978	0.979	1.002
1	110	0.978	0.979	1.002
1	120	0.978	0.979	1.002
1	130	0.978	0.979	1.002
2	70	0.979	0.983	1.002
2	80	0.979	0.983	1.002
2	90	0.979	0.983	1.002
2	100	0.979	0.983	1.002
2	110	0.979	0.983	1.002
2	120	0.979	0.983	1.002
2	130	0.979	0.983	1.002
3	50	0.971	0.995	1.001
3	60	0.971	0.995	1.001
4	70	0.984	0.985	0.998
4	80	0.984	0.985	0.998
4	90	0.984	0.985	0.998
4	100	0.984	0.985	0.998
4	110	0.984	0.985	0.998
4	120	0.984	0.985	0.998
4	130	0.984	0.985	0.998
5	50	0.998	0.990	1.002
5	60	0.998	0.990	1.002
6	70	0.979	0.983	1.002
6	80	0.979	0.983	1.002
6	90	0.979	0.983	1.002
6	100	0.979	0.983	1.002
6	110	0.979	0.983	1.002
6	120	0.979	0.983	1.002
6	130	0.979	0.983	1.002
7	50	0.971	0.995	1.001
7	60	0.971	0.995	1.001
8	70	0.979	0.983	1.002
8	80	0.979	0.983	1.002
8	90	0.979	0.983	1.002
8	100	0.979	0.983	1.002
8	110	0.979	0.983	1.002
8	120	0.979	0.983	1.002
8	130	0.979	0.983	1.002
9	50	0.971	0.995	1.001
9	60	0.971	0.995	1.001
10	30	0.971	0.995	1.001
10	40	0.971	0.995	1.001
10	50	0.971	0.995	1.001
10	60	0.971	0.995	1.001
11	70	0.979	0.983	1.002
11	80	0.979	0.983	1.002
11	90	0.979	0.983	1.002

11	100	0.979	0.983	1.002
11	110	0.979	0.983	1.002
11	120	0.979	0.983	1.002
11	130	0.979	0.983	1.002

Link and Junction Combined Casualty Beta Factor Changes over Time

Range of Years    Change to Beta Factor

2011-2016	1.000
2017-2026	0.500
2027-2036	0.250
2037-2160	0.000



[Section 1.1] Economic Summary

Total Without-Scheme Collision Costs =	68,891.8
Total With-Scheme Collision Costs =	65,787.6
Total Collision Benefits Saved by Scheme =	3,104.3

Costs and benefits discounted to 2011 in multiples of a thousand euros.

[Section 1.2] Collision Summary

Total Without-Scheme Collisions =	1,192.0
Total With-Scheme Collisions =	1,180.9
Total Collisions Saved by Scheme =	11.1

This analysis includes 228 serious error(s).  
These results should not be considered usable.

This analysis includes 117 warning(s).  
These results should be considered carefully before using.

[Section 1.3] Casualty Summary

Total Without-Scheme Casualties (Fatal) =	37.1
(Serious) =	90.0
(Slight) =	1,726.8
Total With-Scheme Casualties (Fatal) =	34.8
(Serious) =	85.2
(Slight) =	1,696.7
Total Casualties Saved by Scheme (Fatal) =	2.2
(Serious) =	4.8
(Slight) =	30.0

This analysis includes 228 serious error(s).  
These results should not be considered usable.

This analysis includes 117 warning(s).  
These results should be considered carefully before using.

[Section 2] Combined Link and Junction Collision Statistics

Scheme	*----- Without-Scheme -----*			*----- With-		
	*----- Benefits -----*			*-----		
Collisions -*	Total*	*-- Number of Collisions -*	Total*	*-- Number of	Total*	
Link Name	*	2030	2045	Cost*	*	2030 2045



Total*	Cost* *	2030	2045	Total*	Benefit*		
897		0.1	0.1	1.7	50.4	0.1	0.1
1.7	50.4	0.0	0.0	0.0	0.0		
900		0.1	0.1	2.0	57.9	0.1	0.1
2.0	57.9	0.0	0.0	0.0	0.0		
901		0.2	0.2	5.1	146.9	0.0	0.0
0.0	0.0	0.2	0.2	5.1	146.9		
906		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
923		0.2	0.2	6.2	407.4	0.2	0.2
6.2	407.4	0.0	0.0	0.0	0.0		
1495		0.1	0.1	1.8	120.0	0.1	0.1
1.8	120.0	0.0	0.0	0.0	0.0		
1497		0.0	0.0	1.4	93.6	0.0	0.0
1.4	93.6	0.0	0.0	0.0	0.0		
1499		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1504		0.1	0.1	2.8	186.3	0.1	0.1
2.8	186.3	0.0	0.0	0.0	0.0		
1505		0.4	0.4	11.0	730.1	0.4	0.4
11.0	730.1	0.0	0.0	0.0	0.0		
1506		0.1	0.1	4.2	275.5	0.1	0.1
4.2	275.5	0.0	0.0	0.0	0.0		
1515		1.1	1.1	33.9	1,217.0	1.1	1.1
33.9	1,217.0	0.0	0.0	0.0	0.0		
1590		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1591		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
44747		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
45876		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48840		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48953		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49089		0.1	0.1	3.4	97.4	0.1	0.1
3.4	97.7	0.0	0.0	0.0	-0.4		
49185		0.8	0.7	22.0	638.3	0.8	0.7
22.1	639.8	0.0	0.0	-0.1	-1.5		
49353		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49552		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49560		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49630		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49684		0.1	0.1	3.9	257.4	0.1	0.1
3.9	256.1	0.0	0.0	0.0	1.3		
49717		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49842		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
50060		0.3	0.3	9.4	272.7	0.3	0.3
9.4	272.8	0.0	0.0	0.0	-0.1		
50401		1.0	1.0	28.7	831.7	1.0	1.0
28.6	827.4	0.0	0.0	0.1	4.4		

50515		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50542		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50600		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50648		0.3	0.2	7.3	486.2	0.3	0.2	
7.3	486.2	0.0	0.0	0.0	0.0	0.0	0.0	
50653		0.1	0.1	3.1	89.1	0.1	0.1	
3.1	89.5	0.0	0.0	0.0	-0.4	0.0	0.0	
50686		0.3	0.3	9.5	275.3	0.3	0.3	
9.6	278.4	0.0	0.0	-0.1	-3.1	0.0	0.0	
554437085		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554437089		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445417		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445421		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445424		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445434		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445603		0.3	0.3	8.9	258.0	0.3	0.3	
8.9	258.1	0.0	0.0	0.0	-0.1	0.0	0.0	
554445605		0.1	0.1	3.2	91.5	0.1	0.1	
3.2	91.5	0.0	0.0	0.0	0.0	0.0	0.0	
554445606		0.1	0.1	2.1	59.7	0.1	0.1	
2.1	59.9	0.0	0.0	0.0	-0.2	0.0	0.0	
554445611		0.1	0.1	2.0	58.0	0.1	0.1	
2.0	58.4	0.0	0.0	0.0	-0.4	0.0	0.0	
554445616		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445660		0.1	0.1	3.8	110.9	0.1	0.1	
3.8	111.2	0.0	0.0	0.0	-0.3	0.0	0.0	
554445681		0.0	0.0	0.7	19.6	0.0	0.0	
0.7	19.7	0.0	0.0	0.0	-0.1	0.0	0.0	
554451601		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554451604		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554451606		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554451619		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554451621		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554469301		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554469376		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554469377		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554469379		0.1	0.1	4.0	114.9	0.1	0.1	
4.0	115.7	0.0	0.0	0.0	-0.8	0.0	0.0	
554469380		0.1	0.1	2.8	81.8	0.1	0.1	
2.8	82.1	0.0	0.0	0.0	-0.3	0.0	0.0	
554469383		0.1	0.1	2.9	83.5	0.1	0.1	

2.9	83.8	0.0	0.0	0.0	-0.3		
	554469386	0.1	0.1	2.5	73.8	0.1	0.1
2.6	73.9	0.0	0.0	0.0	-0.1		
	554469390	0.0	0.0	1.0	67.5	0.0	0.0
1.0	67.4	0.0	0.0	0.0	0.1		
	554476250	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476251	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476254	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476255	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476258	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476263	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476268	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476273	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476275	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476276	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476314	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476317	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476318	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476321	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476331	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476332	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476337	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476339	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476344	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476347	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554478297	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554478964	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554478965	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554479189	0.0	0.0	0.7	43.7	0.0	0.0
0.7	43.7	0.0	0.0	0.0	0.0		
	554479190	0.0	0.0	0.1	9.2	0.0	0.0
0.1	9.2	0.0	0.0	0.0	0.0		
	554499930	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554499931	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

554499943	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
559752177	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
562717850	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578082733	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578088741	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814444	0.1	0.1	1.7	47.9	0.1	0.1	
1.7	48.1	0.0	0.0	0.0	-0.2		
587814449	0.1	0.1	2.2	62.9	0.1	0.1	
2.2	63.1	0.0	0.0	0.0	-0.2		
587814450	0.0	0.0	0.6	18.2	0.0	0.0	
0.6	18.3	0.0	0.0	0.0	-0.1		
587814454	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814456	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814797	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814807	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814808	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814809	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814811	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814819	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814822	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814825	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814826	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815160	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815163	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815170	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815171	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815173	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815174	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815269	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815274	0.0	0.0	0.0	0.0	0.0	0.0	0.0





0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817228	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817230	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817231	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817234	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817269	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817271	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817272	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817274	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817275	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817314	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817316	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817318	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817319	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817447	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817448	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817453	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015491	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015493	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015494	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589626976	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481852	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481853	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481868	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2.1	590522243	0.1	0.1	2.1	60.1	0.1	0.1
0.9	60.1	0.0	0.0	0.0	0.0		
0.0	590522244	0.0	0.0	0.9	25.3	0.0	0.0
0.0	25.3	0.0	0.0	0.0	0.0		
0.0	590522245	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1139400830	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1148054292	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1164076472	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

	1165618763	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1167345578	0.0	0.0	1.0	69.2	0.0	0.0	0.0
1.0	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1176181443	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1176242672	0.1	0.1	4.2	280.6	0.1	0.1	0.1
4.2	280.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1186121768	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2122362473	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147474988	1.1	1.1	31.6	2,096.4	1.1	1.1	1.1
31.6	2,096.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475007	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475798	0.5	0.5	14.7	973.5	0.5	0.5	0.5
14.7	973.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475799	0.3	0.3	8.1	539.8	0.3	0.3	0.3
8.1	539.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475801	0.2	0.2	5.3	354.4	0.2	0.2	0.2
5.3	352.6	0.0	0.0	0.0	1.8	0.0	0.0	0.0
	2147475949	0.2	0.2	5.2	342.9	0.2	0.2	0.2
5.2	342.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481733	0.0	0.0	0.1	3.5	0.0	0.0	0.0
0.1	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481754	0.0	0.0	1.2	79.0	0.0	0.0	0.0
1.2	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481911	0.3	0.3	8.1	535.8	0.3	0.3	0.3
8.1	535.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481977	0.5	0.4	13.1	869.9	0.5	0.4	0.4
13.1	869.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482906	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482907	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482908	0.1	0.1	3.5	231.7	0.1	0.1	0.1
3.5	230.2	0.0	0.0	0.0	1.5	0.0	0.0	0.0
	2147482912	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482916	0.0	0.0	1.2	34.7	0.0	0.0	0.0
1.2	34.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482917	0.0	0.0	1.3	38.6	0.0	0.0	0.0
1.3	38.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482919	0.3	0.3	8.1	538.5	0.3	0.3	0.3
8.1	538.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482922	0.2	0.2	5.0	329.9	0.2	0.2	0.2
4.9	327.5	0.0	0.0	0.0	2.4	0.0	0.0	0.0
	2147482923	0.0	0.0	0.6	41.2	0.0	0.0	0.0
0.6	40.9	0.0	0.0	0.0	0.3	0.0	0.0	0.0
	2147482924	0.0	0.0	0.9	62.7	0.0	0.0	0.0
0.9	62.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0
	2147482925	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482926	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482927	0.0	0.0	0.0	0.2	0.0	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482928	0.0	0.0	0.1	6.6	0.0	0.0	0.0



0.1	6.6	0.0	0.0	0.0	0.1		
	2147482930	0.0	0.0	1.5	96.5	0.0	0.0
1.4	95.6	0.0	0.0	0.0	0.8		
	2147482931	0.1	0.1	3.6	237.6	0.1	0.1
3.6	235.6	0.0	0.0	0.0	2.0		
	2147482932	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482933	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482937	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482940	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482941	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482942	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482943	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482944	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482945	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482946	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482947	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482949	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482950	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482951	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482952	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482953	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482954	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482957	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482958	0.0	0.0	0.0	0.7	0.0	0.0
0.0	0.7	0.0	0.0	0.0	0.0		
	2147482959	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482960	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482963	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482964	0.2	0.2	6.3	416.6	0.2	0.2
6.3	416.8	0.0	0.0	0.0	-0.2		
	2147482966	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482967	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482968	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482969	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

2147482970	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482973	0.2	0.2	4.6	132.1	0.2	0.2	0.2
4.6	132.1	0.0	0.0	0.0	0.0	0.0	0.0
2147482974	0.1	0.1	3.0	86.2	0.1	0.1	0.1
3.0	86.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482975	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482976	1.1	1.1	32.5	2,157.5	1.1	1.1	1.1
32.5	2,157.5	0.0	0.0	0.0	0.0	0.0	0.0
2147482977	1.2	1.2	35.6	2,360.6	1.2	1.2	1.2
35.6	2,360.8	0.0	0.0	0.0	-0.2	0.0	0.0
2147482979	0.0	0.0	1.3	86.9	0.0	0.0	0.0
1.3	86.8	0.0	0.0	0.0	0.1	0.0	0.0
2147482980	0.0	0.0	1.1	72.3	0.0	0.0	0.0
1.1	72.2	0.0	0.0	0.0	0.1	0.0	0.0
2147482981	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482982	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482985	0.0	0.0	1.3	85.3	0.0	0.0	0.0
1.3	85.3	0.0	0.0	0.0	0.0	0.0	0.0
2147482989	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482990	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482992	0.0	0.0	0.6	37.7	0.0	0.0	0.0
0.6	37.7	0.0	0.0	0.0	0.0	0.0	0.0
2147482993	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482994	0.6	0.6	17.9	1,187.2	0.6	0.6	0.6
17.9	1,187.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482995	0.2	0.2	5.4	357.6	0.2	0.2	0.2
5.4	357.6	0.0	0.0	0.0	0.0	0.0	0.0
2147482996	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482997	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482998	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482999	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483004	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483005	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483006	0.6	0.5	16.1	1,067.0	0.6	0.5	0.5
16.1	1,067.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483007	0.0	0.0	0.6	40.6	0.0	0.0	0.0
0.6	40.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483008	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483009		0.1	0.1	2.3	154.2	0.1	0.1
2.3	154.2	0.0	0.0	0.0	-0.1		
2147483011		0.0	0.0	0.9	57.5	0.0	0.0
0.9	57.5	0.0	0.0	0.0	0.0		
2147483012		0.2	0.2	5.3	353.7	0.2	0.2
5.3	354.0	0.0	0.0	0.0	-0.3		
2147483015		0.0	0.0	0.4	28.3	0.0	0.0
0.4	28.2	0.0	0.0	0.0	0.1		
2147483016		0.0	0.0	0.7	49.2	0.0	0.0
0.7	49.2	0.0	0.0	0.0	0.0		
2147483017		0.1	0.1	2.4	163.1	0.1	0.1
2.4	162.7	0.0	0.0	0.0	0.4		
2147483019		0.7	0.7	20.1	1,339.6	0.7	0.7
20.1	1,339.6	0.0	0.0	0.0	0.0		
2147483020		0.0	0.0	1.3	89.8	0.0	0.0
1.3	89.6	0.0	0.0	0.0	0.2		
2147483021		0.3	0.3	9.2	608.7	0.3	0.3
9.2	608.7	0.0	0.0	0.0	0.0		
2147483024		0.1	0.1	2.5	165.5	0.1	0.1
2.5	165.5	0.0	0.0	0.0	0.0		
2147483025		0.2	0.2	5.6	374.4	0.2	0.2
5.6	374.4	0.0	0.0	0.0	0.0		
2147483026		0.1	0.1	1.8	121.3	0.1	0.1
1.8	121.3	0.0	0.0	0.0	0.0		
2147483027		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483028		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483029		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483030		0.0	0.0	0.1	5.4	0.0	0.0
0.1	5.4	0.0	0.0	0.0	0.0		
2147483031		0.0	0.0	0.0	2.2	0.0	0.0
0.0	2.2	0.0	0.0	0.0	0.0		
2147483032		0.0	0.0	0.0	1.2	0.0	0.0
0.0	1.2	0.0	0.0	0.0	0.0		
2147483033		0.0	0.0	0.0	2.2	0.0	0.0
0.0	2.2	0.0	0.0	0.0	0.0		
2147483034		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483035		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483037		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483038		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483039		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483040		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483041		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483042		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483043		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483044		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		





2147483118	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483119	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483121	0.0	0.0	0.0	0.2	13.9	0.0	0.0
0.2	13.7	0.0	0.0	0.0	0.2	0.0	0.0
2147483122	0.0	0.0	0.0	0.2	10.0	0.0	0.0
0.1	9.9	0.0	0.0	0.0	0.1	0.0	0.0
2147483123	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483124	0.0	0.0	0.0	0.2	12.3	0.0	0.0
0.2	12.2	0.0	0.0	0.0	0.1	0.0	0.0
2147483125	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483126	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483127	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483128	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483129	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483131	0.1	0.1	3.0	200.2	0.1	0.1	0.1
3.0	199.3	0.0	0.0	0.0	1.0	0.0	0.0
2147483132	0.2	0.1	4.5	296.0	0.2	0.1	0.1
4.5	297.8	0.0	0.0	0.0	-1.8	0.0	0.0
2147483134	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483135	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483136	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483137	0.1	0.1	2.0	132.5	0.1	0.1	0.1
2.0	132.3	0.0	0.0	0.0	0.2	0.0	0.0
2147483139	0.0	0.0	0.6	41.5	0.0	0.0	0.0
0.6	41.4	0.0	0.0	0.0	0.1	0.0	0.0
2147483141	0.1	0.1	3.8	253.9	0.1	0.1	0.1
3.8	253.5	0.0	0.0	0.0	0.4	0.0	0.0
2147483143	1.1	1.1	33.1	2,190.8	1.1	1.1	1.1
33.1	2,190.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483145	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483146	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483147	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483148	0.0	0.0	0.8	51.2	0.0	0.0	0.0
0.8	51.4	0.0	0.0	0.0	-0.2	0.0	0.0
2147483149	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483150	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483151	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483152	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483153	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483154	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483155	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483156	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483157	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483158	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483159	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483161	0.1	0.1	2.5	164.7	0.1	0.1	0.1
2.5	164.9	0.0	0.0	0.0	-0.2	0.2	0.2
2147483162	0.2	0.2	5.7	376.0	0.2	0.2	0.2
5.7	376.5	0.0	0.0	0.0	-0.5	0.0	0.0
2147483163	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483164	0.2	0.2	5.1	336.3	0.2	0.2	0.2
5.1	336.7	0.0	0.0	0.0	-0.4	0.0	0.0
2147483165	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483166	0.0	0.0	0.6	42.3	0.0	0.0	0.0
0.6	42.5	0.0	0.0	0.0	-0.2	0.0	0.0
2147483168	0.0	0.0	0.6	40.6	0.0	0.0	0.0
0.6	40.8	0.0	0.0	0.0	-0.2	0.0	0.0
2147483169	0.2	0.2	5.6	369.1	0.2	0.2	0.2
5.6	370.7	0.0	0.0	0.0	-1.6	0.1	0.1
2147483170	0.1	0.1	1.9	127.2	0.1	0.1	0.1
1.9	126.7	0.0	0.0	0.0	0.5	0.1	0.1
2147483171	0.1	0.1	2.6	170.1	0.1	0.1	0.1
2.6	169.0	0.0	0.0	0.0	1.1	0.0	0.0
2147483172	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483173	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483174	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483175	0.9	0.8	25.3	1,680.0	0.9	0.8	0.8
25.3	1,680.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483178	0.0	0.0	1.2	77.9	0.0	0.0	0.0
1.2	78.1	0.0	0.0	0.0	-0.3	0.0	0.0
2147483179	0.0	0.0	0.9	57.3	0.0	0.0	0.0
0.9	57.5	0.0	0.0	0.0	-0.2	0.2	0.2
2147483180	0.2	0.2	6.0	401.0	0.2	0.2	0.2
6.1	402.4	0.0	0.0	0.0	-1.4	0.1	0.1
2147483181	0.1	0.1	1.6	109.6	0.1	0.1	0.1
1.6	109.4	0.0	0.0	0.0	0.3	0.1	0.1
2147483182	0.1	0.1	3.1	203.4	0.1	0.1	0.1
3.0	202.9	0.0	0.0	0.0	0.5	0.0	0.0
2147483183	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483184	0.1	0.1	2.0	135.3	0.1	0.1	0.1
2.0	134.6	0.0	0.0	0.0	0.7	0.1	0.1
2147483185	0.1	0.1	1.6	106.9	0.1	0.1	0.1
1.6	106.3	0.0	0.0	0.0	0.5	0.0	0.0
2147483186	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483187	0.1	0.1	1.8	122.1	0.1	0.1	0.1
1.8	121.4	0.0	0.0	0.0	0.6	0.0	0.0

2147483188	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483189	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483190	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483191	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483192	0.0	0.0	0.2	0.0	13.0	0.0	0.0
0.2	13.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483193	0.0	0.0	0.3	0.0	19.4	0.0	0.0
0.3	19.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483194	0.0	0.0	0.7	0.0	48.3	0.0	0.0
0.7	48.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483195	0.0	0.0	0.1	0.0	4.4	0.0	0.0
0.1	4.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483196	0.0	0.0	0.2	0.0	12.3	0.0	0.0
0.2	12.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483197	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483198	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483199	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483201	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483202	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483206	0.2	0.2	7.4	0.0	488.9	0.2	0.2
7.4	488.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483207	0.0	0.0	0.8	0.0	50.3	0.0	0.0
0.8	50.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483208	0.0	0.0	0.8	0.0	52.8	0.0	0.0
0.8	52.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483209	0.4	0.4	12.1	0.0	798.8	0.4	0.4
12.1	798.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483210	0.1	0.1	1.7	0.0	111.9	0.1	0.1
1.7	111.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483211	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483212	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483213	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483214	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483215	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483216	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483217	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483218	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483219	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483222	0.0	0.0	0.1	0.0	4.0	0.0	0.0





	2147483265	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483266	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483267	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483270	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483274	0.0	0.0	1.4	90.1	0.0	0.0	0.0
1.4	90.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483275	1.0	1.0	30.4	2,018.4	1.0	1.0	1.0
30.4	2,018.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483278	0.0	0.0	0.6	36.6	0.0	0.0	0.0
0.5	31.5	0.0	0.0	0.1	5.1	0.0	0.0	0.0
	2147483280	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483281	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483282	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483283	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483284	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483285	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483286	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483290DN	0.1	0.1	2.7	183.3	0.0	0.0	0.0
0.0	0.0	0.1	0.1	2.7	183.3	0.0	0.0	0.0
	2147483290DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	4.2	0.0	0.0	-0.1	-4.2	0.0	0.0	0.0
	2147483297	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483300	0.0	0.0	1.3	36.8	0.0	0.0	0.0
0.0	0.0	0.0	0.0	1.3	36.8	0.0	0.0	0.0
	2147483303	0.2	0.2	4.9	327.3	0.2	0.2	0.2
5.0	330.9	0.0	0.0	-0.1	-3.6	0.0	0.0	0.0
	2147483304	0.0	0.0	1.4	90.6	0.0	0.0	0.0
1.4	92.0	0.0	0.0	0.0	-1.4	0.0	0.0	0.0
	2147483305DN	0.3	0.2	7.4	496.1	0.0	0.0	0.0
0.0	0.0	0.3	0.2	7.4	496.1	0.0	0.0	0.0
	2147483305DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	9.3	0.0	0.0	-0.1	-9.3	0.0	0.0	0.0
	2147483306	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483308	0.2	0.2	5.0	333.6	0.2	0.2	0.2
5.1	338.7	0.0	0.0	-0.1	-5.1	0.0	0.0	0.0
	2147483309	0.2	0.2	6.0	397.3	0.2	0.2	0.2
6.1	403.4	0.0	0.0	-0.1	-6.1	0.0	0.0	0.0
	2147483311	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483312	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0		
	2147483316	0.1	0.1	1.9	127.1	0.1	0.1
1.9	127.1	0.0	0.0	0.0	0.0		
	2147483319	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483320	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483321	0.0	0.0	0.0	0.2	0.0	0.0
0.0	0.7	0.0	0.0	0.0	-0.5		
	2147483323	0.0	0.0	0.1	4.6	0.0	0.0
0.2	13.6	0.0	0.0	-0.1	-9.0		
	2147483325	0.0	0.0	0.0	1.2	0.0	0.0
0.1	5.2	0.0	0.0	-0.1	-4.0		
	2147483326	0.0	0.0	0.0	0.8	0.0	0.0
0.1	3.7	0.0	0.0	0.0	-2.9		
	2147483327DN	0.2	0.2	5.4	359.0	0.0	0.0
0.0	0.0	0.2	0.2	5.4	359.0		
	2147483327DS	0.0	0.0	0.0	0.0	0.0	0.0
0.4	23.7	0.0	0.0	-0.4	-23.7		
	2147483330	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483331	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483333	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483334	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483335DN	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483335DS	0.0	0.0	0.0	0.0	0.0	0.0
0.9	59.5	0.0	0.0	-0.9	-59.5		
	2147483336	0.0	0.0	0.3	22.0	0.0	0.0
0.3	22.1	0.0	0.0	0.0	-0.1		
	2147483337	0.0	0.0	0.1	3.6	0.0	0.0
0.1	3.6	0.0	0.0	0.0	0.0		
	2147483338	0.0	0.0	0.6	39.2	0.0	0.0
0.6	39.4	0.0	0.0	0.0	-0.2		
	2147483339	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483340	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483341	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483342	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483343	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483344	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483345	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483346	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483347	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483348	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483349	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

2147483350	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483352	0.1	0.1	2.1	136.2	0.1	0.1	0.1
2.1	136.2	0.0	0.0	0.0	0.0	0.0	0.0
2147483355	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483356	0.0	0.0	0.4	28.4	0.0	0.0	0.0
0.4	28.3	0.0	0.0	0.0	0.1	0.0	0.0
2147483357	0.0	0.0	0.2	10.6	0.0	0.0	0.0
0.2	10.3	0.0	0.0	0.0	0.3	0.0	0.0
2147483358	0.0	0.0	0.0	3.0	0.0	0.0	0.0
0.0	2.9	0.0	0.0	0.0	0.1	0.0	0.0
2147483359	0.0	0.0	0.1	9.5	0.0	0.0	0.0
0.1	9.2	0.0	0.0	0.0	0.3	0.0	0.0
2147483360	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483362	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483363	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483364	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483365	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483366	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483367	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483368	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483369	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483371	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483373	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483374	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483375	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483376	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483377	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483378	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483380	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483383DN	0.4	0.4	12.8	859.5	0.0	0.0	0.0
0.0	0.0	0.4	0.4	12.8	859.5	0.0	0.0
2147483383DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.2	78.0	0.0	0.0	-1.2	-78.0	0.0	0.0
2147483387	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483388	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.3	0.0	0.0
2147483389	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.1	0.0	0.0	0.0	-0.1	0.0	0.0
2147483390	0.0	0.0	0.0	0.0	0.0	0.0	0.0



	2147483420	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483421	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483423DS	0.0	0.0	0.0	0.0	0.0	0.1	0.1
1.8	122.6	-0.1	-0.1	-1.8	-122.6			
	2147483423DN	0.7	0.7	20.3	1,361.2	0.0	0.0	0.0
0.0	0.0	0.7	0.7	20.3	1,361.2			
	2147483424	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483425	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483426DN	0.4	0.4	11.9	799.7	0.0	0.0	0.0
0.0	0.0	0.4	0.4	11.9	799.7			
	2147483426DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	59.2	0.0	0.0	-0.9	-59.2			
	2147483428	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483429	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483431	0.0	0.0	0.1	8.9	0.0	0.0	0.0
0.2	10.0	0.0	0.0	0.0	-1.1			
	2147483432	0.0	0.0	0.1	7.4	0.0	0.0	0.0
0.2	10.0	0.0	0.0	0.0	-2.6			
	2147483433	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483434	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483435	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483436	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483437	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483438	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483439	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483440	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483441	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483442	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483443	0.2	0.2	6.8	452.8	0.2	0.2	0.2
6.8	452.8	0.0	0.0	0.0	0.0			
	2147483444	0.0	0.0	1.0	68.2	0.0	0.0	0.0
1.0	68.2	0.0	0.0	0.0	0.0			
	2147483445	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483446	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483447	0.0	0.0	0.0	0.3	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	0.0			
	2147483448	0.0	0.0	0.0	0.6	0.0	0.0	0.0
0.0	0.6	0.0	0.0	0.0	0.0			
	2147483449	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483450	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0		
	2147483451	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483452	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483453	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483454	0.0	0.0	0.0	0.4	0.0	0.0
0.0	0.4	0.0	0.0	0.0	0.0		
	2147483455	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483456	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483457	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483458	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483459	0.0	0.0	0.3	17.2	0.0	0.0
0.3	17.2	0.0	0.0	0.0	0.0		
	2147483460	0.0	0.0	0.0	1.6	0.0	0.0
0.0	1.6	0.0	0.0	0.0	0.0		
	2147483461	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483464	0.0	0.0	0.2	16.2	0.0	0.0
0.2	16.2	0.0	0.0	0.0	0.0		
	2147483465	0.0	0.0	0.3	20.1	0.0	0.0
0.3	20.1	0.0	0.0	0.0	0.0		
	2147483466	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483468	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483469	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483471	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483472	0.0	0.0	1.4	95.4	0.0	0.0
1.4	95.4	0.0	0.0	0.0	0.0		
	2147483473	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483474	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483475	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483476	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483477	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483478	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483479	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483480	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483481	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483482	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483483	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

2147483484	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483485	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483486	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483487	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483488	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483489	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483490	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483491	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483492	0.0	0.0	0.3	0.0	21.9	0.0	0.0
0.3	21.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483493	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483494	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483495	0.0	0.0	0.2	0.0	5.3	0.0	0.0
0.2	5.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483497	0.1	0.1	1.6	0.0	45.6	0.1	0.1
1.6	45.4	0.0	0.0	0.0	0.2	0.0	0.0
2147483498	0.1	0.1	1.7	0.0	48.2	0.1	0.1
1.7	48.0	0.0	0.0	0.0	0.2	0.0	0.0
2147483499	0.2	0.2	5.3	0.0	353.3	0.2	0.2
5.3	352.8	0.0	0.0	0.0	0.5	0.0	0.0
2147483501	0.1	0.1	3.0	0.0	198.7	0.1	0.1
3.0	198.2	0.0	0.0	0.0	0.4	0.0	0.0
2147483502	0.2	0.2	4.8	0.0	320.0	0.2	0.2
4.8	319.5	0.0	0.0	0.0	0.5	0.0	0.0
2147483504	0.2	0.2	5.0	0.0	145.4	0.2	0.2
5.0	145.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483505	0.4	0.4	11.7	0.0	339.3	0.4	0.4
11.7	339.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483506	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483507	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483508	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483510	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483511	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483512	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483513	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483517	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483518	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483519	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483520	0.0	0.0	0.0	0.0	0.0	0.0	0.0



0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483521	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483522	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483523	0.0	0.0	0.0	1.3	36.7	0.0	0.0
1.3	36.6	0.0	0.0	0.0	0.0	0.2	0.0	0.0
	2147483524	0.1	0.1	1.5	43.4	0.1	0.1	0.1
1.5	43.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0
	2147483528	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483531	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483532	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483533	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483534	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483537	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483540	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483543	0.5	0.5	14.8	985.2	0.5	0.5	0.5
14.8	985.6	0.0	0.0	0.0	-0.4	0.0	0.0	0.0
	2147483544	0.3	0.3	7.8	519.8	0.3	0.3	0.3
7.8	520.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0
	2147483545	0.2	0.2	6.9	458.6	0.2	0.2	0.2
6.9	458.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	2147483546	0.1	0.1	4.2	276.0	0.1	0.1	0.1
4.1	275.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	2147483547	0.0	0.0	1.4	93.2	0.0	0.0	0.0
1.4	93.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483548	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483549	0.1	0.1	1.5	101.9	0.1	0.1	0.1
1.6	103.5	0.0	0.0	0.0	-1.6	0.0	0.0	0.0
	2147483550	0.1	0.1	2.5	167.5	0.1	0.1	0.1
2.6	170.1	0.0	0.0	0.0	-2.6	0.0	0.0	0.0
	2147483551	0.0	0.0	0.0	0.6	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
	2147483552	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483553	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483554	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483555DN	0.3	0.3	9.7	647.5	0.0	0.0	0.0
0.0	0.0	0.3	0.3	9.7	647.5	0.0	0.0	0.0
	2147483555DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.1	74.5	0.0	0.0	-1.1	-74.5	0.0	0.0	0.0
	2147483556DN	0.3	0.3	9.0	605.6	0.0	0.0	0.0
0.0	0.0	0.3	0.3	9.0	605.6	0.0	0.0	0.0
	2147483556DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	64.6	0.0	0.0	-1.0	-64.6	0.0	0.0	0.0
	2147483557	0.0	0.0	1.0	69.0	0.0	0.0	0.0
1.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483558	0.1	0.1	1.8	51.9	0.1	0.1	0.1
1.8	51.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2147483561	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483562	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483563	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483564	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483565	0.1	0.1	2.8	183.7	0.1	0.1	
2.8	184.0	0.0	0.0	0.0	-0.3		
2147483566	0.0	0.0	0.0	2.7	0.0	0.0	
0.0	0.2	0.0	0.0	0.0	2.6		
2147483567	0.0	0.0	0.1	5.8	0.0	0.0	
0.0	0.4	0.0	0.0	0.1	5.4		
2147483568	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483569	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483572	0.3	0.3	7.6	503.6	0.3	0.3	
7.6	502.9	0.0	0.0	0.0	0.6		
2147483573	0.0	0.0	0.1	4.6	0.0	0.0	0.0
0.1	4.6	0.0	0.0	0.0	0.0		
2147483575	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483576	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483577	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483578	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483579	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483580	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483581	0.2	0.2	5.8	385.5	0.2	0.2	
5.9	391.2	0.0	0.0	-0.1	-5.7		
2147483582	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483585	0.0	0.0	0.7	21.4	0.0	0.0	0.0
0.7	21.4	0.0	0.0	0.0	0.0		
2147483588	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483590	0.1	0.0	1.5	42.7	0.1	0.0	
1.5	42.7	0.0	0.0	0.0	0.0		
2147483593	0.1	0.1	2.4	68.9	0.1	0.1	
2.4	68.9	0.0	0.0	0.0	0.0		
2147483595	0.7	0.7	20.0	718.0	0.7	0.7	
20.0	719.4	0.0	0.0	0.0	-1.4		
2147483596	0.1	0.1	2.1	60.2	0.1	0.1	
2.1	61.3	0.0	0.0	0.0	-1.1		
2147483599	0.4	0.4	12.8	847.2	0.4	0.4	
12.8	847.6	0.0	0.0	0.0	-0.4		
2147483600	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483601	0.0	0.0	0.6	22.4	0.0	0.0	0.0
0.6	22.4	0.0	0.0	0.0	0.0		
2147483603	0.0	0.0	1.1	69.6	0.0	0.0	0.0
1.1	69.8	0.0	0.0	0.0	-0.2		
2147483605	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483606	0.0	0.0	0.5	32.0	0.0	0.0	0.0
0.5	31.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	2147483608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483610	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483612	0.8	0.8	23.1	830.1	0.8	0.8	0.8
23.1	829.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0
	2147483615	0.1	0.1	2.6	93.9	0.1	0.1	0.1
2.6	93.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483617	0.0	0.0	0.2	14.1	0.0	0.0	0.0
0.2	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483618	0.1	0.1	2.9	190.7	0.1	0.1	0.1
2.9	191.4	0.0	0.0	0.0	-0.7	0.0	0.0	0.0
	2147483619	0.1	0.1	1.9	124.5	0.1	0.1	0.1
1.9	124.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
	2147483621	0.0	0.0	0.2	15.7	0.0	0.0	0.0
0.2	15.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0
	2147483622	0.0	0.0	0.2	15.4	0.0	0.0	0.0
0.2	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483626	0.7	0.7	20.4	730.7	0.7	0.7	0.7
20.2	726.3	0.0	0.0	0.1	4.4	0.0	0.0	0.0
	2147483627	0.0	0.0	0.5	16.2	0.0	0.0	0.0
0.5	17.0	0.0	0.0	0.0	-0.8	0.0	0.0	0.0
	2147483630	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483631	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1	0.0	0.0	0.0	0.0	2.5	2.5	2.5
74.1	2,660.9	-2.5	-2.5	-74.1	-2,660.9	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	6.1	0.0	0.0	-0.2	-6.1	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.4	51.3	0.0	0.0	-1.4	-51.3	0.0	0.0	0.0
	2147483597	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.7	20.3	0.0	0.0	-0.7	-20.3	0.0	0.0	0.0
	2147483633	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	25.2	0.0	0.0	-0.9	-25.2	0.0	0.0	0.0
	2147483637	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1.9	53.8	-0.1	-0.1	-1.9	-53.8	0.0	0.0	0.0
	2147483639	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	31.9	0.0	0.0	-0.9	-31.9	0.0	0.0	0.0
	2147483641	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1.8	51.6	-0.1	-0.1	-1.8	-51.6	0.0	0.0	0.0
	Total	40.8	39.8	1,192.0	68,892.0	40.4	39.4	39.4
1,180.9	65,787.7	0.4	0.4	11.1	3,104.3			

Costs and benefits discounted to 2011 in multiples of a thousand euros.

[Section 3] Combined Link and Junction Collision Rates

Link Name \*----- Collision Rate -----\*  
\* 2030 2045 \*

897	0.387882	0.364630
900	0.387882	0.364630
901	0.387882	0.364630
906	0.000000	0.000000
923	0.132426	0.123735
1495	0.132426	0.123735
1497	0.132426	0.123735
1499	0.132426	0.123735
1504	0.132426	0.123735
1505	0.132426	0.123735
1506	0.132426	0.123735
1515	0.057490	0.053798
1590	0.132426	0.123735
1591	0.132426	0.123735
44747	0.000000	0.000000
45876	0.000000	0.000000
48840	0.000000	0.000000
48953	0.000000	0.000000
49089	0.387882	0.364630
49185	0.387882	0.364630
49353	0.000000	0.000000
49552	0.000000	0.000000
49560	0.000000	0.000000
49630	0.000000	0.000000
49684	0.132426	0.123735
49717	0.000000	0.000000
49842	0.000000	0.000000
50060	0.387882	0.364630
50401	0.387882	0.364630
50515	0.000000	0.000000
50542	0.000000	0.000000
50600	0.000000	0.000000
50648	0.132426	0.123735
50653	0.387882	0.364630
50686	0.387882	0.364630
554437085	0.000000	0.000000
554437089	0.000000	0.000000
554445417	0.000000	0.000000
554445421	0.000000	0.000000
554445424	0.000000	0.000000
554445434	0.000000	0.000000
554445603	0.387882	0.364630
554445605	0.387882	0.364630
554445606	0.387882	0.364630
554445611	0.387882	0.364630
554445616	0.000000	0.000000
554445660	0.387882	0.364630
554445681	0.387882	0.364630
554451601	0.000000	0.000000
554451604	0.000000	0.000000
554451606	0.000000	0.000000
554451619	0.000000	0.000000
554451621	0.000000	0.000000
554469301	0.000000	0.000000
554469376	0.000000	0.000000
554469377	0.000000	0.000000
554469379	0.387882	0.364630
554469380	0.387882	0.364630
554469383	0.387882	0.364630

554469386	0.387882	0.364630
554469390	0.132426	0.123735
554476250	0.000000	0.000000
554476251	0.000000	0.000000
554476254	0.000000	0.000000
554476255	0.000000	0.000000
554476258	0.000000	0.000000
554476263	0.000000	0.000000
554476268	0.000000	0.000000
554476273	0.000000	0.000000
554476275	0.000000	0.000000
554476276	0.000000	0.000000
554476314	0.000000	0.000000
554476317	0.000000	0.000000
554476318	0.000000	0.000000
554476321	0.000000	0.000000
554476331	0.000000	0.000000
554476332	0.000000	0.000000
554476337	0.000000	0.000000
554476339	0.000000	0.000000
554476344	0.000000	0.000000
554476347	0.000000	0.000000
554478297	0.000000	0.000000
554478964	0.000000	0.000000
554478965	0.000000	0.000000
554479189	0.132426	0.123735
554479190	0.132426	0.123735
554499930	0.000000	0.000000
554499931	0.000000	0.000000
554499943	0.000000	0.000000
559752177	0.000000	0.000000
562717850	0.000000	0.000000
578082733	0.000000	0.000000
578088741	0.000000	0.000000
587814444	0.387882	0.364630
587814449	0.387882	0.364630
587814450	0.387882	0.364630
587814454	0.000000	0.000000
587814456	0.000000	0.000000
587814797	0.000000	0.000000
587814807	0.000000	0.000000
587814808	0.000000	0.000000
587814809	0.000000	0.000000
587814811	0.000000	0.000000
587814819	0.000000	0.000000
587814822	0.000000	0.000000
587814825	0.000000	0.000000
587814826	0.000000	0.000000
587815160	0.000000	0.000000
587815163	0.000000	0.000000
587815170	0.000000	0.000000
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2147483409	0.132426	0.123735
2147483410	0.132426	0.123735
2147483411	0.132426	0.123735
2147483412	0.000000	0.000000
2147483413	0.000000	0.000000
2147483414	0.000000	0.000000
2147483415	0.000000	0.000000
2147483416	0.000000	0.000000
2147483417DN	0.069539	0.064975
2147483417DS	0.069539	0.064975
2147483418DN	0.069539	0.064975
2147483418DS	0.069539	0.064975
2147483419	0.000000	0.000000
2147483420	0.000000	0.000000
2147483421	0.000000	0.000000
2147483423DS	0.069539	0.064975
2147483423DN	0.069539	0.064975
2147483424	0.000000	0.000000
2147483425	0.000000	0.000000
2147483426DN	0.069539	0.064975
2147483426DS	0.069539	0.064975
2147483428	0.000000	0.000000
2147483429	0.132426	0.123735
2147483431	0.132426	0.123735
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2147483435	0.132426	0.123735
2147483436	0.132426	0.123735
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2147483438	0.132426	0.123735
2147483439	0.132426	0.123735
2147483440	0.132426	0.123735
2147483441	0.132426	0.123735
2147483442	0.132426	0.123735
2147483443	0.132426	0.123735
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2147483446	0.000000	0.000000
2147483447	0.132426	0.123735
2147483448	0.132426	0.123735
2147483449	0.000000	0.000000
2147483450	0.132426	0.123735

2147483451	0.132426	0.123735
2147483452	0.000000	0.000000
2147483453	0.132426	0.123735
2147483454	0.132426	0.123735
2147483455	0.132426	0.123735
2147483456	0.132426	0.123735
2147483457	0.132426	0.123735
2147483458	0.132426	0.123735
2147483459	0.132426	0.123735
2147483460	0.132426	0.123735
2147483461	0.132426	0.123735
2147483464	0.132426	0.123735
2147483465	0.132426	0.123735
2147483466	0.132426	0.123735
2147483468	0.132426	0.123735
2147483469	0.132426	0.123735
2147483471	0.000000	0.000000
2147483472	0.132426	0.123735
2147483473	0.000000	0.000000
2147483474	0.000000	0.000000
2147483475	0.132426	0.123735
2147483476	0.132426	0.123735
2147483477	0.132426	0.123735
2147483478	0.132426	0.123735
2147483479	0.132426	0.123735
2147483480	0.000000	0.000000
2147483481	0.132426	0.123735
2147483482	0.000000	0.000000
2147483483	0.000000	0.000000
2147483484	0.000000	0.000000
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2147483486	0.000000	0.000000
2147483487	0.132426	0.123735
2147483488	0.132426	0.123735
2147483489	0.132426	0.123735
2147483490	0.132426	0.123735
2147483491	0.132426	0.123735
2147483492	0.132426	0.123735
2147483493	0.000000	0.000000
2147483494	0.132426	0.123735
2147483495	0.387882	0.364630
2147483497	0.387882	0.364630
2147483498	0.387882	0.364630
2147483499	0.132426	0.123735
2147483501	0.132426	0.123735
2147483502	0.132426	0.123735
2147483504	0.387882	0.364630
2147483505	0.387882	0.364630
2147483506	0.000000	0.000000
2147483507	0.000000	0.000000
2147483508	0.000000	0.000000
2147483510	0.000000	0.000000
2147483511	0.000000	0.000000
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2147483513	0.000000	0.000000
2147483517	0.000000	0.000000
2147483518	0.000000	0.000000
2147483519	0.000000	0.000000
2147483520	0.000000	0.000000

2147483521	0.000000	0.000000
2147483522	0.000000	0.000000
2147483523	0.387882	0.364630
2147483524	0.387882	0.364630
2147483528	0.000000	0.000000
2147483531	0.000000	0.000000
2147483532	0.000000	0.000000
2147483533	0.000000	0.000000
2147483534	0.000000	0.000000
2147483537	0.000000	0.000000
2147483540	0.000000	0.000000
2147483543	0.132426	0.123735
2147483544	0.132426	0.123735
2147483545	0.132426	0.123735
2147483546	0.132426	0.123735
2147483547	0.132426	0.123735
2147483548	0.000000	0.000000
2147483549	0.132426	0.123735
2147483550	0.132426	0.123735
2147483551	0.132426	0.123735
2147483552	0.132426	0.123735
2147483553	0.132426	0.123735
2147483554	0.132426	0.123735
2147483555DN	0.069539	0.064975
2147483555DS	0.069539	0.064975
2147483556DN	0.069539	0.064975
2147483556DS	0.069539	0.064975
2147483557	0.132426	0.123735
2147483558	0.387882	0.364630
2147483561	0.132426	0.123735
2147483562	0.132426	0.123735
2147483563	0.132426	0.123735
2147483564	0.000000	0.000000
2147483565	0.132426	0.123735
2147483566	0.132426	0.123735
2147483567	0.132426	0.123735
2147483568	0.132426	0.123735
2147483569	0.000000	0.000000
2147483572	0.132426	0.123735
2147483573	0.132426	0.123735
2147483575	0.000000	0.000000
2147483576	0.000000	0.000000
2147483577	0.000000	0.000000
2147483578	0.000000	0.000000
2147483579	0.000000	0.000000
2147483580	0.000000	0.000000
2147483581	0.132426	0.123735
2147483582	0.000000	0.000000
2147483585	0.387882	0.364630
2147483588	0.000000	0.000000
2147483590	0.387882	0.364630
2147483593	0.387882	0.364630
2147483595	0.057490	0.053798
2147483596	0.387882	0.364630
2147483599	0.132426	0.123735
2147483600	0.000000	0.000000
2147483601	0.057490	0.053798
2147483603	0.132426	0.123735
2147483605	0.132426	0.123735



2147483606	0.132426	0.123735
2147483608	0.000000	0.000000
2147483610	0.000000	0.000000
2147483612	0.057490	0.053798
2147483615	0.057490	0.053798
2147483617	0.132426	0.123735
2147483618	0.132426	0.123735
2147483619	0.132426	0.123735
2147483621	0.132426	0.123735
2147483622	0.132426	0.123735
2147483626	0.057490	0.053798
2147483627	0.057490	0.053798
2147483630	0.000000	0.000000
2147483631	0.132426	0.123735
1	0.057490	0.053798
2	0.387882	0.364630
3	0.057490	0.053798
2147483597	0.387882	0.364630
2147483633	0.387882	0.364630
2147483637	0.387882	0.364630
2147483639	0.057490	0.053798
2147483641	0.387882	0.364630

Collision rates are in collisions per million vehicle kilometres.

[Section 4] Input Data - Scheme File

Scheme Name  
N25 Glenmore to Waterford

Years Subsection

Current Year 2020

Base Year 2020

Without-Scheme

Year 1 2030

Year 2 2045

Year 3 2060

Year 4 0

Year 5 0

With-Scheme

Year 1 2030

Year 2 2045

Year 3 2060

Year 4 0

Year 5 0

Scheme Opening Year 2030

Link and Junction Combined Input Section

Combined Classification Subsection

Link Name	Road Type	Length (km)	Speed Limit (km/h)	Error/Warning Summary (!=Error, #=Warning)
897	3	0.06	50	
900	3	0.08	50	
901	3	0.13	50	

906	11	0.55	65	#Unusual speed limit (65) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
923	2	1.17	100	
1495	2	1.12	70	
1497	2	0.88	70	
1499	2	0.32	70	
1504	2	0.22	70	
1505	2	0.68	100	
1506	2	0.79	100	
1515	4	5.69	100	
1590	2	0.65	70	
1591	2	0.25	70	
44747	4	0.10	40	!Speed limit is too low for a
fast dual carriageway.				
45876	4	0.04	40	!Speed limit is too low for a
fast dual carriageway.				
48840	2	0.42	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
48953	4	0.44	50	!Speed limit is too low for a
fast dual carriageway.				
49089	3	0.15	60	
49185	3	0.70	50	
49353	3	0.87	80	!Speed limit is high. Care
should be taken using the results of the calculation for this link.				
49552	3	0.31	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
49560	3	0.50	80	!Speed limit is high. Care
should be taken using the results of the calculation for this link.				
49630	2	0.37	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
49684	2	0.45	80	
49717	3	0.23	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
49842	2	0.23	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50060	3	0.23	50	
50401	3	1.87	50	
50515	3	0.18	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50542	3	0.28	40	
50600	2	0.17	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50648	2	4.01	80	
50653	3	0.16	60	
50686	3	0.41	60	
554437085	3	0.05	40	
554437089	2	0.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554445417	4	0.07	40	!Speed limit is too low for a
fast dual carriageway.				
554445421	3	0.04	40	
554445424	3	0.06	40	
554445434	3	0.03	40	
554445603	3	0.24	50	
554445605	3	0.09	50	
554445606	3	0.10	50	
554445611	3	0.05	50	
554445616	3	0.11	30	#Speed limit is low. Care

should be taken using the results of the calculation for this link.				
554445660	3	0.11	50	
554445681	3	0.03	60	
554451601	3	0.07	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451604	3	0.13	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451606	3	0.02	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451619	3	0.01	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451621	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554469301	3	0.08	40	
554469376	3	0.12	40	
554469377	2	0.04	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554469379	3	0.10	50	
554469380	3	0.07	50	
554469383	3	0.09	50	
554469386	3	0.06	50	
554469390	2	0.08	100	
554476250	3	0.07	40	
554476251	3	0.17	40	
554476254	3	0.05	40	
554476255	3	0.13	40	
554476258	3	0.04	40	
554476263	3	0.08	40	
554476268	3	0.01	40	
554476273	3	0.04	40	
554476275	3	0.12	40	
554476276	3	0.04	40	
554476314	3	0.08	40	
554476317	3	0.06	40	
554476318	4	0.03	40	!Speed limit is too low for a
fast dual carriageway.				
554476321	4	0.01	40	!Speed limit is too low for a
fast dual carriageway.				
554476331	4	0.04	40	!Speed limit is too low for a
fast dual carriageway.				
554476332	3	0.04	40	
554476337	3	0.07	40	
554476339	3	0.05	40	
554476344	3	0.02	40	
554476347	3	0.01	40	
554478297	3	0.08	40	
554478964	3	0.07	40	
554478965	3	0.03	40	
554479189	2	0.17	70	
554479190	2	0.04	70	
554499930	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554499931	2	0.03	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554499943	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
559752177	3	0.39	40	
562717850	3	0.23	40	
578082733	2	0.09	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.  
578088741 2 0.06 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814444 3 0.09 60  
587814449 3 0.10 60  
587814450 3 0.03 60  
587814454 3 0.09 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814456 3 0.04 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814797 3 0.19 15 #Unusual speed limit (15) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587814807 10 0.01 10 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814808 3 0.05 15 #Unusual speed limit (15) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587814809 3 0.04 15 #Unusual speed limit (15) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587814811 4 0.04 10 !Speed limit is too low for a  
fast dual carriageway.  
587814819 3 0.02 10 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814822 3 0.05 10 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814825 3 0.03 10 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814826 3 0.03 10 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815160 3 0.13 15 #Unusual speed limit (15) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815163 3 0.03 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815170 3 0.30 23 #Unusual speed limit (23) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815171 3 0.15 23 #Unusual speed limit (23) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815173 3 0.02 23 #Unusual speed limit (23) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815174 3 0.12 23 #Unusual speed limit (23) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815269 3 0.09 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815271 3 0.13 30 #Speed limit is low. Care

should be taken using the results of the calculation for this link.  
587815272 3 0.09 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815273 3 0.19 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815274 3 0.08 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815275 3 0.07 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815277 3 0.12 15 #Unusual speed limit (15) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815278 3 0.04 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815280 3 0.13 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815285 3 0.05 15 #Unusual speed limit (15) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815287 3 0.06 15 #Unusual speed limit (15) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815295 3 0.44 50  
587815303 3 0.02 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815773 3 0.04 50  
587815780 3 0.16 50  
587815785 2 0.07 25 #Unusual speed limit (25) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. !Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815787 3 0.02 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815790 3 0.14 40  
587815791 3 0.16 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815792 3 0.20 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815795 3 0.04 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815802 3 0.04 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815824 3 0.04 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587816038 3 0.20 40  
587816039 3 0.08 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587816041 3 0.02 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587816057 3 0.06 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587816058 3 0.02 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587816063 3 0.05 50  
587816177 3 0.02 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.

587816186	3	0.08	40	
587816709	3	0.10	50	
587816710	3	0.02	50	
587816711	3	0.22	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816712	3	0.16	40	
587816713	3	0.04	50	
587816714	3	0.34	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816718	3	0.19	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816721	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816722	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816725	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816971	3	0.05	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816972	3	0.12	40	
587816973	3	0.10	40	
587816974	3	0.19	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816975	4	0.07	30	!Speed limit is too low for a
fast dual carriageway.				
587816978	4	0.06	30	!Speed limit is too low for a
fast dual carriageway.				
587816980	4	0.06	30	!Speed limit is too low for a
fast dual carriageway.				
587816981	4	0.06	30	!Speed limit is too low for a
fast dual carriageway.				
587816984	10	0.04	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816985	3	0.09	40	
587816986	3	0.29	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816988	3	0.25	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816989	3	0.33	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817206	3	0.06	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817207	3	0.48	40	
587817216	3	0.03	40	
587817217	3	0.16	40	
587817219	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817221	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817223	3	0.08	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817225	4	0.07	30	!Speed limit is too low for a
fast dual carriageway.				
587817226	4	0.06	30	!Speed limit is too low for a
fast dual carriageway.				
587817227	4	0.10	30	!Speed limit is too low for a
fast dual carriageway.				
587817228	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				

587817230	3	0.06	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817231	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817234	4	0.02	30	!Speed limit is too low for a
fast dual carriageway.				
587817269	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817271	3	0.03	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817272	3	0.07	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817274	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817275	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817314	5	0.12	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817316	3	0.07	25	#Unusual speed limit (25) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587817318	3	0.01	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817319	3	0.10	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817447	3	0.09	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817448	3	0.08	25	#Unusual speed limit (25) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587817453	3	0.05	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015491	3	0.02	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015493	3	0.01	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015494	3	0.00	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589626976	2	0.13	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
590481852	3	0.05	40	
590481853	3	0.05	40	
590481868	3	0.06	40	
590522243	3	0.06	50	
590522244	3	0.02	50	
590522245	3	0.05	40	
1139400830	3	0.35	40	
1148054292	3	0.62	40	
1164076472	3	0.12	40	
1165618763	3	0.20	40	
1167345578	2	0.27	70	
1176181443	3	0.13	40	
1176242672	2	0.32	70	
1186121768	3	0.39	40	
2122362473	4	0.14	40	!Speed limit is too low for a
fast dual carriageway.				
2147474988	2	3.36	80	

2147475007	2	0.07	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147475798	2	1.12	70		
2147475799	2	0.65	70		
2147475801	2	0.61	80		
2147475949	2	0.73	70		
2147481733	2	0.88	70		
2147481754	2	0.77	70		
2147481911	2	0.89	100		
2147481977	2	3.42	70		
2147482906	3	0.06	30	#Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482907	3	0.08	30	#Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482908	2	0.86	80		
2147482912	2	0.40	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482916	3	0.07	50		
2147482917	3	0.08	50		
2147482919	2	1.01	100		
2147482922	2	1.60	80		
2147482923	2	0.20	80		
2147482924	2	0.16	80		
2147482925	2	1.59	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482926	2	1.00	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482927	2	0.07	70		
2147482928	2	0.03	80		
2147482930	2	0.43	80		
2147482931	2	1.06	80		
2147482932	2	1.24	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482933	2	1.46	30	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482937	3	0.17	40		
2147482940	3	0.09	30	#Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482941	3	0.42	40		
2147482942	3	0.02	40		
2147482943	2	2.76	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482944	2	1.26	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482945	2	1.32	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482946	2	1.06	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482947	2	1.52	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482949	2	2.39	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482950	2	0.75	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482951	2	0.31	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482952	2	0.28	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147482953	2	0.25	40	!Speed limit is	low. Care



should be taken using the results of the calculation for this link.

2147482954	2	1.53	70	
2147482957	2	0.05	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482958	2	2.45	70	
2147482959	2	1.66	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482960	2	3.36	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482963	2	1.90	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. !Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
2147482964	2	0.49	80	
2147482966	2	1.01	25	#Unusual speed limit (25) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. !Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
2147482967	2	0.16	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482968	2	0.73	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482969	2	0.57	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482970	2	0.81	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482973	3	0.11	60	
2147482974	3	0.08	60	
2147482975	2	2.53	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482976	2	2.64	100	
2147482977	2	3.02	100	
2147482979	2	2.38	70	
2147482980	2	1.98	70	
2147482981	2	1.54	70	
2147482982	2	0.22	70	
2147482985	2	0.15	100	
2147482989	2	3.07	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482990	2	1.90	70	
2147482992	2	0.06	100	
2147482993	2	1.37	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482994	2	2.04	100	
2147482995	2	0.62	100	
2147482996	2	1.93	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482997	2	0.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482998	2	0.62	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482999	2	0.28	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483000	2	0.42	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483001	2	0.55	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483002	2	2.37	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				

2147483003	2	1.43	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483004	2	1.66	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483005	2	0.92	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483006	2	1.84	100	
2147483007	2	0.07	100	
2147483008	2	1.29	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483009	2	0.70	80	
2147483011	2	0.27	80	
2147483012	2	1.67	80	
2147483015	2	0.11	80	
2147483016	2	0.21	80	
2147483017	2	2.23	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation for this link.				
2147483019	2	9.88	80	
2147483020	2	1.23	80	
2147483021	2	1.14	100	
2147483024	2	0.28	100	
2147483025	2	0.64	100	
2147483026	2	0.21	100	
2147483027	2	0.75	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483028	2	0.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483029	2	1.00	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483030	2	1.27	70	
2147483031	2	0.51	70	
2147483032	2	0.16	70	
2147483033	2	0.30	70	
2147483034	2	2.85	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483035	2	0.89	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483037	2	0.48	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483038	2	0.72	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483039	2	0.32	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483040	2	0.52	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483041	2	0.27	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483042	2	0.31	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483043	2	2.19	70	
2147483044	2	0.72	70	
2147483045	2	0.57	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483046	2	1.00	80	
2147483047	2	0.43	80	
2147483048	2	1.51	80	
2147483049	2	2.16	80	
2147483050	2	0.05	80	

2147483051	2	1.32	70	
2147483052	2	1.11	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483054	2	0.82	80	
2147483055	2	0.76	80	
2147483058	2	0.26	80	
2147483060	2	0.14	80	
2147483061	2	3.20	80	
2147483062	2	3.79	80	
2147483063	2	0.57	100	
2147483066	2	0.21	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483067	3	0.03	40	
2147483071	2	0.04	100	
2147483073	2	0.24	100	
2147483074	2	1.50	100	
2147483075	2	1.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483076	2	1.66	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483077	2	1.31	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483078	2	0.90	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483079	2	0.69	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483080	2	0.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483081	2	0.70	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483083	2	0.04	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483084	2	3.65	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483085	2	0.23	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483086	2	0.08	100	
2147483088	2	0.17	100	
2147483089	2	0.32	100	
2147483090	2	0.02	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483091	2	0.33	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483092	2	0.77	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483093	2	1.54	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483094	2	0.89	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483095	2	1.40	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483096	2	0.73	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483097	2	1.03	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483098	2	0.68	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483099	2	0.19	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				

2147483101	2	0.64	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483102	2	0.45	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483103	2	0.46	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483104	2	0.61	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483105	2	0.59	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483106	2	1.24	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483107	2	1.13	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483108	2	0.55	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483109	2	0.75	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483110	2	0.14	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483111	2	0.93	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483112	2	0.28	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483113	2	0.20	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483114	2	0.52	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483115	2	0.95	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483117	2	1.74	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483118	2	1.57	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483119	2	0.10	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483121	2	1.29	70		
2147483122	2	0.93	70		
2147483123	2	0.75	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483124	2	1.14	70		
2147483125	2	0.60	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483126	2	1.41	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483127	2	1.32	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483128	2	0.26	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483129	2	1.48	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483131	2	0.34	80		
2147483132	2	0.88	80		
2147483134	2	0.72	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483135	2	0.25	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483136	2	0.54	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	

2147483137	2	0.64	70	
2147483139	2	0.20	70	
2147483141	2	1.24	70	
2147483143	2	4.98	70	
2147483145	2	1.74	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483146	2	1.51	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483147	2	1.06	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483148	2	0.21	70	
2147483149	2	0.22	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483150	2	0.36	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483151	2	0.20	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483152	2	0.02	70	
2147483153	2	0.95	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483154	2	0.82	70	
2147483155	2	0.16	70	
2147483156	2	0.58	70	
2147483157	2	2.22	70	
2147483158	2	0.05	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483159	2	0.18	70	
2147483161	2	0.53	70	
2147483162	2	1.20	70	
2147483163	2	1.38	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483164	2	1.08	70	
2147483165	2	1.16	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483166	2	0.18	70	
2147483168	2	0.17	70	
2147483169	2	1.54	70	
2147483170	2	0.46	70	
2147483171	2	1.19	70	
2147483172	2	1.29	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483173	2	1.38	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483174	2	1.73	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483175	2	8.21	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483178	2	0.64	80	
2147483179	2	0.47	80	
2147483180	2	3.31	80	
2147483181	2	1.11	80	
2147483182	2	2.06	80	
2147483183	2	3.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483184	2	1.62	70	
2147483185	2	1.28	70	
2147483186	2	0.96	70	
2147483187	2	1.46	70	

2147483188	2	0.74	70	
2147483189	2	0.90	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483190	2	0.39	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483191	2	1.50	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483192	2	0.21	70	
2147483193	2	0.31	80	
2147483194	2	0.77	80	
2147483195	2	0.07	80	
2147483196	2	0.20	80	
2147483197	2	0.40	70	
2147483198	2	0.21	70	
2147483199	2	1.80	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483200	2	0.52	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483201	2	1.68	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483202	2	0.91	70	
2147483206	2	1.82	70	
2147483207	2	0.22	70	
2147483208	2	0.24	70	
2147483209	2	1.69	70	
2147483210	2	0.24	70	
2147483211	2	1.54	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483212	2	1.53	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483213	2	0.65	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483214	2	1.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483215	2	0.22	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483216	2	1.21	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483217	2	0.48	70	
2147483218	2	0.18	70	
2147483219	2	1.73	65	#Unusual speed limit (65) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. !Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
2147483222	2	0.02	70	
2147483224	2	0.04	70	
2147483226	2	1.42	70	
2147483227	2	0.24	70	
2147483229	2	1.72	70	
2147483230	2	0.41	70	
2147483231	2	1.75	70	
2147483234	2	13.41	70	
2147483236	2	1.52	70	
2147483237	2	6.67	70	
2147483238	2	0.26	70	
2147483239	2	0.26	70	
2147483240	2	0.48	70	

2147483241	2	1.03	70	
2147483242	2	1.89	70	
2147483243	2	1.78	70	
2147483244	2	1.25	70	
2147483245	2	1.01	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483246	2	0.46	70	
2147483247	2	0.43	70	
2147483248	2	1.11	70	
2147483249	2	0.29	70	
2147483250	2	1.00	70	
2147483251	2	1.14	70	
2147483252	2	1.24	70	
2147483254	2	0.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483256	2	0.55	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483258	2	1.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483260	2	0.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483264	2	0.66	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483265	2	0.34	70	
2147483266	2	1.16	70	
2147483267	2	3.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483270	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483271	2	0.69	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483272	2	0.23	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483273	2	1.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483274	2	0.35	70	
2147483275	2	7.92	70	
2147483278	2	0.81	70	
2147483280	2	0.11	80	
2147483281	2	0.26	80	
2147483282	2	1.88	80	
2147483283	2	0.43	80	
2147483284	2	0.13	80	
2147483285	2	0.87	80	
2147483286	2	1.88	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483290DN	11	0.26	100	
2147483290DS	11	0.26	80	
2147483297	11	0.15	50	
2147483300	3	0.04	50	
2147483303	2	0.72	90	
2147483304	2	0.20	100	
2147483305DN	11	0.69	100	
2147483305DS	11	0.79	80	
2147483306	11	0.25	60	
2147483308	2	0.73	100	
2147483309	2	0.87	100	
2147483311	2	0.56	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.				
2147483312	2	0.14	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483316	2	0.56	70	
2147483319	2	2.13	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483320	2	0.08	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483321	2	0.07	80	
2147483323	2	1.44	70	
2147483325	2	0.55	70	
2147483326	2	0.39	70	
2147483327DN	11	0.48	100	
2147483327DS	11	0.48	80	
2147483330	2	2.37	70	
2147483331	2	0.10	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483333	2	0.18	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483334	2	0.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483335DN	2	0.95	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483335DS	2	0.95	70	
2147483336	2	0.57	70	
2147483337	2	0.09	70	
2147483338	2	1.01	70	
2147483339	2	2.08	70	
2147483340	2	1.31	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483341	2	1.11	80	
2147483342	2	0.19	80	
2147483343	2	0.89	80	
2147483344	2	0.59	80	
2147483345	2	0.22	80	
2147483346	2	1.92	80	
2147483347	2	1.15	80	
2147483348	2	0.32	80	
2147483349	2	0.94	80	
2147483350	2	1.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483352	2	0.60	70	
2147483355	2	1.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483356	2	0.80	70	
2147483357	2	1.31	80	
2147483358	2	0.37	80	
2147483359	2	1.17	70	
2147483360	2	0.23	70	
2147483362	2	0.20	70	
2147483363	2	1.76	70	
2147483364	2	0.77	70	
2147483365	2	0.78	70	
2147483366	2	1.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483367	2	0.92	80	
2147483368	2	0.70	80	
2147483369	2	0.61	80	
2147483371	2	0.29	50	!Speed limit is low. Care



should be taken using the results of the calculation for this link.

2147483373	2	0.75	75	#Unusual speed limit (75) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link.
2147483374	2	0.84	75	#Unusual speed limit (75) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link.
2147483375	2	0.40	70	
2147483376	2	0.93	70	
2147483377	2	0.45	70	
2147483378	2	0.14	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483380	2	0.18	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483383DN	11	1.12	100	
2147483383DS	11	1.12	80	
2147483387	2	0.51	80	
2147483388	2	0.37	70	
2147483389	2	0.16	70	
2147483390	2	0.82	70	
2147483391	2	0.06	70	
2147483392	2	0.19	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483393	2	0.50	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483394	2	0.38	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483395	2	0.34	70	
2147483396	2	0.43	70	
2147483397	2	0.39	70	
2147483398	2	0.86	70	
2147483400	2	0.05	70	
2147483401	2	1.73	70	
2147483402	2	0.34	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483403	2	0.24	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483404	2	0.70	80	
2147483405	2	0.02	80	
2147483406	2	0.63	100	
2147483408	2	0.54	80	
2147483409	2	1.32	80	
2147483410	2	0.29	80	
2147483411	2	2.93	80	
2147483412	2	0.24	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483413	2	0.05	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483414	2	1.65	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483415	2	0.55	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483416	2	0.07	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483417DN	11	0.42	100	
2147483417DS	11	0.42	80	
2147483418DN	11	1.04	100	
2147483418DS	11	1.04	80	
2147483419	2	1.07	50	!Speed limit is low. Care

should be taken using the results of the calculation for this link.  
2147483420 2 0.77 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483421 2 0.36 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483423DS 11 1.79 100  
2147483423DN 11 1.79 80  
2147483424 2 1.77 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483425 2 1.08 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483426DN 11 1.06 100  
2147483426DS 11 1.06 80  
2147483428 2 0.34 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483429 2 2.00 70  
2147483431 2 0.48 70  
2147483432 2 0.84 80  
2147483433 2 0.61 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483434 2 0.90 70  
2147483435 2 0.67 70  
2147483436 2 0.15 70  
2147483437 2 0.66 70  
2147483438 2 1.47 70  
2147483439 2 1.22 70  
2147483440 2 0.54 70  
2147483441 2 0.05 70  
2147483442 2 1.26 70  
2147483443 2 1.98 70  
2147483444 2 0.30 70  
2147483445 2 0.03 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483446 2 0.32 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483447 2 0.95 80  
2147483448 2 2.19 70  
2147483449 2 0.22 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483450 2 0.10 70  
2147483451 2 0.25 70  
2147483452 2 0.06 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483453 2 0.10 70  
2147483454 2 1.29 70  
2147483455 2 1.25 70  
2147483456 2 2.21 70  
2147483457 2 1.67 70  
2147483458 2 1.13 70  
2147483459 2 1.07 70  
2147483460 2 0.10 70  
2147483461 2 0.49 70  
2147483464 2 1.01 70  
2147483465 2 1.25 70  
2147483466 2 0.86 70  
2147483468 2 0.56 70  
2147483469 2 0.29 70  
2147483471 2 0.71 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483472	2	0.42	70	
2147483473	2	0.11	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483474	2	0.43	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483475	2	0.30	70	
2147483476	2	0.44	70	
2147483477	2	0.14	70	
2147483478	2	0.63	70	
2147483479	2	0.27	70	
2147483480	2	0.80	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483481	2	0.34	70	
2147483482	2	0.86	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483483	2	0.22	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483484	2	0.31	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483485	2	0.48	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483486	2	0.32	30	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483487	2	1.08	70	
2147483488	2	0.26	70	
2147483489	2	1.12	70	
2147483490	2	1.58	70	
2147483491	2	2.24	70	
2147483492	2	1.36	70	
2147483493	2	0.58	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483494	2	0.17	70	
2147483495	3	0.06	60	
2147483497	3	0.12	50	
2147483498	3	0.13	50	
2147483499	2	0.40	100	
2147483501	2	0.23	100	
2147483502	2	0.36	100	
2147483504	3	0.14	50	
2147483505	3	0.32	50	
2147483506	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483507	3	0.04	40	
2147483508	3	0.02	40	
2147483510	3	0.21	40	
2147483511	3	0.05	40	
2147483512	3	0.08	40	
2147483513	3	0.29	40	
2147483517	3	0.05	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483518	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483519	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483520	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483521	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483522	3	0.04	30	#Speed limit is low. Care

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should be taken using the results of the calculation for this link.
2147483523      3      0.09      50
2147483524      3      0.11      50
2147483528      3      0.11      40
2147483531      3      0.08      40
2147483532      3      0.15      40
2147483533      3      0.04      40
2147483534      3      0.39      40
2147483537      3      0.17      20      #Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483540      4      0.05      20      !Speed limit is too low for a
fast dual carriageway.
2147483543      2      0.98      100
2147483544      2      0.52      100
2147483545      2      0.55      80
2147483546      2      0.33      80
2147483547      2      1.29      80
2147483548      2      0.10      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483549      2      0.22      100
2147483550      2      0.37      100
2147483551      2      0.40      80
2147483552      2      0.70      70
2147483553      2      0.63      70
2147483554      2      0.75      70
2147483555DN    11     0.83      80
2147483555DS    11     0.83      100
2147483556DN    11     0.78      100
2147483556DS    11     0.78      80
2147483557      2      1.25      70
2147483558      3      0.05      50
2147483561      2      0.17      70
2147483562      2      0.19      70
2147483563      2      0.09      70
2147483564      2      1.80      40      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483565      2      1.33      80
2147483566      2      0.17      80
2147483567      2      0.37      80
2147483568      2      0.10      70
2147483569      2      0.68      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483572      2      0.72      70
2147483573      2      0.11      70
2147483575      3      0.04      40
2147483576      3      0.04      40
2147483577      2      0.78      50      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483578      2      0.24      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483579      2      0.09      30      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483580      2      0.84      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483581      2      0.95      80
2147483582      3      0.41      40
2147483585      3      0.04      50
2147483588      2      0.23      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.

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2147483590	3	0.05	50	
2147483593	3	0.07	50	
2147483595	4	4.93	100	
2147483596	3	0.07	50	
2147483599	2	0.84	80	
2147483600	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483601	4	0.17	100	
2147483603	2	0.33	80	
2147483605	2	3.35	70	
2147483606	2	0.13	70	
2147483608	2	0.02	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483610	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483612	4	4.51	100	
2147483615	4	0.61	100	
2147483617	2	0.26	80	
2147483618	2	0.29	80	
2147483619	2	0.20	80	
2147483621	2	0.07	80	
2147483622	2	0.22	80	
2147483626	4	3.21	100	
2147483627	4	0.14	80	
2147483630	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483631	2	0.02	70	
1	4	8.66	100	
2	3	0.21	60	
3	4	0.16	100	
2147483597	3	0.06	50	
2147483633	3	0.03	50	
2147483637	3	0.05	50	
2147483639	4	0.15	100	
2147483641	3	0.05	50	

Combined Flow Subsection					Without-Scheme Flows					With-
Link	Base Year									
Scheme Flows	Flows				Year 1	Year 2	Year 3	Year 4	Year 5	Year 1
Name	Year 2	Year 3	Year 4	Year 5						
897			6,307		7,056	7,438	7,520	0	0	7,056
7,438	7,520	0	0							
900			5,177		5,838	6,163	6,196	0	0	5,838
6,163	6,196	0	0							
901			8,277		9,238	9,771	9,917	0	0	0
0	0	0	0							
906			14,012		15,649	16,479	16,635	0	0	1,779
1,904	1,942	0	0							
923			2,975		3,566	3,912	4,049	0	0	3,566
3,912	4,049	0	0							
1495			990		1,133	1,190	1,202	0	0	1,133
1,190	1,202	0	0							
1497			990		1,133	1,190	1,202	0	0	1,133
1,190	1,202	0	0							
1499			0		0	0	0	0	0	0
0	0	0	0							
1504			8,107		8,882	9,223	9,201	0	0	8,882
9,223	9,201	0	0							

1505			10,172	11,426	12,108	12,220	0	0	11,426
12,108	12,220	0	0						
1506			2,975	3,566	3,912	4,049	0	0	3,566
3,912	4,049	0	0						
1515			8,447	9,537	10,165	10,388	0	0	9,537
10,165	10,388	0	0						
1590			0	0	0	0	0	0	0
0	0	0	0						
1591			0	0	0	0	0	0	0
0	0	0	0						
44747			5,177	5,852	6,113	6,101	0	0	5,852
6,113	6,101	0	0						
45876			4,258	4,625	4,802	4,795	0	0	4,625
4,802	4,795	0	0						
48840			6,240	6,868	7,129	7,149	0	0	6,961
7,179	7,191	0	0						
48953			0	0	0	0	0	0	0
0	0	0	0						
49089			4,701	5,469	5,835	5,897	0	0	5,485
5,861	5,912	0	0						
49185			6,950	7,732	7,878	7,878	0	0	7,741
7,894	7,920	0	0						
49353			4,548	5,180	5,366	5,365	0	0	5,153
5,348	5,368	0	0						
49552			3,216	3,545	3,606	3,567	0	0	3,545
3,607	3,572	0	0						
49560			7,102	7,775	7,974	8,020	0	0	7,708
7,964	8,001	0	0						
49630			4,375	5,044	5,404	5,456	0	0	5,058
5,415	5,462	0	0						
49684			5,729	6,242	6,390	6,421	0	0	6,176
6,380	6,401	0	0						
49717			1,954	2,162	2,186	2,168	0	0	2,165
2,176	2,158	0	0						
49842			1,372	1,531	1,560	1,547	0	0	1,531
1,560	1,546	0	0						
50060			9,129	10,039	10,233	10,208	0	0	10,033
10,237	10,231	0	0						
50401			3,481	3,756	3,840	3,862	0	0	3,719
3,825	3,863	0	0						
50515			1,185	1,594	1,722	1,880	0	0	1,569
1,694	1,701	0	0						
50542			918	1,302	1,414	1,570	0	0	1,269
1,385	1,390	0	0						
50600			4,162	4,561	4,704	4,730	0	0	4,561
4,704	4,730	0	0						
50648			1,162	1,310	1,344	1,344	0	0	1,310
1,344	1,344	0	0						
50653			4,060	4,610	4,760	4,806	0	0	4,626
4,787	4,820	0	0						
50686			5,104	5,614	5,865	5,896	0	0	5,712
5,916	5,939	0	0						
554437085			5,960	6,627	6,754	6,754	0	0	6,656
6,765	6,779	0	0						
554437089			8,487	9,207	9,265	9,207	0	0	9,186
9,257	9,219	0	0						
554445417			3,919	4,376	4,575	4,541	0	0	4,376
4,575	4,541	0	0						
554445421			0	0	0	0	0	0	0

0	0	0	0						
	554445424		1,011	1,186	1,240	1,260	0	0	1,186
1,240	1,260	0	0						
	554445434		5,245	6,028	6,220	6,243	0	0	6,032
6,215	6,246	0	0						
	554445603		8,498	9,054	9,100	8,980	0	0	9,031
9,091	9,072	0	0						
	554445605		7,578	8,409	8,594	8,578	0	0	8,393
8,594	8,595	0	0						
	554445606		4,663	5,275	5,437	5,478	0	0	5,291
5,464	5,492	0	0						
	554445611		8,753	9,938	10,262	10,288	0	0	9,999
10,331	10,366	0	0						
	554445616		3,349	3,572	3,660	3,646	0	0	3,601
3,673	3,667	0	0						
	554445660		7,786	8,754	8,952	8,963	0	0	8,775
8,974	9,008	0	0						
	554445681		4,455	5,188	5,540	5,600	0	0	5,204
5,563	5,612	0	0						
	554451601		2,585	2,611	2,637	2,632	0	0	2,642
2,646	2,628	0	0						
	554451604		0	0	0	0	0	0	0
0	0	0	0						
	554451606		2,585	2,611	2,637	2,632	0	0	2,642
2,646	2,628	0	0						
	554451619		3,716	3,920	3,957	3,936	0	0	3,949
3,972	3,947	0	0						
	554451621		2,585	2,611	2,637	2,632	0	0	2,642
2,646	2,628	0	0						
	554469301		8,177	9,001	9,377	9,335	0	0	9,001
9,377	9,335	0	0						
	554469376		1,402	1,554	1,582	1,571	0	0	1,554
1,582	1,571	0	0						
	554469377		7,354	8,097	8,371	8,378	0	0	8,190
8,420	8,419	0	0						
	554469379		8,753	9,938	10,262	10,288	0	0	9,999
10,331	10,366	0	0						
	554469380		8,473	9,521	9,847	9,909	0	0	9,559
9,882	9,927	0	0						
	554469383		7,104	7,933	8,096	8,109	0	0	7,955
8,123	8,158	0	0						
	554469386		8,969	9,946	10,101	10,080	0	0	9,962
10,107	10,114	0	0						
	554469390		8,505	9,238	9,302	9,241	0	0	9,217
9,294	9,253	0	0						
	554476250		0	0	0	0	0	0	0
0	0	0	0						
	554476251		0	0	0	0	0	0	0
0	0	0	0						
	554476254		0	0	0	0	0	0	0
0	0	0	0						
	554476255		0	0	0	0	0	0	0
0	0	0	0						
	554476258		0	0	0	0	0	0	0
0	0	0	0						
	554476263		0	0	0	0	0	0	0
0	0	0	0						
	554476268		0	0	0	0	0	0	0
0	0	0	0						

554476273	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
554476275	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
554476276	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
554476314	8,177	9,001	9,377	9,335	0	0	0	9,001	
9,377 9,335	0	0	0	0	0	0	0	0	
554476317	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
554476318	3,919	4,376	4,575	4,541	0	0	0	4,376	
4,575 4,541	0	0	0	0	0	0	0	0	
554476321	3,919	4,376	4,575	4,541	0	0	0	4,376	
4,575 4,541	0	0	0	0	0	0	0	0	
554476331	10,004	11,099	11,498	11,535	0	0	0	11,099	
11,498 11,535	0	0	0	0	0	0	0	0	
554476332	4,470	4,814	4,975	4,993	0	0	0	4,810	
4,981 4,989	0	0	0	0	0	0	0	0	
554476337	9,714	10,842	11,195	11,235	0	0	0	10,842	
11,195 11,235	0	0	0	0	0	0	0	0	
554476339	9,714	10,842	11,195	11,235	0	0	0	10,842	
11,195 11,235	0	0	0	0	0	0	0	0	
554476344	9,714	10,842	11,195	11,235	0	0	0	10,842	
11,195 11,235	0	0	0	0	0	0	0	0	
554476347	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
554478297	4,974	5,547	5,730	5,745	0	0	0	5,547	
5,730 5,745	0	0	0	0	0	0	0	0	
554478964	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
554478965	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
554479189	2,456	2,777	2,809	2,792	0	0	0	2,777	
2,809 2,792	0	0	0	0	0	0	0	0	
554479190	2,456	2,777	2,809	2,792	0	0	0	2,777	
2,809 2,792	0	0	0	0	0	0	0	0	
554499930	2,794	3,045	3,161	3,198	0	0	0	3,045	
3,160 3,198	0	0	0	0	0	0	0	0	
554499931	2,794	3,045	3,161	3,198	0	0	0	3,045	
3,160 3,198	0	0	0	0	0	0	0	0	
554499943	118	132	131	133	0	0	0	127	
131 132	0	0	0	0	0	0	0	0	
559752177	1,742	1,948	2,028	2,050	0	0	0	1,948	
2,028 2,050	0	0	0	0	0	0	0	0	
562717850	11,199	12,305	12,709	12,744	0	0	0	12,398	
12,758 12,786	0	0	0	0	0	0	0	0	
578082733	4,455	5,188	5,540	5,600	0	0	0	5,204	
5,563 5,612	0	0	0	0	0	0	0	0	
578088741	118	132	131	133	0	0	0	127	
131 132	0	0	0	0	0	0	0	0	
587814444	4,060	4,610	4,760	4,806	0	0	0	4,626	
4,787 4,820	0	0	0	0	0	0	0	0	
587814449	4,663	5,275	5,437	5,478	0	0	0	5,291	
5,464 5,492	0	0	0	0	0	0	0	0	
587814450	4,663	5,275	5,437	5,478	0	0	0	5,291	
5,464 5,492	0	0	0	0	0	0	0	0	
587814454	3,216	3,545	3,606	3,567	0	0	0	3,545	
3,607 3,572	0	0	0	0	0	0	0	0	
587814456	3,216	3,545	3,606	3,567	0	0	0	3,545	



3,607	3,572	0	0							
	587814797		2,603	2,907	2,978	2,974	0	0	0	2,939
3,010	2,976	0	0							
	587814807		0	0	0	0	0	0	0	0
0	0	0	0							
	587814808		3,238	3,804	4,112	4,124	0	0	0	3,833
4,135	4,121	0	0							
	587814809		3,238	3,804	4,112	4,124	0	0	0	3,833
4,135	4,121	0	0							
	587814811		0	0	0	0	0	0	0	0
0	0	0	0							
	587814819		0	0	0	0	0	0	0	0
0	0	0	0							
	587814822		0	0	0	0	0	0	0	0
0	0	0	0							
	587814825		0	0	0	0	0	0	0	0
0	0	0	0							
	587814826		0	0	0	0	0	0	0	0
0	0	0	0							
	587815160		3,238	3,804	4,112	4,124	0	0	0	3,833
4,135	4,121	0	0							
	587815163		2,585	2,611	2,637	2,632	0	0	0	2,642
2,646	2,628	0	0							
	587815170		642	859	1,075	1,091	0	0	0	859
1,075	1,092	0	0							
	587815171		642	859	1,075	1,091	0	0	0	859
1,075	1,092	0	0							
	587815173		642	859	1,075	1,091	0	0	0	859
1,075	1,092	0	0							
	587815174		642	859	1,075	1,091	0	0	0	859
1,075	1,092	0	0							
	587815269		2,391	2,809	3,023	3,054	0	0	0	2,799
2,999	3,007	0	0							
	587815271		2,391	2,809	3,023	3,054	0	0	0	2,799
2,999	3,007	0	0							
	587815272		420	742	886	898	0	0	0	748
917	928	0	0							
	587815273		2,380	3,079	3,433	3,481	0	0	0	3,075
3,440	3,463	0	0							
	587815274		2,585	2,611	2,637	2,632	0	0	0	2,642
2,646	2,628	0	0							
	587815275		2,585	2,611	2,637	2,632	0	0	0	2,642
2,646	2,628	0	0							
	587815277		0	0	0	0	0	0	0	0
0	0	0	0							
	587815278		420	742	886	898	0	0	0	748
917	928	0	0							
	587815280		2,380	3,079	3,433	3,481	0	0	0	3,075
3,440	3,463	0	0							
	587815285		0	0	0	0	0	0	0	0
0	0	0	0							
	587815287		0	0	0	0	0	0	0	0
0	0	0	0							
	587815295		8,428	9,273	9,463	9,443	0	0	0	9,268
9,466	9,465	0	0							
	587815303		0	0	0	0	0	0	0	0
0	0	0	0							
	587815773		5,528	6,231	6,278	6,476	0	0	0	6,146
6,291	6,278	0	0							

587815780		5,248		5,869	6,008	6,105	0	0	5,870
6,017	6,011	0	0						
587815785		2		142	284	308	0	0	137
274	314	0	0						
587815787		5,773		6,403	6,629	6,629	0	0	6,446
6,658	6,634	0	0						
587815790		5,354		5,907	6,067	6,080	0	0	5,933
6,080	6,054	0	0						
587815791		5,438		5,996	6,156	6,170	0	0	6,022
6,170	6,144	0	0						
587815792		0		0	0	0	0	0	0
0	0	0	0						
587815795		918		1,302	1,414	1,570	0	0	1,269
1,385	1,390	0	0						
587815802		0		0	0	0	0	0	0
0	0	0	0						
587815824		0		0	0	0	0	0	0
0	0	0	0						
587816038		3,554		4,038	4,257	4,251	0	0	4,007
4,255	4,231	0	0						
587816039		4,032		4,546	4,749	4,739	0	0	4,516
4,747	4,719	0	0						
587816041		4,032		4,546	4,749	4,739	0	0	4,516
4,747	4,719	0	0						
587816057		0		0	0	0	0	0	0
0	0	0	0						
587816058		1,020		1,133	1,148	1,141	0	0	1,133
1,148	1,141	0	0						
587816063		2,636		3,048	3,249	3,253	0	0	3,018
3,244	3,235	0	0						
587816177		0		0	0	0	0	0	0
0	0	0	0						
587816186		966		1,361	1,480	1,633	0	0	1,332
1,456	1,459	0	0						
587816709		2,636		3,048	3,249	3,253	0	0	3,018
3,244	3,235	0	0						
587816710		3,108		3,577	3,789	3,787	0	0	3,547
3,784	3,770	0	0						
587816711		830		921	936	927	0	0	921
936	927	0	0						
587816712		3,247		3,685	3,889	3,888	0	0	3,654
3,889	3,870	0	0						
587816713		3,460		3,977	4,199	4,194	0	0	3,946
4,193	4,176	0	0						
587816714		228		315	333	328	0	0	314
328	329	0	0						
587816718		228		315	333	328	0	0	314
328	329	0	0						
587816721		228		315	333	328	0	0	314
328	329	0	0						
587816722		228		315	333	328	0	0	314
328	329	0	0						
587816725		228		315	333	328	0	0	314
328	329	0	0						
587816971		1,954		2,162	2,186	2,168	0	0	2,165
2,176	2,158	0	0						
587816972		1,470		1,799	1,904	1,898	0	0	1,811
1,913	1,921	0	0						
587816973		1,242		1,484	1,571	1,570	0	0	1,497

1,584	1,592	0	0						
	587816974		1,242	1,484	1,571	1,570	0	0	1,497
1,584	1,592	0	0						
	587816975		0	0	0	0	0	0	0
0	0	0	0						
	587816978		0	0	0	0	0	0	0
0	0	0	0						
	587816980		0	0	0	0	0	0	0
0	0	0	0						
	587816981		0	0	0	0	0	0	0
0	0	0	0						
	587816984		0	0	0	0	0	0	0
0	0	0	0						
	587816985		1,470	1,799	1,904	1,898	0	0	1,811
1,913	1,921	0	0						
	587816986		0	0	0	0	0	0	0
0	0	0	0						
	587816988		2,203	2,425	2,471	2,456	0	0	2,428
2,462	2,443	0	0						
	587816989		0	0	0	0	0	0	0
0	0	0	0						
	587817206		0	0	0	0	0	0	0
0	0	0	0						
	587817207		830	921	936	927	0	0	921
936	927	0	0						
	587817216		3,807	4,071	4,135	4,152	0	0	4,109
4,146	4,113	0	0						
	587817217		2,174	2,396	2,531	2,575	0	0	2,401
2,533	2,530	0	0						
	587817219		2,320	2,698	2,869	2,912	0	0	2,742
2,908	2,902	0	0						
	587817221		2,320	2,698	2,869	2,912	0	0	2,742
2,908	2,902	0	0						
	587817223		2,387	2,742	2,821	2,809	0	0	2,754
2,828	2,823	0	0						
	587817225		0	0	0	0	0	0	0
0	0	0	0						
	587817226		0	0	0	0	0	0	0
0	0	0	0						
	587817227		0	0	0	0	0	0	0
0	0	0	0						
	587817228		2,320	2,698	2,869	2,912	0	0	2,742
2,908	2,902	0	0						
	587817230		2,585	2,611	2,637	2,632	0	0	2,642
2,646	2,628	0	0						
	587817231		2,585	2,611	2,637	2,632	0	0	2,642
2,646	2,628	0	0						
	587817234		0	0	0	0	0	0	0
0	0	0	0						
	587817269		2,320	2,698	2,869	2,912	0	0	2,742
2,908	2,902	0	0						
	587817271		2,387	2,742	2,821	2,809	0	0	2,754
2,828	2,823	0	0						
	587817272		2,283	2,601	2,684	2,678	0	0	2,599
2,680	2,665	0	0						
	587817274		938	1,114	1,157	1,145	0	0	1,112
1,152	1,151	0	0						
	587817275		256	292	301	292	0	0	292
301	301	0	0						

587817314	967	1,183	1,310	1,325	0	0	1,224
1,358 1,359	0 0						
587817316	1,287	1,447	1,479	1,469	0	0	1,445
1,482 1,479	0 0						
587817318	156	163	157	148	0	0	162
157 158	0 0						
587817319	1,254	1,386	1,415	1,443	0	0	1,388
1,406 1,400	0 0						
587817447	0	0	0	0	0	0	0
0 0	0 0						
587817448	1,410	1,549	1,572	1,591	0	0	1,550
1,563 1,558	0 0						
587817453	2,596	2,850	2,941	2,925	0	0	2,853
2,940 2,939	0 0						
589015491	3,507	3,876	3,957	3,973	0	0	3,895
3,959 3,950	0 0						
589015493	4,531	4,918	5,058	5,059	0	0	4,949
5,074 5,042	0 0						
589015494	4,285	4,784	4,963	4,965	0	0	4,790
4,975 4,953	0 0						
589626976	4,162	4,561	4,704	4,730	0	0	4,561
4,704 4,730	0 0						
590481852	3,992	4,459	4,657	4,620	0	0	4,459
4,657 4,620	0 0						
590481853	3,992	4,459	4,657	4,620	0	0	4,459
4,657 4,620	0 0						
590481868	956	1,092	1,147	1,157	0	0	1,092
1,147 1,157	0 0						
590522243	8,497	9,025	9,067	8,948	0	0	9,002
9,058 9,040	0 0						
590522244	8,497	9,025	9,067	8,948	0	0	9,002
9,058 9,040	0 0						
590522245	0	0	0	0	0	0	0
0 0	0 0						
1139400830	956	1,092	1,147	1,157	0	0	1,092
1,147 1,157	0 0						
1148054292	8,425	9,282	9,661	9,612	0	0	9,282
9,661 9,612	0 0						
1164076472	8,425	9,282	9,661	9,612	0	0	9,282
9,661 9,612	0 0						
1165618763	956	1,092	1,147	1,157	0	0	1,092
1,147 1,157	0 0						
1167345578	2,456	2,777	2,809	2,792	0	0	2,777
2,809 2,792	0 0						
1176181443	9,714	10,842	11,195	11,235	0	0	10,842
11,195 11,235	0 0						
1176242672	8,425	9,282	9,661	9,612	0	0	9,282
9,661 9,612	0 0						
1186121768	846	938	958	954	0	0	938
958 954	0 0						
2122362473	5,269	5,812	6,042	6,055	0	0	5,812
6,042 6,055	0 0						
2147474988	6,000	6,684	6,947	6,964	0	0	6,684
6,947 6,964	0 0						
2147475007	8,525	9,340	9,379	9,370	0	0	9,350
9,389 9,344	0 0						
2147475798	8,460	9,322	9,704	9,657	0	0	9,322
9,704 9,657	0 0						
2147475799	8,107	8,882	9,223	9,201	0	0	8,882

9,223	9,201	0	0							
	2147475801		5,729	6,242	6,390	6,421	0	0	0	6,176
6,380	6,401	0	0							
	2147475949		4,128	4,915	5,307	5,439	0	0	0	4,915
5,307	5,439	0	0							
	2147481733		35	41	44	45	0	0	0	41
44	45	0	0							
	2147481754		956	1,092	1,147	1,157	0	0	0	1,092
1,147	1,157	0	0							
	2147481911		5,431	6,343	6,722	6,842	0	0	0	6,343
6,722	6,842	0	0							
	2147481977		2,456	2,777	2,809	2,792	0	0	0	2,777
2,809	2,792	0	0							
	2147482906		3,481	3,756	3,840	3,862	0	0	0	3,719
3,825	3,863	0	0							
	2147482907		3,481	3,756	3,840	3,862	0	0	0	3,719
3,825	3,863	0	0							
	2147482908		2,459	2,889	3,012	3,008	0	0	0	2,865
2,990	3,006	0	0							
	2147482912		486	641	678	679	0	0	0	641
674	677	0	0							
	2147482916		3,729	4,207	4,361	4,376	0	0	0	4,214
4,354	4,388	0	0							
	2147482917		3,585	4,168	4,365	4,388	0	0	0	4,175
4,357	4,400	0	0							
	2147482919		5,171	5,718	5,905	5,958	0	0	0	5,718
5,905	5,958	0	0							
	2147482922		1,923	2,204	2,295	2,297	0	0	0	2,184
2,276	2,293	0	0							
	2147482923		1,923	2,204	2,295	2,297	0	0	0	2,184
2,276	2,293	0	0							
	2147482924		3,529	4,123	4,277	4,291	0	0	0	4,106
4,254	4,283	0	0							
	2147482925		203	211	207	205	0	0	0	212
208	205	0	0							
	2147482926		226	241	240	238	0	0	0	242
241	239	0	0							
	2147482927		22	30	33	33	0	0	0	30
33	33	0	0							
	2147482928		2,003	2,423	2,559	2,567	0	0	0	2,401
2,534	2,560	0	0							
	2147482930		1,964	2,378	2,511	2,519	0	0	0	2,356
2,486	2,512	0	0							
	2147482931		1,964	2,378	2,511	2,519	0	0	0	2,356
2,486	2,512	0	0							
	2147482932		0	0	0	0	0	0	0	0
0	0	0	0							
	2147482933		22	30	33	33	0	0	0	30
33	33	0	0							
	2147482937		1,850	2,054	2,087	2,070	0	0	0	2,053
2,087	2,069	0	0							
	2147482940		3,216	3,545	3,606	3,567	0	0	0	3,545
3,607	3,572	0	0							
	2147482941		1,997	2,228	2,268	2,252	0	0	0	2,228
2,268	2,250	0	0							
	2147482942		1,442	1,606	1,632	1,619	0	0	0	1,606
1,632	1,619	0	0							
	2147482943		14	32	38	38	0	0	0	32
37	37	0	0							

	2147482944		283		430	471	474	0	0	429
466	472	0	0							
	2147482945		14		32	38	38	0	0	32
37	37	0	0							
	2147482946		337		413	444	455	0	0	413
442	454	0	0							
	2147482947		283		430	471	474	0	0	429
466	472	0	0							
	2147482949		322		381	406	417	0	0	381
405	417	0	0							
	2147482950		323		384	410	421	0	0	384
409	420	0	0							
	2147482951		323		384	410	421	0	0	384
409	420	0	0							
	2147482952		0		0	0	0	0	0	0
0	0	0	0							
	2147482953		0		0	0	0	0	0	0
0	0	0	0							
	2147482954		0		0	0	0	0	0	0
0	0	0	0							
	2147482957		378		543	584	592	0	0	542
579	588	0	0							
	2147482958		1		3	3	4	0	0	3
3	4	0	0							
	2147482959		378		540	581	588	0	0	539
575	584	0	0							
	2147482960		96		113	114	118	0	0	113
113	116	0	0							
	2147482963		0		1	1	4	0	0	1
1	2	0	0							
	2147482964		8,525		9,340	9,379	9,370	0	0	9,350
9,389	9,344	0	0							
	2147482966		2		142	284	308	0	0	137
274	314	0	0							
	2147482967		317		359	367	366	0	0	359
367	366	0	0							
	2147482968		169		185	186	184	0	0	184
186	184	0	0							
	2147482969		147		174	181	182	0	0	174
180	182	0	0							
	2147482970		147		174	181	182	0	0	174
180	182	0	0							
	2147482973		8,577		9,636	10,054	10,185	0	0	9,636
10,055	10,186	0	0							
	2147482974		8,521		9,566	9,974	10,101	0	0	9,566
9,975	10,102	0	0							
	2147482975		0		0	1	1	0	0	0
1	1	0	0							
	2147482976		7,738		8,709	9,119	9,261	0	0	8,709
9,119	9,261	0	0							
	2147482977		7,415		8,326	8,709	8,841	0	0	8,326
8,710	8,842	0	0							
	2147482979		323		383	409	420	0	0	383
408	420	0	0							
	2147482980		323		383	409	420	0	0	383
408	420	0	0							
	2147482981		0		0	0	0	0	0	0
0	0	0	0							
	2147482982		0		0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0
6,441	2147482985	6,497	0	5,644	6,242	6,441	6,497	0	6,242
0	2147482989	0	0	0	0	0	0	0	0
0	2147482990	0	0	0	0	0	0	0	0
6,441	2147482992	6,497	0	5,644	6,242	6,441	6,497	0	6,242
0	2147482993	0	0	0	0	0	0	0	0
6,441	2147482994	6,497	0	5,644	6,242	6,441	6,497	0	6,242
6,441	2147482995	6,497	0	5,644	6,242	6,441	6,497	0	6,242
0	2147482996	0	0	0	0	0	0	0	0
0	2147482997	0	0	0	0	0	0	0	0
0	2147482998	0	0	0	0	0	0	0	0
0	2147482999	0	0	0	0	0	0	0	0
0	2147483000	0	0	0	0	0	0	0	0
0	2147483001	0	0	0	0	0	0	0	0
0	2147483002	0	0	0	0	0	0	0	0
0	2147483003	0	0	0	0	0	0	0	0
0	2147483004	0	0	0	0	0	0	0	0
0	2147483005	0	0	0	0	0	0	0	0
6,441	2147483006	6,497	0	5,644	6,242	6,441	6,497	0	6,242
6,441	2147483007	6,497	0	5,644	6,242	6,441	6,497	0	6,242
0	2147483008	0	0	0	0	0	0	0	0
2,440	2147483009	2,445	0	2,157	2,369	2,437	2,441	0	2,366
2,358	2147483011	2,361	0	2,089	2,290	2,354	2,357	0	2,288
2,358	2147483012	2,361	0	2,089	2,290	2,354	2,357	0	2,288
2,951	2147483015	2,963	0	2,455	2,881	2,959	2,970	0	2,879
2,619	2147483016	2,626	0	2,258	2,559	2,621	2,628	0	2,558
801	2147483017	807	0	723	802	803	808	0	800
1,494	2147483019	1,501	0	1,335	1,481	1,494	1,501	0	1,481
801	2147483020	807	0	723	802	803	808	0	800
5,905	2147483021	5,958	0	5,171	5,718	5,905	5,958	0	5,718

2147483024	5,644	6,242	6,441	6,497	0	0	6,242
6,441 6,497	0 0						
2147483025	5,644	6,242	6,441	6,497	0	0	6,242
6,441 6,497	0 0						
2147483026	5,644	6,242	6,441	6,497	0	0	6,242
6,441 6,497	0 0						
2147483027	0	0	0	0	0	0	0
0 0	0 0						
2147483028	29	34	36	36	0	0	34
35 36	0 0						
2147483029	29	34	36	36	0	0	34
35 36	0 0						
2147483030	39	45	47	48	0	0	45
47 48	0 0						
2147483031	39	45	47	48	0	0	45
47 48	0 0						
2147483032	68	79	83	83	0	0	79
83 83	0 0						
2147483033	68	78	82	83	0	0	78
82 83	0 0						
2147483034	0	1	1	0	0	0	1
1 0	0 0						
2147483035	1,023	1,284	1,335	1,345	0	0	1,285
1,330 1,339	0 0						
2147483037	1,023	1,283	1,335	1,344	0	0	1,284
1,329 1,339	0 0						
2147483038	1,023	1,283	1,335	1,344	0	0	1,284
1,329 1,339	0 0						
2147483039	1,023	1,283	1,335	1,344	0	0	1,284
1,329 1,339	0 0						
2147483040	1,023	1,283	1,335	1,344	0	0	1,284
1,329 1,339	0 0						
2147483041	0	0	0	0	0	0	0
0 0	0 0						
2147483042	0	0	0	0	0	0	0
0 0	0 0						
2147483043	0	0	0	0	0	0	0
0 0	0 0						
2147483044	0	0	0	0	0	0	0
0 0	0 0						
2147483045	1,635	1,962	2,026	2,037	0	0	1,964
2,022 2,034	0 0						
2147483046	612	679	691	693	0	0	680
693 695	0 0						
2147483047	612	679	691	693	0	0	680
693 695	0 0						
2147483048	1,085	1,203	1,227	1,232	0	0	1,204
1,229 1,234	0 0						
2147483049	473	524	536	539	0	0	524
536 539	0 0						
2147483050	1,496	1,808	1,871	1,884	0	0	1,809
1,866 1,878	0 0						
2147483051	473	524	536	539	0	0	524
536 539	0 0						
2147483052	0	0	0	0	0	0	0
0 0	0 0						
2147483054	5,729	6,242	6,390	6,421	0	0	6,176
6,380 6,401	0 0						
2147483055	3,739	4,185	4,463	4,532	0	0	4,173



4,470	4,516	0	0						
	2147483058		2,299	2,541	2,666	2,682	0	0	2,537
2,668	2,684	0	0						
	2147483060		2,299	2,541	2,666	2,682	0	0	2,537
2,668	2,684	0	0						
	2147483061		2,727	3,019	3,154	3,156	0	0	3,015
3,153	3,164	0	0						
	2147483062		4,308	4,894	5,096	5,101	0	0	4,894
5,096	5,101	0	0						
	2147483063		8,505	9,238	9,302	9,241	0	0	9,217
9,294	9,253	0	0						
	2147483066		9,103	10,002	10,153	10,027	0	0	10,029
10,140	10,117	0	0						
	2147483067		6,857	7,646	7,866	7,786	0	0	7,638
7,849	7,854	0	0						
	2147483071		10,234	11,471	11,918	12,028	0	0	11,471
11,919	12,029	0	0						
	2147483073		10,234	11,471	11,918	12,028	0	0	11,471
11,919	12,029	0	0						
	2147483074		8,521	9,566	9,973	10,100	0	0	9,566
9,975	10,101	0	0						
	2147483075		55	70	80	84	0	0	70
79	84	0	0						
	2147483076		55	70	80	84	0	0	70
79	84	0	0						
	2147483077		55	70	80	84	0	0	70
79	84	0	0						
	2147483078		55	70	80	84	0	0	70
79	84	0	0						
	2147483079		262	321	341	347	0	0	320
339	343	0	0						
	2147483080		1,543	1,809	1,880	1,884	0	0	1,813
1,881	1,875	0	0						
	2147483081		1,543	1,809	1,880	1,884	0	0	1,813
1,881	1,875	0	0						
	2147483083		0	0	0	0	0	0	0
0	0	0	0						
	2147483084		0	0	0	0	0	0	0
0	0	0	0						
	2147483085		0	0	0	0	0	0	0
0	0	0	0						
	2147483086		9,732	10,792	11,196	11,301	0	0	10,794
11,203	11,306	0	0						
	2147483088		9,857	10,930	11,337	11,441	0	0	10,932
11,344	11,445	0	0						
	2147483089		9,857	10,930	11,337	11,441	0	0	10,932
11,344	11,445	0	0						
	2147483090		125	138	141	139	0	0	138
141	139	0	0						
	2147483091		0	0	0	0	0	0	0
0	0	0	0						
	2147483092		207	251	261	263	0	0	251
259	259	0	0						
	2147483093		207	251	261	263	0	0	251
259	259	0	0						
	2147483094		125	138	141	139	0	0	138
141	139	0	0						
	2147483095		125	138	141	139	0	0	138
141	139	0	0						

	2147483096		207	251	261	263	0	0	251
259	259	0	0						
	2147483097		0	0	0	0	0	0	0
0	0	0	0						
	2147483098		1,281	1,488	1,540	1,538	0	0	1,493
1,543	1,533	0	0						
	2147483099		1,281	1,488	1,540	1,538	0	0	1,493
1,543	1,533	0	0						
	2147483101		1,370	1,721	1,917	1,936	0	0	1,709
1,878	1,912	0	0						
	2147483102		1,370	1,721	1,917	1,936	0	0	1,709
1,878	1,912	0	0						
	2147483103		758	1,042	1,228	1,253	0	0	1,029
1,189	1,229	0	0						
	2147483104		428	479	488	474	0	0	478
485	480	0	0						
	2147483105		428	479	488	474	0	0	478
485	480	0	0						
	2147483106		0	0	0	0	0	0	0
0	0	0	0						
	2147483107		428	479	488	474	0	0	478
485	480	0	0						
	2147483108		0	0	0	0	0	0	0
0	0	0	0						
	2147483109		331	563	740	779	0	0	551
704	749	0	0						
	2147483110		331	563	740	779	0	0	551
704	749	0	0						
	2147483111		331	563	740	779	0	0	551
704	749	0	0						
	2147483112		50	56	58	58	0	0	56
58	58	0	0						
	2147483113		50	56	58	58	0	0	56
58	58	0	0						
	2147483114		50	56	58	58	0	0	56
58	58	0	0						
	2147483115		50	56	58	58	0	0	56
58	58	0	0						
	2147483117		0	0	0	0	0	0	0
0	0	0	0						
	2147483118		0	0	0	0	0	0	0
0	0	0	0						
	2147483119		8,003	8,907	9,089	9,113	0	0	8,912
9,088	9,090	0	0						
	2147483121		82	113	120	123	0	0	112
119	120	0	0						
	2147483122		82	113	120	123	0	0	112
119	120	0	0						
	2147483123		0	0	0	0	0	0	0
0	0	0	0						
	2147483124		82	113	120	123	0	0	112
119	120	0	0						
	2147483125		0	0	0	0	0	0	0
0	0	0	0						
	2147483126		0	0	0	0	0	0	0
0	0	0	0						
	2147483127		0	0	0	0	0	0	0
0	0	0	0						
	2147483128		1,281	1,488	1,540	1,538	0	0	1,493

1,543	1,533	0	0						
	2147483129		1,281	1,488	1,540	1,538	0	0	1,493
1,543	1,533	0	0						
	2147483131		5,778	6,295	6,445	6,476	0	0	6,229
6,435	6,456	0	0						
	2147483132		3,408	3,623	3,723	3,753	0	0	3,622
3,765	3,768	0	0						
	2147483134		0	0	0	0	0	0	0
0	0	0	0						
	2147483135		0	0	0	0	0	0	0
0	0	0	0						
	2147483136		0	0	0	0	0	0	0
0	0	0	0						
	2147483137		1,837	2,111	2,319	2,387	0	0	2,103
2,324	2,369	0	0						
	2147483139		1,837	2,111	2,319	2,387	0	0	2,103
2,324	2,369	0	0						
	2147483141		1,837	2,111	2,319	2,387	0	0	2,103
2,324	2,369	0	0						
	2147483143		3,949	4,655	4,916	5,003	0	0	4,655
4,916	5,003	0	0						
	2147483145		523	621	645	650	0	0	621
645	649	0	0						
	2147483146		523	621	645	650	0	0	621
645	649	0	0						
	2147483147		523	621	645	650	0	0	621
645	649	0	0						
	2147483148		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483149		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483150		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483151		0	0	0	0	0	0	0
0	0	0	0						
	2147483152		0	0	0	0	0	0	0
0	0	0	0						
	2147483153		0	0	0	0	0	0	0
0	0	0	0						
	2147483154		0	0	0	0	0	0	0
0	0	0	0						
	2147483155		0	0	0	0	0	0	0
0	0	0	0						
	2147483156		0	0	0	0	0	0	0
0	0	0	0						
	2147483157		0	0	0	0	0	0	0
0	0	0	0						
	2147483158		0	0	0	0	0	0	0
0	0	0	0						
	2147483159		0	0	0	0	0	0	0
0	0	0	0						
	2147483161		2,767	3,271	3,503	3,585	0	0	3,280
3,499	3,603	0	0						
	2147483162		2,767	3,271	3,503	3,585	0	0	3,280
3,499	3,603	0	0						
	2147483163		0	0	0	0	0	0	0
0	0	0	0						
	2147483164		2,767	3,271	3,503	3,585	0	0	3,280
3,499	3,603	0	0						

	2147483165		531	697	853	910	0	0	696
840	906	0	0						
	2147483166		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483168		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483169		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483170		2,368	2,809	3,172	3,297	0	0	2,799
3,164	3,275	0	0						
	2147483171		1,191	1,461	1,620	1,679	0	0	1,451
1,613	1,657	0	0						
	2147483172		0	0	0	0	0	0	0
0	0	0	0						
	2147483173		0	0	0	0	0	0	0
0	0	0	0						
	2147483174		0	0	0	0	0	0	0
0	0	0	0						
	2147483175		1,860	2,173	2,285	2,305	0	0	2,173
2,285	2,305	0	0						
	2147483178		1,198	1,295	1,349	1,354	0	0	1,297
1,355	1,360	0	0						
	2147483179		1,198	1,295	1,349	1,354	0	0	1,297
1,355	1,360	0	0						
	2147483180		1,198	1,295	1,349	1,354	0	0	1,297
1,355	1,360	0	0						
	2147483181		959	1,074	1,088	1,086	0	0	1,070
1,086	1,084	0	0						
	2147483182		959	1,074	1,088	1,086	0	0	1,070
1,086	1,084	0	0						
	2147483183		0	0	0	0	0	0	0
0	0	0	0						
	2147483184		662	877	937	951	0	0	876
930	945	0	0						
	2147483185		662	877	937	951	0	0	876
930	945	0	0						
	2147483186		0	0	0	0	0	0	0
0	0	0	0						
	2147483187		662	877	937	951	0	0	876
930	945	0	0						
	2147483188		0	0	0	0	0	0	0
0	0	0	0						
	2147483189		0	0	0	0	0	0	0
0	0	0	0						
	2147483190		612	679	691	693	0	0	680
693	695	0	0						
	2147483191		612	679	691	693	0	0	680
693	695	0	0						
	2147483192		612	679	691	693	0	0	680
693	695	0	0						
	2147483193		612	679	691	693	0	0	680
693	695	0	0						
	2147483194		612	679	691	693	0	0	680
693	695	0	0						
	2147483195		612	679	691	693	0	0	680
693	695	0	0						
	2147483196		612	679	691	693	0	0	680
693	695	0	0						
	2147483197		0	0	0	0	0	0	0

0	0	0	0							
	2147483198	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483199	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483200	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483201	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483202	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483206	2,348	0	2,785	3,024	3,097	0	0	0	2,785
3,024	3,097	0	0							
	2147483207	1,958	0	2,338	2,527	2,582	0	0	0	2,338
2,527	2,582	0	0							
	2147483208	1,958	0	2,338	2,527	2,582	0	0	0	2,338
2,527	2,582	0	0							
	2147483209	4,128	0	4,915	5,307	5,439	0	0	0	4,915
5,307	5,439	0	0							
	2147483210	4,128	0	4,915	5,307	5,439	0	0	0	4,915
5,307	5,439	0	0							
	2147483211	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483212	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483213	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483214	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483215	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483216	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483217	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483218	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483219	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483222	1,380	0	1,678	1,770	1,810	0	0	0	1,678
1,770	1,810	0	0							
	2147483224	1,385	0	1,681	1,777	1,818	0	0	0	1,681
1,777	1,818	0	0							
	2147483226	182	0	222	249	258	0	0	0	222
249	258	0	0							
	2147483227	1,780	0	2,130	2,282	2,342	0	0	0	2,130
2,282	2,342	0	0							
	2147483229	1,780	0	2,130	2,282	2,342	0	0	0	2,130
2,282	2,342	0	0							
	2147483230	1,780	0	2,130	2,282	2,342	0	0	0	2,130
2,282	2,342	0	0							
	2147483231	1,380	0	1,678	1,770	1,810	0	0	0	1,678
1,770	1,810	0	0							
	2147483234	1,380	0	1,678	1,770	1,810	0	0	0	1,678
1,770	1,810	0	0							
	2147483236	1,958	0	2,338	2,527	2,582	0	0	0	2,338
2,527	2,582	0	0							
	2147483237	1,958	0	2,338	2,527	2,582	0	0	0	2,338
2,527	2,582	0	0							

2147483238	1,958		2,338	2,527	2,582	0	0	2,338
2,527 2,582	0 0							
2147483239	1,380		1,678	1,770	1,810	0	0	1,678
1,770 1,810	0 0							
2147483240	1,380		1,678	1,770	1,810	0	0	1,678
1,770 1,810	0 0							
2147483241	0		0	0	0	0	0	0
0 0	0 0							
2147483242	0		0	0	0	0	0	0
0 0	0 0							
2147483243	0		0	0	0	0	0	0
0 0	0 0							
2147483244	0		0	0	0	0	0	0
0 0	0 0							
2147483245	0		0	0	0	0	0	0
0 0	0 0							
2147483246	0		0	0	0	0	0	0
0 0	0 0							
2147483247	0		0	0	0	0	0	0
0 0	0 0							
2147483248	0		0	0	0	0	0	0
0 0	0 0							
2147483249	0		0	0	0	0	0	0
0 0	0 0							
2147483250	0		0	0	0	0	0	0
0 0	0 0							
2147483251	0		0	0	0	0	0	0
0 0	0 0							
2147483252	0		0	0	0	0	0	0
0 0	0 0							
2147483254	2,794		3,045	3,161	3,198	0	0	3,045
3,160 3,198	0 0							
2147483256	2,794		3,045	3,161	3,198	0	0	3,045
3,160 3,198	0 0							
2147483258	3,112		3,408	3,547	3,593	0	0	3,408
3,547 3,593	0 0							
2147483260	3,112		3,408	3,547	3,593	0	0	3,408
3,547 3,593	0 0							
2147483264	2,254		2,447	2,534	2,562	0	0	2,447
2,534 2,562	0 0							
2147483265	0		0	0	0	0	0	0
0 0	0 0							
2147483266	0		0	0	0	0	0	0
0 0	0 0							
2147483267	0		0	0	0	0	0	0
0 0	0 0							
2147483270	118		132	131	133	0	0	127
131 132	0 0							
2147483271	318		363	387	395	0	0	363
387 396	0 0							
2147483272	0		0	0	0	0	0	0
0 0	0 0							
2147483273	0		0	0	0	0	0	0
0 0	0 0							
2147483274	2,521		2,732	2,827	2,857	0	0	2,732
2,827 2,857	0 0							
2147483275	2,521		2,733	2,827	2,858	0	0	2,733
2,827 2,858	0 0							
2147483278	439		489	498	507	0	0	411

434	442	0	0							
	2147483280	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483281	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483282	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483283	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483284	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483285	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483286	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483290DN	12,894	0	14,322	15,038	15,162	0	0	0	0
0	0	0	0							
	2147483290DS	0	0	0	0	0	0	0	0	326
341	345	0	0							
	2147483297	8,394	0	9,201	9,657	9,740	0	0	0	0
0	0	0	0							
	2147483300	6,860	0	7,623	8,018	8,111	0	0	0	0
0	0	0	0							
	2147483303	4,397	0	4,813	5,048	5,069	0	0	0	4,881
5,095	5,115	0	0							
	2147483304	4,424	0	4,845	5,082	5,103	0	0	0	4,936
5,151	5,171	0	0							
	2147483305DN	12,843	0	14,309	15,042	15,170	0	0	0	0
0	0	0	0							
	2147483305DS	0	0	0	0	0	0	0	0	235
247	250	0	0							
	2147483306	12,751	0	14,204	14,936	15,064	0	0	0	0
0	0	0	0							
	2147483308	4,424	0	4,845	5,082	5,103	0	0	0	4,936
5,151	5,171	0	0							
	2147483309	4,424	0	4,845	5,082	5,103	0	0	0	4,936
5,151	5,171	0	0							
	2147483311	3,112	0	3,408	3,547	3,593	0	0	0	3,408
3,547	3,593	0	0							
	2147483312	2,405	0	2,617	2,713	2,744	0	0	0	2,617
2,713	2,744	0	0							
	2147483316	2,254	0	2,447	2,534	2,562	0	0	0	2,447
2,534	2,562	0	0							
	2147483319	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483320	16	0	21	42	44	0	0	0	99
106	108	0	0							
	2147483321	16	0	21	42	44	0	0	0	99
106	108	0	0							
	2147483323	16	0	21	42	44	0	0	0	99
106	108	0	0							
	2147483325	16	0	19	22	37	0	0	0	99
106	108	0	0							
	2147483326	16	0	19	22	37	0	0	0	99
106	108	0	0							
	2147483327DN	13,437	0	14,998	15,790	15,922	0	0	0	0
0	0	0	0							
	2147483327DS	0	0	0	0	0	0	0	0	967
1,049	1,074	0	0							

	2147483330	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483331	478		630	716	729	0	0	826
904	928	0	0						
	2147483333	395		515	578	597	0	0	552
610	631	0	0						
	2147483334	395		515	578	597	0	0	552
610	631	0	0						
	2147483335DN	447		527	574	590	0	0	0
0	0	0	0						
	2147483335DS	0		0	0	0	0	0	642
704	726	0	0						
	2147483336	369		418	430	431	0	0	423
430	431	0	0						
	2147483337	369		418	430	431	0	0	423
430	431	0	0						
	2147483338	369		418	430	431	0	0	423
430	431	0	0						
	2147483339	0		0	0	0	0	0	0
0	0	0	0						
	2147483340	0		0	0	0	0	0	0
0	0	0	0						
	2147483341	0		0	0	0	0	0	0
0	0	0	0						
	2147483342	0		0	0	0	0	0	0
0	0	0	0						
	2147483343	0		0	0	0	0	0	0
0	0	0	0						
	2147483344	0		0	0	0	0	0	0
0	0	0	0						
	2147483345	0		0	0	0	0	0	0
0	0	0	0						
	2147483346	0		0	0	0	0	0	0
0	0	0	0						
	2147483347	0		0	0	0	0	0	0
0	0	0	0						
	2147483348	0		0	0	0	0	0	0
0	0	0	0						
	2147483349	0		0	0	0	0	0	0
0	0	0	0						
	2147483350	0		0	0	0	0	0	0
0	0	0	0						
	2147483352	2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0						
	2147483355	334		378	394	400	0	0	374
393	400	0	0						
	2147483356	334		378	394	400	0	0	374
393	400	0	0						
	2147483357	82		91	88	88	0	0	86
87	86	0	0						
	2147483358	82		91	88	88	0	0	86
87	86	0	0						
	2147483359	82		91	88	88	0	0	86
87	86	0	0						
	2147483360	0		0	0	0	0	0	0
0	0	0	0						
	2147483362	0		0	0	0	0	0	0
0	0	0	0						
	2147483363	0		0	0	0	0	0	0







0	0	0	0						
	2147483431		199	213	202	200	0	0	227
234	235	0	0						
	2147483432		114	108	92	89	0	0	130
132	132	0	0						
	2147483433		85	105	110	110	0	0	97
102	103	0	0						
	2147483434		0	0	0	0	0	0	0
0	0	0	0						
	2147483435		0	0	0	0	0	0	0
0	0	0	0						
	2147483436		0	0	0	0	0	0	0
0	0	0	0						
	2147483437		0	0	0	0	0	0	0
0	0	0	0						
	2147483438		0	0	0	0	0	0	0
0	0	0	0						
	2147483439		0	0	0	0	0	0	0
0	0	0	0						
	2147483440		0	0	0	0	0	0	0
0	0	0	0						
	2147483441		0	0	0	0	0	0	0
0	0	0	0						
	2147483442		0	0	0	0	0	0	0
0	0	0	0						
	2147483443		2,254	2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0						
	2147483444		2,254	2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0						
	2147483445		3	3	3	3	0	0	3
3	3	0	0						
	2147483446		3	3	3	3	0	0	3
3	3	0	0						
	2147483447		3	3	3	3	0	0	3
3	3	0	0						
	2147483448		3	3	3	3	0	0	3
3	3	0	0						
	2147483449		3	3	3	3	0	0	3
3	3	0	0						
	2147483450		0	0	0	0	0	0	0
0	0	0	0						
	2147483451		0	0	0	0	0	0	0
0	0	0	0						
	2147483452		0	0	0	0	0	0	0
0	0	0	0						
	2147483453		3	3	3	3	0	0	3
3	3	0	0						
	2147483454		3	3	3	3	0	0	3
3	3	0	0						
	2147483455		0	0	0	0	0	0	0
0	0	0	0						
	2147483456		0	0	0	0	0	0	0
0	0	0	0						
	2147483457		0	0	0	0	0	0	0
0	0	0	0						
	2147483458		0	0	0	0	0	0	0
0	0	0	0						
	2147483459		152	170	179	182	0	0	170
179	182	0	0						

	2147483460		152		170	179	182	0	0	170
179	182	0	0							
	2147483461		0		0	0	0	0	0	0
0	0	0	0							
	2147483464		152		170	179	182	0	0	170
179	182	0	0							
	2147483465		152		170	179	182	0	0	170
179	182	0	0							
	2147483466		0		0	0	0	0	0	0
0	0	0	0							
	2147483468		0		0	0	0	0	0	0
0	0	0	0							
	2147483469		0		0	0	0	0	0	0
0	0	0	0							
	2147483471		2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0							
	2147483472		2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0							
	2147483473		2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0							
	2147483474		0		0	0	0	0	0	0
0	0	0	0							
	2147483475		0		0	0	0	0	0	0
0	0	0	0							
	2147483476		0		0	0	0	0	0	0
0	0	0	0							
	2147483477		0		0	0	0	0	0	0
0	0	0	0							
	2147483478		0		0	0	0	0	0	0
0	0	0	0							
	2147483479		0		0	0	0	0	0	0
0	0	0	0							
	2147483480		0		0	0	0	0	0	0
0	0	0	0							
	2147483481		0		0	0	0	0	0	0
0	0	0	0							
	2147483482		0		0	0	0	0	0	0
0	0	0	0							
	2147483483		0		0	0	0	0	0	0
0	0	0	0							
	2147483484		0		0	0	0	0	0	0
0	0	0	0							
	2147483485		0		0	0	0	0	0	0
0	0	0	0							
	2147483486		0		0	0	0	0	0	0
0	0	0	0							
	2147483487		0		0	0	0	0	0	0
0	0	0	0							
	2147483488		0		0	0	0	0	0	0
0	0	0	0							
	2147483489		0		0	0	0	0	0	0
0	0	0	0							
	2147483490		0		0	0	0	0	0	0
0	0	0	0							
	2147483491		0		0	0	0	0	0	0
0	0	0	0							
	2147483492		152		170	179	182	0	0	170
179	182	0	0							
	2147483493		0		0	0	0	0	0	0



2147483537	2,533		2,798	2,850	2,829	0	0	2,798
2,853	2,830	0	0					
2147483540	1,067		1,313	1,454	1,469	0	0	1,354
1,502	1,502	0	0					
2147483543	9,732		10,792	11,196	11,301	0	0	10,794
11,203	11,306	0	0					
2147483544	9,732		10,792	11,196	11,301	0	0	10,794
11,203	11,306	0	0					
2147483545	8,125		9,043	9,224	9,243	0	0	9,048
9,223	9,223	0	0					
2147483546	8,125		9,043	9,224	9,243	0	0	9,048
9,223	9,223	0	0					
2147483547	710		789	803	796	0	0	789
803	796	0	0					
2147483548	27		32	34	34	0	0	56
58	57	0	0					
2147483549	4,424		4,845	5,082	5,103	0	0	4,936
5,151	5,171	0	0					
2147483550	4,424		4,845	5,082	5,103	0	0	4,936
5,151	5,171	0	0					
2147483551	1		2	20	34	0	0	0
0	0	0	0					
2147483552	0		0	0	0	0	0	0
0	0	0	0					
2147483553	0		0	0	0	0	0	0
0	0	0	0					
2147483554	0		0	0	0	0	0	0
0	0	0	0					
2147483555DN	14,012		15,649	16,479	16,635	0	0	0
0	0	0	0					
2147483555DS	0		0	0	0	0	0	1,779
1,904	1,942	0	0					
2147483556DN	13,878		15,503	16,322	16,476	0	0	0
0	0	0	0					
2147483556DS	0		0	0	0	0	0	1,633
1,747	1,783	0	0					
2147483557	518		584	617	628	0	0	584
617	628	0	0					
2147483558	7,596		8,561	9,065	9,158	0	0	8,561
9,065	9,158	0	0					
2147483561	0		0	0	0	0	0	0
0	0	0	0					
2147483562	0		0	0	0	0	0	0
0	0	0	0					
2147483563	0		0	0	0	0	0	0
0	0	0	0					
2147483564	1,281		1,488	1,540	1,538	0	0	1,493
1,543	1,533	0	0					
2147483565	1,281		1,488	1,540	1,538	0	0	1,493
1,543	1,533	0	0					
2147483566	167		173	171	181	0	0	11
12	13	0	0					
2147483567	167		173	171	181	0	0	11
12	13	0	0					
2147483568	0		0	0	0	0	0	0
0	0	0	0					
2147483569	4,231		4,868	5,206	5,259	0	0	4,880
5,215	5,263	0	0					
2147483572	6,645		7,481	7,862	7,938	0	0	7,457

7,856	7,946	0	0						
	2147483573		416	462	468	465	0	0	462
468	465	0	0						
	2147483575		3,841	4,408	4,658	4,697	0	0	4,404
4,667	4,718	0	0						
	2147483576		3,822	4,387	4,636	4,677	0	0	4,382
4,645	4,697	0	0						
	2147483577		448	595	679	691	0	0	794
870	893	0	0						
	2147483578		448	595	679	691	0	0	794
870	893	0	0						
	2147483579		0	0	0	0	0	0	0
0	0	0	0						
	2147483580		5,104	5,614	5,865	5,896	0	0	5,712
5,916	5,939	0	0						
	2147483581		3,982	4,333	4,534	4,542	0	0	4,433
4,582	4,585	0	0						
	2147483582		1,863	2,170	2,307	2,361	0	0	2,170
2,307	2,361	0	0						
	2147483585		3,560	4,130	4,328	4,354	0	0	4,137
4,322	4,366	0	0						
	2147483588		8,041	8,969	9,158	9,185	0	0	8,974
9,156	9,159	0	0						
	2147483590		5,935	6,739	6,977	7,006	0	0	6,760
6,975	7,003	0	0						
	2147483593		7,543	8,265	8,508	8,615	0	0	8,271
8,511	8,596	0	0						
	2147483595		5,900	6,642	6,858	6,920	0	0	6,667
6,869	6,915	0	0						
	2147483596		6,403	7,010	7,382	7,463	0	0	7,160
7,509	7,584	0	0						
	2147483599		9,732	10,792	11,196	11,301	0	0	10,794
11,203	11,306	0	0						
	2147483600		7,758	8,571	8,834	8,904	0	0	8,572
8,830	8,894	0	0						
	2147483601		5,232	6,020	6,378	6,488	0	0	5,999
6,368	6,485	0	0						
	2147483603		1,974	2,221	2,362	2,398	0	0	2,221
2,373	2,412	0	0						
	2147483605		0	0	0	0	0	0	0
0	0	0	0						
	2147483606		2,293	2,514	2,670	2,720	0	0	2,516
2,662	2,708	0	0						
	2147483608		811	944	1,022	1,054	0	0	943
1,020	1,054	0	0						
	2147483610		323	380	399	405	0	0	380
399	405	0	0						
	2147483612		7,206	8,241	8,740	8,886	0	0	8,220
8,741	8,897	0	0						
	2147483615		6,126	6,955	7,327	7,420	0	0	6,934
7,331	7,432	0	0						
	2147483617		488	563	623	648	0	0	563
621	648	0	0						
	2147483618		6,175	6,894	7,225	7,337	0	0	6,902
7,264	7,370	0	0						
	2147483619		6,005	6,719	6,990	7,074	0	0	6,653
6,986	7,066	0	0						
	2147483621		2,055	2,457	2,624	2,664	0	0	2,382
2,580	2,622	0	0						

2147483622	593	723	790	817	0	0	723
788 817 0 0							
2147483626	9,041	10,227	10,798	10,927	0	0	10,134
10,749 10,885 0 0							
2147483627	4,685	5,224	5,519	5,602	0	0	5,477
5,802 5,896 0 0							
2147483630	1,651	1,775	1,884	1,911	0	0	1,776
1,873 1,898 0 0							
2147483631	0	0	0	0	0	0	0
0 0 0 0							
1	0	0	0	0	0	0	13,871
14,575 14,694 0 0							
2	0	0	0	0	0	0	243
252 255 0 0							
3	0	0	0	0	0	0	14,106
14,822 14,943 0 0							
2147483597	0	0	0	0	0	0	2,779
2,887 2,895 0 0							
2147483633	0	0	0	0	0	0	7,713
8,128 8,229 0 0							
2147483637	0	0	0	0	0	0	9,238
9,771 9,917 0 0							
2147483639	0	0	0	0	0	0	9,448
9,875 9,955 0 0							
2147483641	0	0	0	0	0	0	9,238
9,771 9,917 0 0							

Combined Local Collision Rate Subsection

Link Name	Observed Collisions	First Observed Collision Year	Local Severity Ratio	Split Year
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[Section 5] Input Data - Parameter File

COBALT Parameter File  
Version 2,019.10

Cost Base Year  
2011

Appraisal Period  
30

Years from Current Year	Discount Rate (%)
30	4.00
60	3.50
100	3.00

Severity	Cost
Fatal	2,310,500
Serious	331,400
Slight	31,100

Severity	Cost per Collision		
	Insurance Administration	Damage to Property Urban	Rural Motorway



Fatal	375	13,952	13,952	13,952
Serious	233	6,225	6,225	6,225
Slight	142	3,713	3,713	3,713
Damage	67	2,346	2,346	2,346

Gardai Cost

	Urban	Rural	Motorway
Fatal	21,521	21,521	21,521
Serious	2,519	2,519	2,519
Slight	653	653	653
Damage	42	42	42

Compound Annual Rates of Growth of Collision Values

Range of Years Rate of Growth (%p.a.)

2011-2015	1.040
2015-2020	1.036
2020-2025	1.022
2025-2111	1.023

Number of Damage Only Collisions per PIA

	Urban	Rural	Motorway
Damage	0.0	0.0	0.0

Link and Junction Combined Collision Proportions

Base Year

2011

Road Type	Speed Limit (km/h)	Collision Proportions		
		Fatal	Serious	Slight
1	70	0.013	0.027	0.960
1	80	0.013	0.027	0.960
1	90	0.013	0.027	0.960
1	100	0.013	0.027	0.960
1	110	0.013	0.027	0.960
1	120	0.013	0.027	0.960
1	130	0.013	0.027	0.960
2	70	0.023	0.053	0.925
2	80	0.023	0.053	0.925
2	90	0.023	0.053	0.925
2	100	0.023	0.053	0.925
2	110	0.023	0.053	0.925
2	120	0.023	0.053	0.925
2	130	0.023	0.053	0.925
3	50	0.005	0.032	0.963
3	60	0.005	0.032	0.963
4	70	0.012	0.026	0.962
4	80	0.012	0.026	0.962
4	90	0.012	0.026	0.962
4	100	0.012	0.026	0.962
4	110	0.012	0.026	0.962
4	120	0.012	0.026	0.962
4	130	0.012	0.026	0.962
5	50	0.008	0.028	0.963
5	60	0.008	0.028	0.963
6	70	0.023	0.053	0.925
6	80	0.023	0.053	0.925
6	90	0.023	0.053	0.925
6	100	0.023	0.053	0.925
6	110	0.023	0.053	0.925
6	120	0.023	0.053	0.925
6	130	0.023	0.053	0.925

7	50	0.005	0.032	0.963
7	60	0.005	0.032	0.963
8	70	0.012	0.026	0.962
8	80	0.012	0.026	0.962
8	90	0.012	0.026	0.962
8	100	0.012	0.026	0.962
8	110	0.012	0.026	0.962
8	120	0.012	0.026	0.962
8	130	0.012	0.026	0.962
9	50	0.008	0.028	0.963
9	60	0.008	0.028	0.963
10	30	0.005	0.032	0.963
10	40	0.005	0.032	0.963
10	50	0.005	0.032	0.963
10	60	0.005	0.032	0.963
11	70	0.123	0.140	0.737
11	80	0.123	0.140	0.737
11	90	0.123	0.140	0.737
11	100	0.123	0.140	0.737
11	110	0.123	0.140	0.737
11	120	0.123	0.140	0.737
11	130	0.123	0.140	0.737

Link and Junction Combined Collision Rates and Change Factors

Base Year

2011

Road Type	Speed Limit (km/h)	Collision Rate	Beta Factor
1	70	0.057	0.956
1	80	0.057	0.956
1	90	0.057	0.956
1	100	0.057	0.956
1	110	0.057	0.956
1	120	0.057	0.956
1	130	0.057	0.956
2	70	0.219	0.955
2	80	0.219	0.955
2	90	0.219	0.955
2	100	0.219	0.955
2	110	0.219	0.955
2	120	0.219	0.955
2	130	0.219	0.955
3	50	0.613	0.959
3	60	0.613	0.959
4	70	0.094	0.956
4	80	0.094	0.956
4	90	0.094	0.956
4	100	0.094	0.956
4	110	0.094	0.956
4	120	0.094	0.956
4	130	0.094	0.956
5	50	0.402	0.967
5	60	0.402	0.967
6	70	0.219	0.955
6	80	0.219	0.955
6	90	0.219	0.955
6	100	0.219	0.955
6	110	0.219	0.955
6	120	0.219	0.955

6	130	0.219	0.955
7	50	0.613	0.959
7	60	0.613	0.959
8	70	0.094	0.955
8	80	0.094	0.955
8	90	0.094	0.955
8	100	0.094	0.955
8	110	0.094	0.955
8	120	0.094	0.955
8	130	0.094	0.955
9	50	0.402	0.959
9	60	0.402	0.959
10	30	0.449	0.959
10	40	0.449	0.959
10	50	0.449	0.959
10	60	0.449	0.959
11	70	0.115	0.955
11	80	0.115	0.955
11	90	0.115	0.955
11	100	0.115	0.955
11	110	0.115	0.955
11	120	0.115	0.955
11	130	0.115	0.955

Link and Junction Combined Collision Beta Factor Changes over Time

Range of Years Change to Beta Factor

2011-2016	1.000
2017-2026	0.500
2027-2036	0.250
2037-2160	0.000

Link and Junction Combined Casualty Rates

Base Year

2011

Road Type	Speed Limit (km/h)	Casualties per P.I.A.		
		Fatal	Serious	Slight
1	70	0.025	0.033	1.393
1	80	0.025	0.033	1.393
1	90	0.025	0.033	1.393
1	100	0.025	0.033	1.393
1	110	0.025	0.033	1.393
1	120	0.025	0.033	1.393
1	130	0.025	0.033	1.393
2	70	0.050	0.106	1.451
2	80	0.050	0.106	1.451
2	90	0.050	0.106	1.451
2	100	0.050	0.106	1.451
2	110	0.050	0.106	1.451
2	120	0.050	0.106	1.451
2	130	0.050	0.106	1.451
3	50	0.007	0.051	1.325
3	60	0.007	0.051	1.325
4	70	0.018	0.043	1.342
4	80	0.018	0.043	1.342
4	90	0.018	0.043	1.342
4	100	0.018	0.043	1.342
4	110	0.018	0.043	1.342
4	120	0.018	0.043	1.342
4	130	0.018	0.043	1.342

5	50	0.008	0.045	1.233
5	60	0.008	0.045	1.233
6	70	0.050	0.106	1.451
6	80	0.050	0.106	1.451
6	90	0.050	0.106	1.451
6	100	0.050	0.106	1.451
6	110	0.050	0.106	1.451
6	120	0.050	0.106	1.451
6	130	0.050	0.106	1.451
7	50	0.007	0.051	1.325
7	60	0.007	0.051	1.325
8	70	0.018	0.043	1.342
8	80	0.018	0.043	1.342
8	90	0.018	0.043	1.342
8	100	0.018	0.043	1.342
8	110	0.018	0.043	1.342
8	120	0.018	0.043	1.342
8	130	0.018	0.043	1.342
9	50	0.008	0.045	1.233
9	60	0.008	0.045	1.233
10	30	0.007	0.051	1.325
10	40	0.007	0.051	1.325
10	50	0.007	0.051	1.325
10	60	0.007	0.051	1.325
11	70	0.050	0.106	1.451
11	80	0.050	0.106	1.451
11	90	0.050	0.106	1.451
11	100	0.050	0.106	1.451
11	110	0.050	0.106	1.451
11	120	0.050	0.106	1.451
11	130	0.050	0.106	1.451

Link and Junction Combined Casualty Change Factors

Base Year

2011

Road Type	Speed Limit (km/h)	Beta Factor		
		Fatal	Serious	Slight
1	70	0.978	0.979	1.002
1	80	0.978	0.979	1.002
1	90	0.978	0.979	1.002
1	100	0.978	0.979	1.002
1	110	0.978	0.979	1.002
1	120	0.978	0.979	1.002
1	130	0.978	0.979	1.002
2	70	0.979	0.983	1.002
2	80	0.979	0.983	1.002
2	90	0.979	0.983	1.002
2	100	0.979	0.983	1.002
2	110	0.979	0.983	1.002
2	120	0.979	0.983	1.002
2	130	0.979	0.983	1.002
3	50	0.971	0.995	1.001
3	60	0.971	0.995	1.001
4	70	0.984	0.985	0.998
4	80	0.984	0.985	0.998
4	90	0.984	0.985	0.998
4	100	0.984	0.985	0.998
4	110	0.984	0.985	0.998
4	120	0.984	0.985	0.998

4	130	0.984	0.985	0.998
5	50	0.998	0.990	1.002
5	60	0.998	0.990	1.002
6	70	0.979	0.983	1.002
6	80	0.979	0.983	1.002
6	90	0.979	0.983	1.002
6	100	0.979	0.983	1.002
6	110	0.979	0.983	1.002
6	120	0.979	0.983	1.002
6	130	0.979	0.983	1.002
7	50	0.971	0.995	1.001
7	60	0.971	0.995	1.001
8	70	0.979	0.983	1.002
8	80	0.979	0.983	1.002
8	90	0.979	0.983	1.002
8	100	0.979	0.983	1.002
8	110	0.979	0.983	1.002
8	120	0.979	0.983	1.002
8	130	0.979	0.983	1.002
9	50	0.971	0.995	1.001
9	60	0.971	0.995	1.001
10	30	0.971	0.995	1.001
10	40	0.971	0.995	1.001
10	50	0.971	0.995	1.001
10	60	0.971	0.995	1.001
11	70	0.979	0.983	1.002
11	80	0.979	0.983	1.002
11	90	0.979	0.983	1.002
11	100	0.979	0.983	1.002
11	110	0.979	0.983	1.002
11	120	0.979	0.983	1.002
11	130	0.979	0.983	1.002

Link and Junction Combined Casualty Beta Factor Changes over Time

Range of Years    Change to Beta Factor

2011-2016	1.000
2017-2026	0.500
2027-2036	0.250
2037-2160	0.000



[Section 1.1] Economic Summary

Total Without-Scheme Collision Costs =	68,891.8
Total With-Scheme Collision Costs =	65,673.7
Total Collision Benefits Saved by Scheme =	3,218.1

Costs and benefits discounted to 2011 in multiples of a thousand euros.

[Section 1.2] Collision Summary

Total Without-Scheme Collisions =	1,192.0
Total With-Scheme Collisions =	1,177.8
Total Collisions Saved by Scheme =	14.2

This analysis includes 228 serious error(s).  
These results should not be considered usable.

This analysis includes 117 warning(s).  
These results should be considered carefully before using.

[Section 1.3] Casualty Summary

Total Without-Scheme Casualties (Fatal) =	37.1
(Serious) =	90.0
(Slight) =	1,726.8
Total With-Scheme Casualties (Fatal) =	34.8
(Serious) =	85.1
(Slight) =	1,692.7
Total Casualties Saved by Scheme (Fatal) =	2.3
(Serious) =	4.9
(Slight) =	34.1

This analysis includes 228 serious error(s).  
These results should not be considered usable.

This analysis includes 117 warning(s).  
These results should be considered carefully before using.

[Section 2] Combined Link and Junction Collision Statistics

	*----- Without-Scheme -----*	*----- With-
Scheme -----*	*----- Benefits -----*	
	*-- Number of Collisions -*	Total* *-- Number of
Collisions -*	Total* *-- Number of Collisions -*	Total*
Link Name	* 2030 2045 Total*	Cost* * 2030 2045

Total*	Cost* *	2030	2045	Total*	Benefit*		
897		0.1	0.1	1.7	50.4	0.1	0.1
1.7	50.4	0.0	0.0	0.0	0.0		
900		0.1	0.1	2.0	57.9	0.1	0.1
2.0	57.9	0.0	0.0	0.0	0.0		
901		0.2	0.2	5.1	146.9	0.0	0.0
0.0	0.0	0.2	0.2	5.1	146.9		
906		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
923		0.2	0.2	6.2	407.4	0.2	0.2
6.2	407.4	0.0	0.0	0.0	0.0		
1495		0.1	0.1	1.8	120.0	0.1	0.1
1.8	120.0	0.0	0.0	0.0	0.0		
1497		0.0	0.0	1.4	93.6	0.0	0.0
1.4	93.6	0.0	0.0	0.0	0.0		
1499		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1504		0.1	0.1	2.8	186.3	0.1	0.1
2.8	186.3	0.0	0.0	0.0	0.0		
1505		0.4	0.4	11.0	730.1	0.4	0.4
11.0	730.1	0.0	0.0	0.0	0.0		
1506		0.1	0.1	4.2	275.5	0.1	0.1
4.2	275.5	0.0	0.0	0.0	0.0		
1515		1.1	1.1	33.9	1,217.0	1.1	1.1
33.9	1,217.0	0.0	0.0	0.0	0.0		
1590		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1591		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
44747		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
45876		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48840		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48953		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49089		0.1	0.1	3.4	97.4	0.1	0.1
3.4	97.7	0.0	0.0	0.0	-0.4		
49185		0.8	0.7	22.0	638.3	0.8	0.7
22.1	639.8	0.0	0.0	-0.1	-1.5		
49353		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49552		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49560		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49630		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49684		0.1	0.1	3.9	257.4	0.1	0.1
3.9	256.1	0.0	0.0	0.0	1.3		
49717		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49842		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
50060		0.3	0.3	9.4	272.7	0.3	0.3
9.4	272.8	0.0	0.0	0.0	-0.1		
50401		1.0	1.0	28.7	831.7	1.0	1.0
28.6	827.4	0.0	0.0	0.1	4.4		



50515		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50542		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50600		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50648		0.3	0.2	7.3	486.2	0.3	0.2	
7.3	486.2	0.0	0.0	0.0	0.0	0.0	0.0	
50653		0.1	0.1	3.1	89.1	0.1	0.1	
3.1	89.5	0.0	0.0	0.0	-0.4	0.0	0.0	
50686		0.3	0.3	9.5	275.3	0.3	0.3	
9.6	278.4	0.0	0.0	-0.1	-3.1	0.0	0.0	
554437085		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554437089		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445417		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445421		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445424		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445434		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445603		0.3	0.3	8.9	258.0	0.3	0.3	
8.9	258.1	0.0	0.0	0.0	-0.1	0.0	0.0	
554445605		0.1	0.1	3.2	91.5	0.1	0.1	
3.2	91.5	0.0	0.0	0.0	0.0	0.0	0.0	
554445606		0.1	0.1	2.1	59.7	0.1	0.1	
2.1	59.9	0.0	0.0	0.0	-0.2	0.0	0.0	
554445611		0.1	0.1	2.0	58.0	0.1	0.1	
2.0	58.4	0.0	0.0	0.0	-0.4	0.0	0.0	
554445616		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554445660		0.1	0.1	3.8	110.9	0.1	0.1	
3.8	111.2	0.0	0.0	0.0	-0.3	0.0	0.0	
554445681		0.0	0.0	0.7	19.6	0.0	0.0	
0.7	19.7	0.0	0.0	0.0	-0.1	0.0	0.0	
554451601		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554451604		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554451606		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554451619		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554451621		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554469301		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554469376		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554469377		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
554469379		0.1	0.1	4.0	114.9	0.1	0.1	
4.0	115.7	0.0	0.0	0.0	-0.8	0.0	0.0	
554469380		0.1	0.1	2.8	81.8	0.1	0.1	
2.8	82.1	0.0	0.0	0.0	-0.3	0.0	0.0	
554469383		0.1	0.1	2.9	83.5	0.1	0.1	

2.9	83.8	0.0	0.0	0.0	-0.3		
	554469386	0.1	0.1	2.5	73.8	0.1	0.1
2.6	73.9	0.0	0.0	0.0	-0.1		
	554469390	0.0	0.0	1.0	67.5	0.0	0.0
1.0	67.4	0.0	0.0	0.0	0.1		
	554476250	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476251	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476254	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476255	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476258	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476263	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476268	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476273	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476275	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476276	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476314	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476317	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476318	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476321	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476331	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476332	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476337	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476339	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476344	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554476347	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554478297	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554478964	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554478965	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554479189	0.0	0.0	0.7	43.7	0.0	0.0
0.7	43.7	0.0	0.0	0.0	0.0		
	554479190	0.0	0.0	0.1	9.2	0.0	0.0
0.1	9.2	0.0	0.0	0.0	0.0		
	554499930	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	554499931	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

554499943	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
559752177	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
562717850	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578082733	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578088741	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814444	0.1	0.1	1.7	47.9	0.1	0.1	
1.7	48.1	0.0	0.0	0.0	-0.2		
587814449	0.1	0.1	2.2	62.9	0.1	0.1	
2.2	63.1	0.0	0.0	0.0	-0.2		
587814450	0.0	0.0	0.6	18.2	0.0	0.0	
0.6	18.3	0.0	0.0	0.0	-0.1		
587814454	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814456	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814797	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814807	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814808	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814809	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814811	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814819	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814822	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814825	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814826	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815160	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815163	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815170	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815171	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815173	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815174	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815269	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815274	0.0	0.0	0.0	0.0	0.0	0.0	0.0





0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817228	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817230	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817231	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817234	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817269	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817271	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817272	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817274	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817275	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817314	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817316	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817318	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817319	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817447	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817448	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817453	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015491	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015493	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015494	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589626976	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481852	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481853	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481868	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2.1	590522243	0.1	0.1	2.1	60.1	0.1	0.1
0.9	60.1	0.0	0.0	0.0	0.0		
0.0	590522244	0.0	0.0	0.9	25.3	0.0	0.0
0.0	25.3	0.0	0.0	0.0	0.0		
0.0	590522245	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1139400830	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1148054292	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1164076472	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

	1165618763	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1167345578	0.0	0.0	1.0	69.2	0.0	0.0	0.0
1.0	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1176181443	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1176242672	0.1	0.1	4.2	280.6	0.1	0.1	0.1
4.2	280.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1186121768	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2122362473	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147474988	1.1	1.1	31.6	2,096.4	1.1	1.1	1.1
31.6	2,096.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475007	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475798	0.5	0.5	14.7	973.5	0.5	0.5	0.5
14.7	973.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475799	0.3	0.3	8.1	539.8	0.3	0.3	0.3
8.1	539.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475801	0.2	0.2	5.3	354.4	0.2	0.2	0.2
5.3	352.6	0.0	0.0	0.0	1.8	0.0	0.0	0.0
	2147475949	0.2	0.2	5.2	342.9	0.2	0.2	0.2
5.2	342.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481733	0.0	0.0	0.1	3.5	0.0	0.0	0.0
0.1	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481754	0.0	0.0	1.2	79.0	0.0	0.0	0.0
1.2	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481911	0.3	0.3	8.1	535.8	0.3	0.3	0.3
8.1	535.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481977	0.5	0.4	13.1	869.9	0.5	0.4	0.4
13.1	869.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482906	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482907	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482908	0.1	0.1	3.5	231.7	0.1	0.1	0.1
3.5	230.2	0.0	0.0	0.0	1.5	0.0	0.0	0.0
	2147482912	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482916	0.0	0.0	1.2	34.7	0.0	0.0	0.0
1.2	34.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482917	0.0	0.0	1.3	38.6	0.0	0.0	0.0
1.3	38.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482919	0.3	0.3	8.1	538.5	0.3	0.3	0.3
8.1	538.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482922	0.2	0.2	5.0	329.9	0.2	0.2	0.2
4.9	327.5	0.0	0.0	0.0	2.4	0.0	0.0	0.0
	2147482923	0.0	0.0	0.6	41.2	0.0	0.0	0.0
0.6	40.9	0.0	0.0	0.0	0.3	0.0	0.0	0.0
	2147482924	0.0	0.0	0.9	62.7	0.0	0.0	0.0
0.9	62.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0
	2147482925	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482926	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482927	0.0	0.0	0.0	0.2	0.0	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482928	0.0	0.0	0.1	6.6	0.0	0.0	0.0

0.1	6.6	0.0	0.0	0.0	0.1		
	2147482930	0.0	0.0	1.5	96.5	0.0	0.0
1.4	95.6	0.0	0.0	0.0	0.8		
	2147482931	0.1	0.1	3.6	237.6	0.1	0.1
3.6	235.6	0.0	0.0	0.0	2.0		
	2147482932	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482933	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482937	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482940	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482941	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482942	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482943	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482944	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482945	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482946	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482947	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482949	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482950	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482951	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482952	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482953	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482954	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482957	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482958	0.0	0.0	0.0	0.7	0.0	0.0
0.0	0.7	0.0	0.0	0.0	0.0		
	2147482959	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482960	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482963	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482964	0.2	0.2	6.3	416.6	0.2	0.2
6.3	416.8	0.0	0.0	0.0	-0.2		
	2147482966	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482967	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482968	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482969	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		



2147482970	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482973	0.2	0.2	4.6	132.1	0.2	0.2	0.2
4.6	132.1	0.0	0.0	0.0	0.0	0.0	0.0
2147482974	0.1	0.1	3.0	86.2	0.1	0.1	0.1
3.0	86.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482975	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482976	1.1	1.1	32.5	2,157.5	1.1	1.1	1.1
32.5	2,157.5	0.0	0.0	0.0	0.0	0.0	0.0
2147482977	1.2	1.2	35.6	2,360.6	1.2	1.2	1.2
35.6	2,360.8	0.0	0.0	0.0	-0.2	0.0	0.0
2147482979	0.0	0.0	1.3	86.9	0.0	0.0	0.0
1.3	86.8	0.0	0.0	0.0	0.1	0.0	0.0
2147482980	0.0	0.0	1.1	72.3	0.0	0.0	0.0
1.1	72.2	0.0	0.0	0.0	0.1	0.0	0.0
2147482981	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482982	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482985	0.0	0.0	1.3	85.3	0.0	0.0	0.0
1.3	85.3	0.0	0.0	0.0	0.0	0.0	0.0
2147482989	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482990	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482992	0.0	0.0	0.6	37.7	0.0	0.0	0.0
0.6	37.7	0.0	0.0	0.0	0.0	0.0	0.0
2147482993	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482994	0.6	0.6	17.9	1,187.2	0.6	0.6	0.6
17.9	1,187.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482995	0.2	0.2	5.4	357.6	0.2	0.2	0.2
5.4	357.6	0.0	0.0	0.0	0.0	0.0	0.0
2147482996	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482997	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482998	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482999	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483004	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483005	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483006	0.6	0.5	16.1	1,067.0	0.6	0.5	0.5
16.1	1,067.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483007	0.0	0.0	0.6	40.6	0.0	0.0	0.0
0.6	40.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483008	0.0	0.0	0.0	0.0	0.0	0.0	0.0



	2147483045	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483046	0.0	0.0	0.0	0.9	62.6	0.0	0.0
0.9	62.7	0.0	0.0	0.0	0.0	-0.2	0.0	0.0
	2147483047	0.0	0.0	0.0	0.4	26.6	0.0	0.0
0.4	26.7	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
	2147483048	0.1	0.1	2.5	2.5	167.8	0.1	0.1
2.5	168.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0
	2147483049	0.1	0.1	1.6	1.6	104.6	0.1	0.1
1.6	104.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483050	0.0	0.0	0.1	0.1	8.3	0.0	0.0
0.1	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483051	0.0	0.0	1.0	1.0	64.2	0.0	0.0
1.0	64.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483052	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483054	0.2	0.2	7.2	7.2	476.1	0.2	0.2
7.1	473.8	0.0	0.0	0.0	0.0	2.4	0.0	0.0
	2147483055	0.2	0.2	4.6	4.6	301.5	0.2	0.2
4.5	301.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
	2147483058	0.0	0.0	0.9	0.9	61.1	0.0	0.0
0.9	61.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483060	0.0	0.0	0.5	0.5	33.2	0.0	0.0
0.5	33.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483061	0.5	0.5	13.6	13.6	904.6	0.5	0.5
13.6	904.4	0.0	0.0	0.0	0.0	0.2	0.0	0.0
	2147483062	0.9	0.9	26.1	26.1	1,733.1	0.9	0.9
26.1	1,733.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483063	0.3	0.2	7.2	7.2	479.9	0.3	0.2
7.2	479.4	0.0	0.0	0.0	0.0	0.5	0.0	0.0
	2147483066	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483067	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483071	0.0	0.0	0.7	0.7	45.0	0.0	0.0
0.7	45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483073	0.1	0.1	3.8	3.8	252.9	0.1	0.1
3.8	252.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483074	0.7	0.7	20.2	20.2	1,340.0	0.7	0.7
20.2	1,340.2	0.0	0.0	0.0	0.0	-0.2	0.0	0.0
	2147483075	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483076	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483077	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483078	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483079	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483080	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483081	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483083	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483084	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483085	0.0	0.0	0.0	0.0	0.0	0.0	0.0



2147483118	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483119	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483121	0.0	0.0	0.0	0.2	13.9	0.0	0.0
0.2	13.7	0.0	0.0	0.0	0.2	0.0	0.0
2147483122	0.0	0.0	0.0	0.2	10.0	0.0	0.0
0.1	9.9	0.0	0.0	0.0	0.1	0.0	0.0
2147483123	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483124	0.0	0.0	0.0	0.2	12.3	0.0	0.0
0.2	12.2	0.0	0.0	0.0	0.1	0.0	0.0
2147483125	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483126	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483127	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483128	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483129	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483131	0.1	0.1	3.0	200.2	0.1	0.1	0.1
3.0	199.3	0.0	0.0	0.0	1.0	0.0	0.0
2147483132	0.2	0.1	4.5	296.0	0.2	0.1	0.1
4.5	297.8	0.0	0.0	0.0	-1.8	0.0	0.0
2147483134	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483135	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483136	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483137	0.1	0.1	2.0	132.5	0.1	0.1	0.1
2.0	132.3	0.0	0.0	0.0	0.2	0.0	0.0
2147483139	0.0	0.0	0.6	41.5	0.0	0.0	0.0
0.6	41.4	0.0	0.0	0.0	0.1	0.0	0.0
2147483141	0.1	0.1	3.8	253.9	0.1	0.1	0.1
3.8	253.5	0.0	0.0	0.0	0.4	0.0	0.0
2147483143	1.1	1.1	33.1	2,190.8	1.1	1.1	1.1
33.1	2,190.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483145	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483146	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483147	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483148	0.0	0.0	0.8	51.2	0.0	0.0	0.0
0.8	51.4	0.0	0.0	0.0	-0.2	0.0	0.0
2147483149	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483150	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483151	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483152	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483153	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483154	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483155	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483156	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483157	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483158	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483159	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483161	0.1	0.1	2.5	164.7	0.1	0.1	
2.5	164.9	0.0	0.0	0.0	-0.2		
2147483162	0.2	0.2	5.7	376.0	0.2	0.2	
5.7	376.5	0.0	0.0	0.0	-0.5		
2147483163	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483164	0.2	0.2	5.1	336.3	0.2	0.2	
5.1	336.7	0.0	0.0	0.0	-0.4		
2147483165	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483166	0.0	0.0	0.6	42.3	0.0	0.0	
0.6	42.5	0.0	0.0	0.0	-0.2		
2147483168	0.0	0.0	0.6	40.6	0.0	0.0	
0.6	40.8	0.0	0.0	0.0	-0.2		
2147483169	0.2	0.2	5.6	369.1	0.2	0.2	
5.6	370.7	0.0	0.0	0.0	-1.6		
2147483170	0.1	0.1	1.9	127.2	0.1	0.1	
1.9	126.7	0.0	0.0	0.0	0.5		
2147483171	0.1	0.1	2.6	170.1	0.1	0.1	
2.6	169.0	0.0	0.0	0.0	1.1		
2147483172	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483173	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483174	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483175	0.9	0.8	25.3	1,680.0	0.9	0.8	
25.3	1,680.0	0.0	0.0	0.0	0.0		
2147483178	0.0	0.0	1.2	77.9	0.0	0.0	
1.2	78.1	0.0	0.0	0.0	-0.3		
2147483179	0.0	0.0	0.9	57.3	0.0	0.0	
0.9	57.5	0.0	0.0	0.0	-0.2		
2147483180	0.2	0.2	6.0	401.0	0.2	0.2	
6.1	402.4	0.0	0.0	0.0	-1.4		
2147483181	0.1	0.1	1.6	109.6	0.1	0.1	
1.6	109.4	0.0	0.0	0.0	0.3		
2147483182	0.1	0.1	3.1	203.4	0.1	0.1	
3.0	202.9	0.0	0.0	0.0	0.5		
2147483183	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483184	0.1	0.1	2.0	135.3	0.1	0.1	
2.0	134.6	0.0	0.0	0.0	0.7		
2147483185	0.1	0.1	1.6	106.9	0.1	0.1	
1.6	106.3	0.0	0.0	0.0	0.5		
2147483186	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483187	0.1	0.1	1.8	122.1	0.1	0.1	
1.8	121.4	0.0	0.0	0.0	0.6		

2147483188	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483189	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483190	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483191	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483192	0.0	0.0	0.2	0.0	13.0	0.0	0.0
0.2	13.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483193	0.0	0.0	0.3	0.0	19.4	0.0	0.0
0.3	19.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483194	0.0	0.0	0.7	0.0	48.3	0.0	0.0
0.7	48.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483195	0.0	0.0	0.1	0.0	4.4	0.0	0.0
0.1	4.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483196	0.0	0.0	0.2	0.0	12.3	0.0	0.0
0.2	12.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483197	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483198	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483199	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483201	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483202	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483206	0.2	0.2	7.4	0.0	488.9	0.2	0.2
7.4	488.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483207	0.0	0.0	0.8	0.0	50.3	0.0	0.0
0.8	50.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483208	0.0	0.0	0.8	0.0	52.8	0.0	0.0
0.8	52.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483209	0.4	0.4	12.1	0.0	798.8	0.4	0.4
12.1	798.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483210	0.1	0.1	1.7	0.0	111.9	0.1	0.1
1.7	111.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483211	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483212	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483213	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483214	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483215	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483216	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483217	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483218	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483219	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483222	0.0	0.0	0.1	0.0	4.0	0.0	0.0





2147483265	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483266	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483267	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483270	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483274	0.0	0.0	1.4	0.0	90.1	0.0	0.0
1.4	90.1	0.0	0.0	0.0	0.0	0.0	0.0
2147483275	1.0	1.0	30.4	2,018.4	1.0	1.0	1.0
30.4	2,018.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483278	0.0	0.0	0.6	36.6	0.0	0.0	0.0
0.5	31.5	0.0	0.0	0.1	5.1	0.0	0.0
2147483280	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483281	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483282	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483283	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483284	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483285	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483286	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483290DN	0.1	0.1	2.7	183.3	0.0	0.0	0.0
0.0	0.0	0.1	0.1	2.7	183.3	0.0	0.0
2147483290DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	4.0	0.0	0.0	-0.1	-4.0	0.0	0.0
2147483297	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483300	0.0	0.0	1.3	36.8	0.0	0.0	0.0
0.0	0.0	0.0	1.3	36.8	0.0	0.0	0.0
2147483303	0.2	0.2	4.9	327.3	0.2	0.2	0.2
5.0	330.9	0.0	0.0	-0.1	-3.6	0.0	0.0
2147483304	0.0	0.0	1.4	90.6	0.0	0.0	0.0
1.4	92.0	0.0	0.0	0.0	-1.4	0.0	0.0
2147483305DN	0.3	0.2	7.4	496.1	0.0	0.0	0.0
0.0	0.0	0.3	0.2	7.4	496.1	0.0	0.0
2147483305DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	9.0	0.0	0.0	-0.1	-9.0	0.0	0.0
2147483306	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483308	0.2	0.2	5.0	333.6	0.2	0.2	0.2
5.1	338.7	0.0	0.0	-0.1	-5.1	0.0	0.0
2147483309	0.2	0.2	6.0	397.3	0.2	0.2	0.2
6.1	403.4	0.0	0.0	-0.1	-6.1	0.0	0.0
2147483311	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483312	0.0	0.0	0.0	0.0	0.0	0.0	0.0



2147483350	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483352	0.1	0.1	2.1	136.2	0.1	0.1	0.1
2.1	136.2	0.0	0.0	0.0	0.0	0.0	0.0
2147483355	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483356	0.0	0.0	0.4	28.4	0.0	0.0	0.0
0.4	28.3	0.0	0.0	0.0	0.1	0.0	0.0
2147483357	0.0	0.0	0.2	10.6	0.0	0.0	0.0
0.2	10.3	0.0	0.0	0.0	0.3	0.0	0.0
2147483358	0.0	0.0	0.0	3.0	0.0	0.0	0.0
0.0	2.9	0.0	0.0	0.0	0.1	0.0	0.0
2147483359	0.0	0.0	0.1	9.5	0.0	0.0	0.0
0.1	9.2	0.0	0.0	0.0	0.3	0.0	0.0
2147483360	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483362	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483363	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483364	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483365	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483366	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483367	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483368	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483369	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483371	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483373	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483374	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483375	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483376	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483377	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483378	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483380	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483383DN	0.4	0.4	12.8	859.5	0.0	0.0	0.0
0.0	0.0	0.4	0.4	12.8	859.5	0.0	0.0
2147483383DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.1	77.0	0.0	0.0	-1.1	-77.0	0.0	0.0
2147483387	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483388	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.3	0.0	0.0
2147483389	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.1	0.0	0.0	0.0	-0.1	0.0	0.0
2147483390	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0		
	2147483391	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.1	0.0	0.0	0.0	0.0		
	2147483392	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483393	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483394	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483395	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.3		
	2147483396	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.4	0.0	0.0	0.0	-0.3		
	2147483397	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.3		
	2147483398	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483400	0.0	0.0	0.0	1.4	0.0	0.0
0.0	1.4	0.0	0.0	0.0	0.0		
	2147483401	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483402	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483403	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483404	0.0	0.0	0.3	20.8	0.0	0.0
0.3	20.8	0.0	0.0	0.0	0.0		
	2147483405	0.0	0.0	0.0	0.7	0.0	0.0
0.0	0.7	0.0	0.0	0.0	0.0		
	2147483406	0.1	0.1	4.1	270.4	0.1	0.1
4.1	274.7	0.0	0.0	-0.1	-4.4		
	2147483408	0.0	0.0	0.6	38.0	0.0	0.0
0.6	37.4	0.0	0.0	0.0	0.6		
	2147483409	0.0	0.0	0.0	0.9	0.0	0.0
0.0	2.5	0.0	0.0	0.0	-1.6		
	2147483410	0.0	0.0	0.0	0.2	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.1		
	2147483411	0.0	0.0	0.0	1.8	0.0	0.0
0.0	2.9	0.0	0.0	0.0	-1.2		
	2147483412	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483413	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483414	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483415	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483416	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483417DN	0.2	0.1	4.5	299.9	0.0	0.0
0.0	0.0	0.2	0.1	4.5	299.9		
	2147483417DS	0.0	0.0	0.0	0.0	0.0	0.0
0.1	4.8	0.0	0.0	-0.1	-4.8		
	2147483418DN	0.4	0.4	11.3	756.1	0.0	0.0
0.0	0.0	0.4	0.4	11.3	756.1		
	2147483418DS	0.0	0.0	0.0	0.0	0.0	0.0
0.3	17.1	0.0	0.0	-0.3	-17.1		
	2147483419	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

2147483420	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483421	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483423DN	0.7	0.7	20.3	1,361.2	0.0	0.0	0.0
0.0	0.0	0.7	20.3	1,361.2	0.0	0.0	0.0
2147483423DS	0.0	0.0	0.0	0.0	0.0	0.1	0.1
1.8	120.9	-0.1	-0.1	-1.8	-120.9	0.0	0.0
2147483424	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483425	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483426DN	0.4	0.4	11.9	799.7	0.0	0.0	0.0
0.0	0.0	0.4	0.4	11.9	799.7	0.0	0.0
2147483426DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	58.2	0.0	0.0	-0.9	-58.2	0.0	0.0
2147483428	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483429	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483431	0.0	0.0	0.1	8.9	0.0	0.0	0.0
0.2	10.0	0.0	0.0	0.0	-1.1	0.0	0.0
2147483432	0.0	0.0	0.1	7.4	0.0	0.0	0.0
0.2	10.0	0.0	0.0	0.0	-2.6	0.0	0.0
2147483433	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483434	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483435	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483436	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483437	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483438	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483439	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483440	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483441	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483442	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483443	0.2	0.2	6.8	452.8	0.2	0.2	0.2
6.8	452.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483444	0.0	0.0	1.0	68.2	0.0	0.0	0.0
1.0	68.2	0.0	0.0	0.0	0.0	0.0	0.0
2147483445	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483446	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483447	0.0	0.0	0.0	0.3	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483448	0.0	0.0	0.0	0.6	0.0	0.0	0.0
0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483449	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483450	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0		
	2147483451	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483452	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483453	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483454	0.0	0.0	0.0	0.4	0.0	0.0
0.0	0.4	0.0	0.0	0.0	0.0		
	2147483455	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483456	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483457	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483458	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483459	0.0	0.0	0.3	17.2	0.0	0.0
0.3	17.2	0.0	0.0	0.0	0.0		
	2147483460	0.0	0.0	0.0	1.6	0.0	0.0
0.0	1.6	0.0	0.0	0.0	0.0		
	2147483461	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483464	0.0	0.0	0.2	16.2	0.0	0.0
0.2	16.2	0.0	0.0	0.0	0.0		
	2147483465	0.0	0.0	0.3	20.1	0.0	0.0
0.3	20.1	0.0	0.0	0.0	0.0		
	2147483466	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483468	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483469	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483471	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483472	0.0	0.0	1.4	95.4	0.0	0.0
1.4	95.4	0.0	0.0	0.0	0.0		
	2147483473	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483474	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483475	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483476	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483477	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483478	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483479	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483480	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483481	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483482	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483483	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

2147483484	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483485	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483486	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483487	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483488	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483489	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483490	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483491	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483492	0.0	0.0	0.3	0.0	21.9	0.0	0.0
0.3	21.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483493	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483494	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483495	0.0	0.0	0.2	0.0	5.3	0.0	0.0
0.2	5.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483497	0.1	0.1	1.6	0.0	45.6	0.1	0.1
1.6	45.4	0.0	0.0	0.0	0.2	0.0	0.0
2147483498	0.1	0.1	1.7	0.0	48.2	0.1	0.1
1.7	48.0	0.0	0.0	0.0	0.2	0.0	0.0
2147483499	0.2	0.2	5.3	0.0	353.3	0.2	0.2
5.3	352.8	0.0	0.0	0.0	0.5	0.0	0.0
2147483501	0.1	0.1	3.0	0.0	198.7	0.1	0.1
3.0	198.2	0.0	0.0	0.0	0.4	0.0	0.0
2147483502	0.2	0.2	4.8	0.0	320.0	0.2	0.2
4.8	319.5	0.0	0.0	0.0	0.5	0.0	0.0
2147483504	0.2	0.2	5.0	0.0	145.4	0.2	0.2
5.0	145.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483505	0.4	0.4	11.7	0.0	339.3	0.4	0.4
11.7	339.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483506	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483507	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483508	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483510	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483511	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483512	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483513	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483517	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483518	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483519	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483520	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483521	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483522	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483523	0.0	0.0	0.0	1.3	36.7	0.0	0.0
1.3	36.6	0.0	0.0	0.0	0.0	0.2	0.0	0.0
	2147483524	0.1	0.1	1.5	43.4	0.1	0.1	0.1
1.5	43.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0
	2147483528	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483531	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483532	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483533	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483534	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483537	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483540	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483543	0.5	0.5	14.8	985.2	0.5	0.5	0.5
14.8	985.6	0.0	0.0	0.0	-0.4	0.0	0.0	0.0
	2147483544	0.3	0.3	7.8	519.8	0.3	0.3	0.3
7.8	520.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0
	2147483545	0.2	0.2	6.9	458.6	0.2	0.2	0.2
6.9	458.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	2147483546	0.1	0.1	4.2	276.0	0.1	0.1	0.1
4.1	275.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	2147483547	0.0	0.0	1.4	93.2	0.0	0.0	0.0
1.4	93.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483548	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483549	0.1	0.1	1.5	101.9	0.1	0.1	0.1
1.6	103.5	0.0	0.0	0.0	-1.6	0.0	0.0	0.0
	2147483550	0.1	0.1	2.5	167.5	0.1	0.1	0.1
2.6	170.1	0.0	0.0	0.0	-2.6	0.0	0.0	0.0
	2147483551	0.0	0.0	0.0	0.6	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
	2147483552	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483553	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483554	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483555DN	0.3	0.3	9.7	647.5	0.0	0.0	0.0
0.0	0.0	0.3	0.3	9.7	647.5	0.0	0.0	0.0
	2147483555DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.1	74.6	0.0	0.0	-1.1	-74.6	0.0	0.0	0.0
	2147483556DN	0.3	0.3	9.0	605.6	0.0	0.0	0.0
0.0	0.0	0.3	0.3	9.0	605.6	0.0	0.0	0.0
	2147483556DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	63.9	0.0	0.0	-1.0	-63.9	0.0	0.0	0.0
	2147483557	0.0	0.0	1.0	69.0	0.0	0.0	0.0
1.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483558	0.1	0.1	1.8	51.9	0.1	0.1	0.1
1.8	51.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0



2147483561	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483562	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483563	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483564	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483565	0.1	0.1	2.8	183.7	0.1	0.1	
2.8	184.0	0.0	0.0	0.0	-0.3		
2147483566	0.0	0.0	0.0	2.7	0.0	0.0	
0.0	0.2	0.0	0.0	0.0	2.6		
2147483567	0.0	0.0	0.1	5.8	0.0	0.0	
0.0	0.4	0.0	0.0	0.1	5.4		
2147483568	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483569	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483572	0.3	0.3	7.6	503.6	0.3	0.3	
7.6	502.9	0.0	0.0	0.0	0.6		
2147483573	0.0	0.0	0.1	4.6	0.0	0.0	0.0
0.1	4.6	0.0	0.0	0.0	0.0		
2147483575	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483576	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483577	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483578	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483579	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483580	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483581	0.2	0.2	5.8	385.5	0.2	0.2	
5.9	391.2	0.0	0.0	-0.1	-5.7		
2147483582	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483585	0.0	0.0	0.7	21.4	0.0	0.0	0.0
0.7	21.4	0.0	0.0	0.0	0.0		
2147483588	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483590	0.1	0.0	1.5	42.7	0.1	0.0	
1.5	42.7	0.0	0.0	0.0	0.0		
2147483593	0.1	0.1	2.4	68.9	0.1	0.1	
2.4	68.9	0.0	0.0	0.0	0.0		
2147483595	0.7	0.7	20.0	718.0	0.7	0.7	
20.0	719.4	0.0	0.0	0.0	-1.4		
2147483596	0.1	0.1	2.1	60.2	0.1	0.1	
2.1	61.3	0.0	0.0	0.0	-1.1		
2147483599	0.4	0.4	12.8	847.2	0.4	0.4	
12.8	847.6	0.0	0.0	0.0	-0.4		
2147483600	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483601	0.0	0.0	0.6	22.4	0.0	0.0	0.0
0.6	22.4	0.0	0.0	0.0	0.0		
2147483603	0.0	0.0	1.1	69.6	0.0	0.0	0.0
1.1	69.8	0.0	0.0	0.0	-0.2		
2147483605	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483606	0.0	0.0	0.5	32.0	0.0	0.0	0.0
0.5	31.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	2147483608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483610	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483612	0.8	0.8	23.1	830.1	0.8	0.8	0.8
23.1	829.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0
	2147483615	0.1	0.1	2.6	93.9	0.1	0.1	0.1
2.6	93.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483617	0.0	0.0	0.2	14.1	0.0	0.0	0.0
0.2	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483618	0.1	0.1	2.9	190.7	0.1	0.1	0.1
2.9	191.4	0.0	0.0	0.0	-0.7	0.0	0.0	0.0
	2147483619	0.1	0.1	1.9	124.5	0.1	0.1	0.1
1.9	124.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
	2147483621	0.0	0.0	0.2	15.7	0.0	0.0	0.0
0.2	15.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0
	2147483622	0.0	0.0	0.2	15.4	0.0	0.0	0.0
0.2	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483626	0.7	0.7	20.4	730.7	0.7	0.7	0.7
20.2	726.3	0.0	0.0	0.1	4.4	0.0	0.0	0.0
	2147483627	0.0	0.0	0.5	16.2	0.0	0.0	0.0
0.5	17.0	0.0	0.0	0.0	-0.8	0.0	0.0	0.0
	2147483630	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483631	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	6.1	0.0	0.0	-0.2	-6.1	0.0	0.0	0.0
	2147483597	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.7	20.2	0.0	0.0	-0.7	-20.2	0.0	0.0	0.0
	2147483633	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	25.2	0.0	0.0	-0.9	-25.2	0.0	0.0	0.0
	2147483637	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1.9	53.8	-0.1	-0.1	-1.9	-53.8	0.0	0.0	0.0
	2147483641	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1.8	51.6	-0.1	-0.1	-1.8	-51.6	0.0	0.0	0.0
	2147483644	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	31.9	0.0	0.0	-0.9	-31.9	0.0	0.0	0.0
	2147483645	0.0	0.0	0.0	0.0	2.4	2.4	2.4
70.7	2,539.6	-2.4	-2.4	-70.7	-2,539.6	0.0	0.0	0.0
	2147483646	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1.8	65.4	-0.1	-0.1	-1.8	-65.4	0.0	0.0	0.0
	Total	40.8	39.8	1,192.0	68,892.0	40.3	39.3	39.3
1,177.8	65,673.8	0.5	0.5	14.2	3,218.2	0.0	0.0	0.0

Costs and benefits discounted to 2011 in multiples of a thousand euros.

[Section 3] Combined Link and Junction Collision Rates

Link Name \*----- Collision Rate -----\*  
\* 2030 2045 \*

897	0.387882	0.364630
900	0.387882	0.364630
901	0.387882	0.364630
906	0.000000	0.000000
923	0.132426	0.123735
1495	0.132426	0.123735
1497	0.132426	0.123735
1499	0.132426	0.123735
1504	0.132426	0.123735
1505	0.132426	0.123735
1506	0.132426	0.123735
1515	0.057490	0.053798
1590	0.132426	0.123735
1591	0.132426	0.123735
44747	0.000000	0.000000
45876	0.000000	0.000000
48840	0.000000	0.000000
48953	0.000000	0.000000
49089	0.387882	0.364630
49185	0.387882	0.364630
49353	0.000000	0.000000
49552	0.000000	0.000000
49560	0.000000	0.000000
49630	0.000000	0.000000
49684	0.132426	0.123735
49717	0.000000	0.000000
49842	0.000000	0.000000
50060	0.387882	0.364630
50401	0.387882	0.364630
50515	0.000000	0.000000
50542	0.000000	0.000000
50600	0.000000	0.000000
50648	0.132426	0.123735
50653	0.387882	0.364630
50686	0.387882	0.364630
554437085	0.000000	0.000000
554437089	0.000000	0.000000
554445417	0.000000	0.000000
554445421	0.000000	0.000000
554445424	0.000000	0.000000
554445434	0.000000	0.000000
554445603	0.387882	0.364630
554445605	0.387882	0.364630
554445606	0.387882	0.364630
554445611	0.387882	0.364630
554445616	0.000000	0.000000
554445660	0.387882	0.364630
554445681	0.387882	0.364630
554451601	0.000000	0.000000
554451604	0.000000	0.000000
554451606	0.000000	0.000000
554451619	0.000000	0.000000
554451621	0.000000	0.000000
554469301	0.000000	0.000000
554469376	0.000000	0.000000
554469377	0.000000	0.000000
554469379	0.387882	0.364630
554469380	0.387882	0.364630
554469383	0.387882	0.364630

554469386	0.387882	0.364630
554469390	0.132426	0.123735
554476250	0.000000	0.000000
554476251	0.000000	0.000000
554476254	0.000000	0.000000
554476255	0.000000	0.000000
554476258	0.000000	0.000000
554476263	0.000000	0.000000
554476268	0.000000	0.000000
554476273	0.000000	0.000000
554476275	0.000000	0.000000
554476276	0.000000	0.000000
554476314	0.000000	0.000000
554476317	0.000000	0.000000
554476318	0.000000	0.000000
554476321	0.000000	0.000000
554476331	0.000000	0.000000
554476332	0.000000	0.000000
554476337	0.000000	0.000000
554476339	0.000000	0.000000
554476344	0.000000	0.000000
554476347	0.000000	0.000000
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2147483380	0.000000	0.000000
2147483383DN	0.069539	0.064975
2147483383DS	0.069539	0.064975
2147483387	0.132426	0.123735
2147483388	0.132426	0.123735
2147483389	0.132426	0.123735
2147483390	0.132426	0.123735

2147483391	0.132426	0.123735
2147483392	0.000000	0.000000
2147483393	0.000000	0.000000
2147483394	0.000000	0.000000
2147483395	0.132426	0.123735
2147483396	0.132426	0.123735
2147483397	0.132426	0.123735
2147483398	0.132426	0.123735
2147483400	0.132426	0.123735
2147483401	0.132426	0.123735
2147483402	0.000000	0.000000
2147483403	0.000000	0.000000
2147483404	0.132426	0.123735
2147483405	0.132426	0.123735
2147483406	0.132426	0.123735
2147483408	0.132426	0.123735
2147483409	0.132426	0.123735
2147483410	0.132426	0.123735
2147483411	0.132426	0.123735
2147483412	0.000000	0.000000
2147483413	0.000000	0.000000
2147483414	0.000000	0.000000
2147483415	0.000000	0.000000
2147483416	0.000000	0.000000
2147483417DN	0.069539	0.064975
2147483417DS	0.069539	0.064975
2147483418DN	0.069539	0.064975
2147483418DS	0.069539	0.064975
2147483419	0.000000	0.000000
2147483420	0.000000	0.000000
2147483421	0.000000	0.000000
2147483423DN	0.069539	0.064975
2147483423DS	0.069539	0.064975
2147483424	0.000000	0.000000
2147483425	0.000000	0.000000
2147483426DN	0.069539	0.064975
2147483426DS	0.069539	0.064975
2147483428	0.000000	0.000000
2147483429	0.132426	0.123735
2147483431	0.132426	0.123735
2147483432	0.132426	0.123735
2147483433	0.000000	0.000000
2147483434	0.132426	0.123735
2147483435	0.132426	0.123735
2147483436	0.132426	0.123735
2147483437	0.132426	0.123735
2147483438	0.132426	0.123735
2147483439	0.132426	0.123735
2147483440	0.132426	0.123735
2147483441	0.132426	0.123735
2147483442	0.132426	0.123735
2147483443	0.132426	0.123735
2147483444	0.132426	0.123735
2147483445	0.000000	0.000000
2147483446	0.000000	0.000000
2147483447	0.132426	0.123735
2147483448	0.132426	0.123735
2147483449	0.000000	0.000000
2147483450	0.132426	0.123735

2147483451	0.132426	0.123735
2147483452	0.000000	0.000000
2147483453	0.132426	0.123735
2147483454	0.132426	0.123735
2147483455	0.132426	0.123735
2147483456	0.132426	0.123735
2147483457	0.132426	0.123735
2147483458	0.132426	0.123735
2147483459	0.132426	0.123735
2147483460	0.132426	0.123735
2147483461	0.132426	0.123735
2147483464	0.132426	0.123735
2147483465	0.132426	0.123735
2147483466	0.132426	0.123735
2147483468	0.132426	0.123735
2147483469	0.132426	0.123735
2147483471	0.000000	0.000000
2147483472	0.132426	0.123735
2147483473	0.000000	0.000000
2147483474	0.000000	0.000000
2147483475	0.132426	0.123735
2147483476	0.132426	0.123735
2147483477	0.132426	0.123735
2147483478	0.132426	0.123735
2147483479	0.132426	0.123735
2147483480	0.000000	0.000000
2147483481	0.132426	0.123735
2147483482	0.000000	0.000000
2147483483	0.000000	0.000000
2147483484	0.000000	0.000000
2147483485	0.000000	0.000000
2147483486	0.000000	0.000000
2147483487	0.132426	0.123735
2147483488	0.132426	0.123735
2147483489	0.132426	0.123735
2147483490	0.132426	0.123735
2147483491	0.132426	0.123735
2147483492	0.132426	0.123735
2147483493	0.000000	0.000000
2147483494	0.132426	0.123735
2147483495	0.387882	0.364630
2147483497	0.387882	0.364630
2147483498	0.387882	0.364630
2147483499	0.132426	0.123735
2147483501	0.132426	0.123735
2147483502	0.132426	0.123735
2147483504	0.387882	0.364630
2147483505	0.387882	0.364630
2147483506	0.000000	0.000000
2147483507	0.000000	0.000000
2147483508	0.000000	0.000000
2147483510	0.000000	0.000000
2147483511	0.000000	0.000000
2147483512	0.000000	0.000000
2147483513	0.000000	0.000000
2147483517	0.000000	0.000000
2147483518	0.000000	0.000000
2147483519	0.000000	0.000000
2147483520	0.000000	0.000000

2147483521	0.000000	0.000000
2147483522	0.000000	0.000000
2147483523	0.387882	0.364630
2147483524	0.387882	0.364630
2147483528	0.000000	0.000000
2147483531	0.000000	0.000000
2147483532	0.000000	0.000000
2147483533	0.000000	0.000000
2147483534	0.000000	0.000000
2147483537	0.000000	0.000000
2147483540	0.000000	0.000000
2147483543	0.132426	0.123735
2147483544	0.132426	0.123735
2147483545	0.132426	0.123735
2147483546	0.132426	0.123735
2147483547	0.132426	0.123735
2147483548	0.000000	0.000000
2147483549	0.132426	0.123735
2147483550	0.132426	0.123735
2147483551	0.132426	0.123735
2147483552	0.132426	0.123735
2147483553	0.132426	0.123735
2147483554	0.132426	0.123735
2147483555DN	0.069539	0.064975
2147483555DS	0.069539	0.064975
2147483556DN	0.069539	0.064975
2147483556DS	0.069539	0.064975
2147483557	0.132426	0.123735
2147483558	0.387882	0.364630
2147483561	0.132426	0.123735
2147483562	0.132426	0.123735
2147483563	0.132426	0.123735
2147483564	0.000000	0.000000
2147483565	0.132426	0.123735
2147483566	0.132426	0.123735
2147483567	0.132426	0.123735
2147483568	0.132426	0.123735
2147483569	0.000000	0.000000
2147483572	0.132426	0.123735
2147483573	0.132426	0.123735
2147483575	0.000000	0.000000
2147483576	0.000000	0.000000
2147483577	0.000000	0.000000
2147483578	0.000000	0.000000
2147483579	0.000000	0.000000
2147483580	0.000000	0.000000
2147483581	0.132426	0.123735
2147483582	0.000000	0.000000
2147483585	0.387882	0.364630
2147483588	0.000000	0.000000
2147483590	0.387882	0.364630
2147483593	0.387882	0.364630
2147483595	0.057490	0.053798
2147483596	0.387882	0.364630
2147483599	0.132426	0.123735
2147483600	0.000000	0.000000
2147483601	0.057490	0.053798
2147483603	0.132426	0.123735
2147483605	0.132426	0.123735

2147483606	0.132426	0.123735
2147483608	0.000000	0.000000
2147483610	0.000000	0.000000
2147483612	0.057490	0.053798
2147483615	0.057490	0.053798
2147483617	0.132426	0.123735
2147483618	0.132426	0.123735
2147483619	0.132426	0.123735
2147483621	0.132426	0.123735
2147483622	0.132426	0.123735
2147483626	0.057490	0.053798
2147483627	0.057490	0.053798
2147483630	0.000000	0.000000
2147483631	0.132426	0.123735
2	0.387882	0.364630
2147483597	0.387882	0.364630
2147483633	0.387882	0.364630
2147483637	0.387882	0.364630
2147483641	0.387882	0.364630
2147483644	0.057490	0.053798
2147483645	0.057490	0.053798
2147483646	0.057490	0.053798

Collision rates are in collisions per million vehicle kilometres.

[Section 4] Input Data - Scheme File

Scheme Name  
N25 Glenmore to Waterford

Years Subsection

Current Year 2020

Base Year 2020

Without-Scheme

Year 1 2030

Year 2 2045

Year 3 2060

Year 4 0

Year 5 0

With-Scheme

Year 1 2030

Year 2 2045

Year 3 2060

Year 4 0

Year 5 0

Scheme Opening Year 2030

Link and Junction Combined Input Section

Combined Classification Subsection

Link Name	Road Type	Length (km)	Speed Limit (km/h)	Error/Warning Summary (!=Error, #=Warning)
897	3	0.06	50	
900	3	0.08	50	
901	3	0.13	50	



906	11	0.55	65	#Unusual speed limit (65) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
923	2	1.17	100	
1495	2	1.12	70	
1497	2	0.88	70	
1499	2	0.32	70	
1504	2	0.22	70	
1505	2	0.68	100	
1506	2	0.79	100	
1515	4	5.69	100	
1590	2	0.65	70	
1591	2	0.25	70	
44747	4	0.10	40	!Speed limit is too low for a
fast dual carriageway.				
45876	4	0.04	40	!Speed limit is too low for a
fast dual carriageway.				
48840	2	0.42	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
48953	4	0.44	50	!Speed limit is too low for a
fast dual carriageway.				
49089	3	0.15	60	
49185	3	0.70	50	
49353	3	0.87	80	!Speed limit is high. Care
should be taken using the results of the calculation for this link.				
49552	3	0.31	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
49560	3	0.50	80	!Speed limit is high. Care
should be taken using the results of the calculation for this link.				
49630	2	0.37	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
49684	2	0.45	80	
49717	3	0.23	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
49842	2	0.23	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50060	3	0.23	50	
50401	3	1.87	50	
50515	3	0.18	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50542	3	0.28	40	
50600	2	0.17	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50648	2	4.01	80	
50653	3	0.16	60	
50686	3	0.41	60	
554437085	3	0.05	40	
554437089	2	0.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554445417	4	0.07	40	!Speed limit is too low for a
fast dual carriageway.				
554445421	3	0.04	40	
554445424	3	0.06	40	
554445434	3	0.03	40	
554445603	3	0.24	50	
554445605	3	0.09	50	
554445606	3	0.10	50	
554445611	3	0.05	50	
554445616	3	0.11	30	#Speed limit is low. Care

should be taken using the results of the calculation for this link.				
554445660	3	0.11	50	
554445681	3	0.03	60	
554451601	3	0.07	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451604	3	0.13	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451606	3	0.02	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451619	3	0.01	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451621	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554469301	3	0.08	40	
554469376	3	0.12	40	
554469377	2	0.04	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554469379	3	0.10	50	
554469380	3	0.07	50	
554469383	3	0.09	50	
554469386	3	0.06	50	
554469390	2	0.08	100	
554476250	3	0.07	40	
554476251	3	0.17	40	
554476254	3	0.05	40	
554476255	3	0.13	40	
554476258	3	0.04	40	
554476263	3	0.08	40	
554476268	3	0.01	40	
554476273	3	0.04	40	
554476275	3	0.12	40	
554476276	3	0.04	40	
554476314	3	0.08	40	
554476317	3	0.06	40	
554476318	4	0.03	40	!Speed limit is too low for a
fast dual carriageway.				
554476321	4	0.01	40	!Speed limit is too low for a
fast dual carriageway.				
554476331	4	0.04	40	!Speed limit is too low for a
fast dual carriageway.				
554476332	3	0.04	40	
554476337	3	0.07	40	
554476339	3	0.05	40	
554476344	3	0.02	40	
554476347	3	0.01	40	
554478297	3	0.08	40	
554478964	3	0.07	40	
554478965	3	0.03	40	
554479189	2	0.17	70	
554479190	2	0.04	70	
554499930	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554499931	2	0.03	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554499943	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
559752177	3	0.39	40	
562717850	3	0.23	40	
578082733	2	0.09	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.  
578088741 2 0.06 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814444 3 0.09 60  
587814449 3 0.10 60  
587814450 3 0.03 60  
587814454 3 0.09 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814456 3 0.04 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814797 3 0.19 15 #Unusual speed limit (15) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587814807 10 0.01 10 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814808 3 0.05 15 #Unusual speed limit (15) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587814809 3 0.04 15 #Unusual speed limit (15) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587814811 4 0.04 10 !Speed limit is too low for a  
fast dual carriageway.  
587814819 3 0.02 10 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814822 3 0.05 10 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814825 3 0.03 10 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587814826 3 0.03 10 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815160 3 0.13 15 #Unusual speed limit (15) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815163 3 0.03 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815170 3 0.30 23 #Unusual speed limit (23) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815171 3 0.15 23 #Unusual speed limit (23) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815173 3 0.02 23 #Unusual speed limit (23) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815174 3 0.12 23 #Unusual speed limit (23) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587815269 3 0.09 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587815271 3 0.13 30 #Speed limit is low. Care

should be taken using the results of the calculation for this link.  
 587815272 3 0.09 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815273 3 0.19 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815274 3 0.08 20 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815275 3 0.07 20 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815277 3 0.12 15 #Unusual speed limit (15) is  
 not multiple of 10km/h. Care should be taken using the results of the calculation  
 for this link. #Speed limit is low. Care should be taken using the results of the  
 calculation for this link.  
 587815278 3 0.04 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815280 3 0.13 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815285 3 0.05 15 #Unusual speed limit (15) is  
 not multiple of 10km/h. Care should be taken using the results of the calculation  
 for this link. #Speed limit is low. Care should be taken using the results of the  
 calculation for this link.  
 587815287 3 0.06 15 #Unusual speed limit (15) is  
 not multiple of 10km/h. Care should be taken using the results of the calculation  
 for this link. #Speed limit is low. Care should be taken using the results of the  
 calculation for this link.  
 587815295 3 0.44 50  
 587815303 3 0.02 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815773 3 0.04 50  
 587815780 3 0.16 50  
 587815785 2 0.07 25 #Unusual speed limit (25) is  
 not multiple of 10km/h. Care should be taken using the results of the calculation  
 for this link. !Speed limit is low. Care should be taken using the results of the  
 calculation for this link.  
 587815787 3 0.02 20 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815790 3 0.14 40  
 587815791 3 0.16 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815792 3 0.20 20 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815795 3 0.04 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815802 3 0.04 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587815824 3 0.04 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816038 3 0.20 40  
 587816039 3 0.08 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816041 3 0.02 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816057 3 0.06 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816058 3 0.02 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816063 3 0.05 50  
 587816177 3 0.02 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.

587816186	3	0.08	40	
587816709	3	0.10	50	
587816710	3	0.02	50	
587816711	3	0.22	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816712	3	0.16	40	
587816713	3	0.04	50	
587816714	3	0.34	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816718	3	0.19	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816721	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816722	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816725	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816971	3	0.05	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816972	3	0.12	40	
587816973	3	0.10	40	
587816974	3	0.19	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816975	4	0.07	30	!Speed limit is too low for a
fast dual carriageway.				
587816978	4	0.06	30	!Speed limit is too low for a
fast dual carriageway.				
587816980	4	0.06	30	!Speed limit is too low for a
fast dual carriageway.				
587816981	4	0.06	30	!Speed limit is too low for a
fast dual carriageway.				
587816984	10	0.04	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816985	3	0.09	40	
587816986	3	0.29	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816988	3	0.25	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587816989	3	0.33	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817206	3	0.06	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817207	3	0.48	40	
587817216	3	0.03	40	
587817217	3	0.16	40	
587817219	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817221	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817223	3	0.08	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817225	4	0.07	30	!Speed limit is too low for a
fast dual carriageway.				
587817226	4	0.06	30	!Speed limit is too low for a
fast dual carriageway.				
587817227	4	0.10	30	!Speed limit is too low for a
fast dual carriageway.				
587817228	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				

587817230	3	0.06	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817231	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817234	4	0.02	30	!Speed limit is too low for a
fast dual carriageway.				
587817269	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817271	3	0.03	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817272	3	0.07	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817274	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817275	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817314	5	0.12	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817316	3	0.07	25	#Unusual speed limit (25) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587817318	3	0.01	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817319	3	0.10	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817447	3	0.09	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817448	3	0.08	25	#Unusual speed limit (25) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587817453	3	0.05	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015491	3	0.02	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015493	3	0.01	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015494	3	0.00	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589626976	2	0.13	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
590481852	3	0.05	40	
590481853	3	0.05	40	
590481868	3	0.06	40	
590522243	3	0.06	50	
590522244	3	0.02	50	
590522245	3	0.05	40	
1139400830	3	0.35	40	
1148054292	3	0.62	40	
1164076472	3	0.12	40	
1165618763	3	0.20	40	
1167345578	2	0.27	70	
1176181443	3	0.13	40	
1176242672	2	0.32	70	
1186121768	3	0.39	40	
2122362473	4	0.14	40	!Speed limit is too low for a
fast dual carriageway.				
2147474988	2	3.36	80	

2147475007	2	0.07	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147475798	2	1.12	70	
2147475799	2	0.65	70	
2147475801	2	0.61	80	
2147475949	2	0.73	70	
2147481733	2	0.88	70	
2147481754	2	0.77	70	
2147481911	2	0.89	100	
2147481977	2	3.42	70	
2147482906	3	0.06	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482907	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482908	2	0.86	80	
2147482912	2	0.40	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482916	3	0.07	50	
2147482917	3	0.08	50	
2147482919	2	1.01	100	
2147482922	2	1.60	80	
2147482923	2	0.20	80	
2147482924	2	0.16	80	
2147482925	2	1.59	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482926	2	1.00	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482927	2	0.07	70	
2147482928	2	0.03	80	
2147482930	2	0.43	80	
2147482931	2	1.06	80	
2147482932	2	1.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482933	2	1.46	30	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482937	3	0.17	40	
2147482940	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482941	3	0.42	40	
2147482942	3	0.02	40	
2147482943	2	2.76	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482944	2	1.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482945	2	1.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482946	2	1.06	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482947	2	1.52	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482949	2	2.39	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482950	2	0.75	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482951	2	0.31	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482952	2	0.28	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482953	2	0.25	40	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147482954	2	1.53	70	
2147482957	2	0.05	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482958	2	2.45	70	
2147482959	2	1.66	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482960	2	3.36	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482963	2	1.90	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. !Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
2147482964	2	0.49	80	
2147482966	2	1.01	25	#Unusual speed limit (25) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. !Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
2147482967	2	0.16	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482968	2	0.73	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482969	2	0.57	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482970	2	0.81	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482973	3	0.11	60	
2147482974	3	0.08	60	
2147482975	2	2.53	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482976	2	2.64	100	
2147482977	2	3.02	100	
2147482979	2	2.38	70	
2147482980	2	1.98	70	
2147482981	2	1.54	70	
2147482982	2	0.22	70	
2147482985	2	0.15	100	
2147482989	2	3.07	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482990	2	1.90	70	
2147482992	2	0.06	100	
2147482993	2	1.37	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482994	2	2.04	100	
2147482995	2	0.62	100	
2147482996	2	1.93	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482997	2	0.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482998	2	0.62	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482999	2	0.28	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483000	2	0.42	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483001	2	0.55	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483002	2	2.37	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				



2147483003	2	1.43	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483004	2	1.66	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483005	2	0.92	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483006	2	1.84	100	
2147483007	2	0.07	100	
2147483008	2	1.29	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483009	2	0.70	80	
2147483011	2	0.27	80	
2147483012	2	1.67	80	
2147483015	2	0.11	80	
2147483016	2	0.21	80	
2147483017	2	2.23	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation for this link.				
2147483019	2	9.88	80	
2147483020	2	1.23	80	
2147483021	2	1.14	100	
2147483024	2	0.28	100	
2147483025	2	0.64	100	
2147483026	2	0.21	100	
2147483027	2	0.75	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483028	2	0.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483029	2	1.00	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483030	2	1.27	70	
2147483031	2	0.51	70	
2147483032	2	0.16	70	
2147483033	2	0.30	70	
2147483034	2	2.85	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483035	2	0.89	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483037	2	0.48	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483038	2	0.72	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483039	2	0.32	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483040	2	0.52	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483041	2	0.27	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483042	2	0.31	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483043	2	2.19	70	
2147483044	2	0.72	70	
2147483045	2	0.57	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483046	2	1.00	80	
2147483047	2	0.43	80	
2147483048	2	1.51	80	
2147483049	2	2.16	80	
2147483050	2	0.05	80	

2147483051	2	1.32	70	
2147483052	2	1.11	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483054	2	0.82	80	
2147483055	2	0.76	80	
2147483058	2	0.26	80	
2147483060	2	0.14	80	
2147483061	2	3.20	80	
2147483062	2	3.79	80	
2147483063	2	0.57	100	
2147483066	2	0.21	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483067	3	0.03	40	
2147483071	2	0.04	100	
2147483073	2	0.24	100	
2147483074	2	1.50	100	
2147483075	2	1.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483076	2	1.66	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483077	2	1.31	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483078	2	0.90	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483079	2	0.69	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483080	2	0.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483081	2	0.70	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483083	2	0.04	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483084	2	3.65	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483085	2	0.23	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483086	2	0.08	100	
2147483088	2	0.17	100	
2147483089	2	0.32	100	
2147483090	2	0.02	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483091	2	0.33	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483092	2	0.77	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483093	2	1.54	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483094	2	0.89	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483095	2	1.40	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483096	2	0.73	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483097	2	1.03	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483098	2	0.68	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483099	2	0.19	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				

2147483101	2	0.64	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483102	2	0.45	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483103	2	0.46	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483104	2	0.61	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483105	2	0.59	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483106	2	1.24	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483107	2	1.13	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483108	2	0.55	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483109	2	0.75	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483110	2	0.14	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483111	2	0.93	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483112	2	0.28	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483113	2	0.20	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483114	2	0.52	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483115	2	0.95	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483117	2	1.74	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483118	2	1.57	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483119	2	0.10	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483121	2	1.29	70		
2147483122	2	0.93	70		
2147483123	2	0.75	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483124	2	1.14	70		
2147483125	2	0.60	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483126	2	1.41	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483127	2	1.32	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483128	2	0.26	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483129	2	1.48	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483131	2	0.34	80		
2147483132	2	0.88	80		
2147483134	2	0.72	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483135	2	0.25	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483136	2	0.54	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	

2147483137	2	0.64	70	
2147483139	2	0.20	70	
2147483141	2	1.24	70	
2147483143	2	4.98	70	
2147483145	2	1.74	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483146	2	1.51	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483147	2	1.06	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483148	2	0.21	70	
2147483149	2	0.22	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483150	2	0.36	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483151	2	0.20	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483152	2	0.02	70	
2147483153	2	0.95	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483154	2	0.82	70	
2147483155	2	0.16	70	
2147483156	2	0.58	70	
2147483157	2	2.22	70	
2147483158	2	0.05	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483159	2	0.18	70	
2147483161	2	0.53	70	
2147483162	2	1.20	70	
2147483163	2	1.38	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483164	2	1.08	70	
2147483165	2	1.16	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483166	2	0.18	70	
2147483168	2	0.17	70	
2147483169	2	1.54	70	
2147483170	2	0.46	70	
2147483171	2	1.19	70	
2147483172	2	1.29	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483173	2	1.38	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483174	2	1.73	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483175	2	8.21	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483178	2	0.64	80	
2147483179	2	0.47	80	
2147483180	2	3.31	80	
2147483181	2	1.11	80	
2147483182	2	2.06	80	
2147483183	2	3.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483184	2	1.62	70	
2147483185	2	1.28	70	
2147483186	2	0.96	70	
2147483187	2	1.46	70	

2147483188	2	0.74	70	
2147483189	2	0.90	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483190	2	0.39	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483191	2	1.50	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483192	2	0.21	70	
2147483193	2	0.31	80	
2147483194	2	0.77	80	
2147483195	2	0.07	80	
2147483196	2	0.20	80	
2147483197	2	0.40	70	
2147483198	2	0.21	70	
2147483199	2	1.80	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483200	2	0.52	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483201	2	1.68	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483202	2	0.91	70	
2147483206	2	1.82	70	
2147483207	2	0.22	70	
2147483208	2	0.24	70	
2147483209	2	1.69	70	
2147483210	2	0.24	70	
2147483211	2	1.54	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483212	2	1.53	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483213	2	0.65	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483214	2	1.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483215	2	0.22	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483216	2	1.21	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483217	2	0.48	70	
2147483218	2	0.18	70	
2147483219	2	1.73	65	#Unusual speed limit (65) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. !Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
2147483222	2	0.02	70	
2147483224	2	0.04	70	
2147483226	2	1.42	70	
2147483227	2	0.24	70	
2147483229	2	1.72	70	
2147483230	2	0.41	70	
2147483231	2	1.75	70	
2147483234	2	13.41	70	
2147483236	2	1.52	70	
2147483237	2	6.67	70	
2147483238	2	0.26	70	
2147483239	2	0.26	70	
2147483240	2	0.48	70	

2147483241	2	1.03	70	
2147483242	2	1.89	70	
2147483243	2	1.78	70	
2147483244	2	1.25	70	
2147483245	2	1.01	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483246	2	0.46	70	
2147483247	2	0.43	70	
2147483248	2	1.11	70	
2147483249	2	0.29	70	
2147483250	2	1.00	70	
2147483251	2	1.14	70	
2147483252	2	1.24	70	
2147483254	2	0.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483256	2	0.55	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483258	2	1.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483260	2	0.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483264	2	0.66	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483265	2	0.34	70	
2147483266	2	1.16	70	
2147483267	2	3.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483270	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483271	2	0.69	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483272	2	0.23	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483273	2	1.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483274	2	0.35	70	
2147483275	2	7.92	70	
2147483278	2	0.81	70	
2147483280	2	0.11	80	
2147483281	2	0.26	80	
2147483282	2	1.88	80	
2147483283	2	0.43	80	
2147483284	2	0.13	80	
2147483285	2	0.87	80	
2147483286	2	1.88	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483290DN	11	0.26	100	
2147483290DS	11	0.26	80	
2147483297	11	0.15	50	
2147483300	3	0.04	50	
2147483303	2	0.72	90	
2147483304	2	0.20	100	
2147483305DN	11	0.69	100	
2147483305DS	11	0.74	80	
2147483306	11	0.25	60	
2147483308	2	0.73	100	
2147483309	2	0.87	100	
2147483311	2	0.56	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.				
2147483312	2	0.14	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483316	2	0.56	70	
2147483319	2	2.13	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483320	2	0.08	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483321	2	0.07	80	
2147483323	2	1.44	70	
2147483325	2	0.55	70	
2147483326	2	0.39	70	
2147483327DN	11	0.48	100	
2147483327DS	11	0.48	80	
2147483330	2	2.37	70	
2147483331	2	0.10	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483333	2	0.18	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483334	2	0.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483335DN	2	0.95	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483335DS	2	0.95	70	
2147483336	2	0.57	70	
2147483337	2	0.09	70	
2147483338	2	1.01	70	
2147483339	2	2.08	70	
2147483340	2	1.31	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483341	2	1.11	80	
2147483342	2	0.19	80	
2147483343	2	0.89	80	
2147483344	2	0.59	80	
2147483345	2	0.22	80	
2147483346	2	1.92	80	
2147483347	2	1.15	80	
2147483348	2	0.32	80	
2147483349	2	0.94	80	
2147483350	2	1.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483352	2	0.60	70	
2147483355	2	1.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483356	2	0.80	70	
2147483357	2	1.31	80	
2147483358	2	0.37	80	
2147483359	2	1.17	70	
2147483360	2	0.23	70	
2147483362	2	0.20	70	
2147483363	2	1.76	70	
2147483364	2	0.77	70	
2147483365	2	0.78	70	
2147483366	2	1.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483367	2	0.92	80	
2147483368	2	0.70	80	
2147483369	2	0.61	80	
2147483371	2	0.29	50	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483373	2	0.75	75	#Unusual speed limit (75) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link.
2147483374	2	0.84	75	#Unusual speed limit (75) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link.
2147483375	2	0.40	70	
2147483376	2	0.93	70	
2147483377	2	0.45	70	
2147483378	2	0.14	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483380	2	0.18	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483383DN	11	1.12	100	
2147483383DS	11	1.12	80	
2147483387	2	0.51	80	
2147483388	2	0.37	70	
2147483389	2	0.16	70	
2147483390	2	0.82	70	
2147483391	2	0.06	70	
2147483392	2	0.19	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483393	2	0.50	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483394	2	0.38	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483395	2	0.34	70	
2147483396	2	0.43	70	
2147483397	2	0.39	70	
2147483398	2	0.86	70	
2147483400	2	0.05	70	
2147483401	2	1.73	70	
2147483402	2	0.34	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483403	2	0.24	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483404	2	0.70	80	
2147483405	2	0.02	80	
2147483406	2	0.63	100	
2147483408	2	0.54	80	
2147483409	2	1.32	80	
2147483410	2	0.29	80	
2147483411	2	2.93	80	
2147483412	2	0.24	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483413	2	0.05	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483414	2	1.65	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483415	2	0.55	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483416	2	0.07	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147483417DN	11	0.42	100	
2147483417DS	11	0.42	80	
2147483418DN	11	1.04	100	
2147483418DS	11	1.04	80	
2147483419	2	1.07	50	!Speed limit is low. Care



should be taken using the results of the calculation for this link.  
2147483420 2 0.77 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483421 2 0.36 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483423DN 11 1.79 100  
2147483423DS 11 1.79 80  
2147483424 2 1.77 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483425 2 1.08 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483426DN 11 1.06 100  
2147483426DS 11 1.06 80  
2147483428 2 0.34 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483429 2 2.00 70  
2147483431 2 0.48 70  
2147483432 2 0.84 80  
2147483433 2 0.61 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483434 2 0.90 70  
2147483435 2 0.67 70  
2147483436 2 0.15 70  
2147483437 2 0.66 70  
2147483438 2 1.47 70  
2147483439 2 1.22 70  
2147483440 2 0.54 70  
2147483441 2 0.05 70  
2147483442 2 1.26 70  
2147483443 2 1.98 70  
2147483444 2 0.30 70  
2147483445 2 0.03 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483446 2 0.32 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483447 2 0.95 80  
2147483448 2 2.19 70  
2147483449 2 0.22 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483450 2 0.10 70  
2147483451 2 0.25 70  
2147483452 2 0.06 50 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
2147483453 2 0.10 70  
2147483454 2 1.29 70  
2147483455 2 1.25 70  
2147483456 2 2.21 70  
2147483457 2 1.67 70  
2147483458 2 1.13 70  
2147483459 2 1.07 70  
2147483460 2 0.10 70  
2147483461 2 0.49 70  
2147483464 2 1.01 70  
2147483465 2 1.25 70  
2147483466 2 0.86 70  
2147483468 2 0.56 70  
2147483469 2 0.29 70  
2147483471 2 0.71 60 !Speed limit is low. Care  
should be taken using the results of the calculation for this link.

2147483472	2	0.42	70	
2147483473	2	0.11	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483474	2	0.43	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483475	2	0.30	70	
2147483476	2	0.44	70	
2147483477	2	0.14	70	
2147483478	2	0.63	70	
2147483479	2	0.27	70	
2147483480	2	0.80	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483481	2	0.34	70	
2147483482	2	0.86	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483483	2	0.22	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483484	2	0.31	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483485	2	0.48	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483486	2	0.32	30	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483487	2	1.08	70	
2147483488	2	0.26	70	
2147483489	2	1.12	70	
2147483490	2	1.58	70	
2147483491	2	2.24	70	
2147483492	2	1.36	70	
2147483493	2	0.58	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483494	2	0.17	70	
2147483495	3	0.06	60	
2147483497	3	0.12	50	
2147483498	3	0.13	50	
2147483499	2	0.40	100	
2147483501	2	0.23	100	
2147483502	2	0.36	100	
2147483504	3	0.14	50	
2147483505	3	0.32	50	
2147483506	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483507	3	0.04	40	
2147483508	3	0.02	40	
2147483510	3	0.21	40	
2147483511	3	0.05	40	
2147483512	3	0.08	40	
2147483513	3	0.29	40	
2147483517	3	0.05	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483518	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483519	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483520	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483521	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483522	3	0.04	30	#Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483523	3	0.09	50	
2147483524	3	0.11	50	
2147483528	3	0.11	40	
2147483531	3	0.08	40	
2147483532	3	0.15	40	
2147483533	3	0.04	40	
2147483534	3	0.39	40	
2147483537	3	0.17	20	#Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483540	4	0.05	20	!Speed limit is too low for a
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fast dual carriageway.

2147483543	2	0.98	100	
2147483544	2	0.52	100	
2147483545	2	0.55	80	
2147483546	2	0.33	80	
2147483547	2	1.29	80	
2147483548	2	0.10	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483549	2	0.22	100	
2147483550	2	0.37	100	
2147483551	2	0.40	80	
2147483552	2	0.70	70	
2147483553	2	0.63	70	
2147483554	2	0.75	70	
2147483555DN	11	0.83	100	
2147483555DS	11	0.83	80	
2147483556DN	11	0.78	100	
2147483556DS	11	0.78	80	
2147483557	2	1.25	70	
2147483558	3	0.05	50	
2147483561	2	0.17	70	
2147483562	2	0.19	70	
2147483563	2	0.09	70	
2147483564	2	1.80	40	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483565	2	1.33	80	
2147483566	2	0.17	80	
2147483567	2	0.37	80	
2147483568	2	0.10	70	
2147483569	2	0.68	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483572	2	0.72	70	
2147483573	2	0.11	70	
2147483575	3	0.04	40	
2147483576	3	0.04	40	
2147483577	2	0.78	50	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483578	2	0.24	60	!Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483579	2	0.09	30	!Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483580	2	0.84	60	!Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483581	2	0.95	80	
2147483582	3	0.41	40	
2147483585	3	0.04	50	
2147483588	2	0.23	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483590	3	0.05	50	
2147483593	3	0.07	50	
2147483595	4	4.93	100	
2147483596	3	0.07	50	
2147483599	2	0.84	80	
2147483600	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483601	4	0.17	100	
2147483603	2	0.33	80	
2147483605	2	3.35	70	
2147483606	2	0.13	70	
2147483608	2	0.02	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483610	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483612	4	4.51	100	
2147483615	4	0.61	100	
2147483617	2	0.26	80	
2147483618	2	0.29	80	
2147483619	2	0.20	80	
2147483621	2	0.07	80	
2147483622	2	0.22	80	
2147483626	4	3.21	100	
2147483627	4	0.14	80	
2147483630	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483631	2	0.02	70	
2	3	0.21	60	
2147483597	3	0.06	50	
2147483633	3	0.03	50	
2147483637	3	0.05	50	
2147483641	3	0.05	50	
2147483644	4	0.15	100	
2147483645	4	8.25	100	
2147483646	4	0.21	100	

Combined Flow Subsection		Without-Scheme Flows							
Link	Base Year	Without-Scheme Flows					With-		
Scheme Flows	Flows	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	
Name	Year 3 Year 4 Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	
897	6,307	7,056	7,438	7,520	0	0	7,056	7,438	
900	5,177	5,838	6,163	6,196	0	0	5,838	6,163	
901	8,277	9,238	9,771	9,917	0	0	9,238	9,771	
906	14,012	15,649	16,479	16,635	0	0	15,649	16,479	
923	2,975	3,566	3,912	4,049	0	0	3,566	3,912	
1495	990	1,133	1,190	1,202	0	0	1,133	1,190	
1497	990	1,133	1,190	1,202	0	0	1,133	1,190	
1499	0	0	0	0	0	0	0	0	
1504	8,107	8,882	9,223	9,201	0	0	8,882	9,223	

1505			10,172	11,426	12,108	12,220	0	0	11,426
12,108	12,220	0	0						
1506			2,975	3,566	3,912	4,049	0	0	3,566
3,912	4,049	0	0						
1515			8,447	9,537	10,165	10,388	0	0	9,537
10,165	10,388	0	0						
1590			0	0	0	0	0	0	0
0	0	0	0						
1591			0	0	0	0	0	0	0
0	0	0	0						
44747			5,177	5,852	6,113	6,101	0	0	5,852
6,113	6,101	0	0						
45876			4,258	4,625	4,802	4,795	0	0	4,625
4,802	4,795	0	0						
48840			6,240	6,868	7,129	7,149	0	0	6,961
7,179	7,191	0	0						
48953			0	0	0	0	0	0	0
0	0	0	0						
49089			4,701	5,469	5,835	5,897	0	0	5,485
5,861	5,912	0	0						
49185			6,950	7,732	7,878	7,878	0	0	7,741
7,894	7,920	0	0						
49353			4,548	5,180	5,366	5,365	0	0	5,153
5,348	5,368	0	0						
49552			3,216	3,545	3,606	3,567	0	0	3,545
3,607	3,572	0	0						
49560			7,102	7,775	7,974	8,020	0	0	7,708
7,964	8,001	0	0						
49630			4,375	5,044	5,404	5,456	0	0	5,058
5,415	5,462	0	0						
49684			5,729	6,242	6,390	6,421	0	0	6,176
6,380	6,401	0	0						
49717			1,954	2,162	2,186	2,168	0	0	2,165
2,176	2,158	0	0						
49842			1,372	1,531	1,560	1,547	0	0	1,531
1,560	1,546	0	0						
50060			9,129	10,039	10,233	10,208	0	0	10,033
10,237	10,231	0	0						
50401			3,481	3,756	3,840	3,862	0	0	3,719
3,825	3,863	0	0						
50515			1,185	1,594	1,722	1,880	0	0	1,569
1,694	1,701	0	0						
50542			918	1,302	1,414	1,570	0	0	1,269
1,385	1,390	0	0						
50600			4,162	4,561	4,704	4,730	0	0	4,561
4,704	4,730	0	0						
50648			1,162	1,310	1,344	1,344	0	0	1,310
1,344	1,344	0	0						
50653			4,060	4,610	4,760	4,806	0	0	4,626
4,787	4,820	0	0						
50686			5,104	5,614	5,865	5,896	0	0	5,712
5,916	5,939	0	0						
554437085			5,960	6,627	6,754	6,754	0	0	6,656
6,765	6,779	0	0						
554437089			8,487	9,207	9,265	9,207	0	0	9,186
9,257	9,219	0	0						
554445417			3,919	4,376	4,575	4,541	0	0	4,376
4,575	4,541	0	0						
554445421			0	0	0	0	0	0	0

0	0	0	0						
	554445424		1,011	1,186	1,240	1,260	0	0	1,186
1,240	1,260	0	0						
	554445434		5,245	6,028	6,220	6,243	0	0	6,032
6,215	6,246	0	0						
	554445603		8,498	9,054	9,100	8,980	0	0	9,031
9,091	9,072	0	0						
	554445605		7,578	8,409	8,594	8,578	0	0	8,393
8,594	8,595	0	0						
	554445606		4,663	5,275	5,437	5,478	0	0	5,291
5,464	5,492	0	0						
	554445611		8,753	9,938	10,262	10,288	0	0	9,999
10,331	10,366	0	0						
	554445616		3,349	3,572	3,660	3,646	0	0	3,601
3,673	3,667	0	0						
	554445660		7,786	8,754	8,952	8,963	0	0	8,775
8,974	9,008	0	0						
	554445681		4,455	5,188	5,540	5,600	0	0	5,204
5,563	5,612	0	0						
	554451601		2,585	2,611	2,637	2,632	0	0	2,642
2,646	2,628	0	0						
	554451604		0	0	0	0	0	0	0
0	0	0	0						
	554451606		2,585	2,611	2,637	2,632	0	0	2,642
2,646	2,628	0	0						
	554451619		3,716	3,920	3,957	3,936	0	0	3,949
3,972	3,947	0	0						
	554451621		2,585	2,611	2,637	2,632	0	0	2,642
2,646	2,628	0	0						
	554469301		8,177	9,001	9,377	9,335	0	0	9,001
9,377	9,335	0	0						
	554469376		1,402	1,554	1,582	1,571	0	0	1,554
1,582	1,571	0	0						
	554469377		7,354	8,097	8,371	8,378	0	0	8,190
8,420	8,419	0	0						
	554469379		8,753	9,938	10,262	10,288	0	0	9,999
10,331	10,366	0	0						
	554469380		8,473	9,521	9,847	9,909	0	0	9,559
9,882	9,927	0	0						
	554469383		7,104	7,933	8,096	8,109	0	0	7,955
8,123	8,158	0	0						
	554469386		8,969	9,946	10,101	10,080	0	0	9,962
10,107	10,114	0	0						
	554469390		8,505	9,238	9,302	9,241	0	0	9,217
9,294	9,253	0	0						
	554476250		0	0	0	0	0	0	0
0	0	0	0						
	554476251		0	0	0	0	0	0	0
0	0	0	0						
	554476254		0	0	0	0	0	0	0
0	0	0	0						
	554476255		0	0	0	0	0	0	0
0	0	0	0						
	554476258		0	0	0	0	0	0	0
0	0	0	0						
	554476263		0	0	0	0	0	0	0
0	0	0	0						
	554476268		0	0	0	0	0	0	0
0	0	0	0						

554476273	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
554476275	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
554476276	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
554476314	8,177	9,001	9,377	9,335	0	0	0	9,001	
9,377 9,335	0	0	0	0	0	0	0	0	
554476317	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
554476318	3,919	4,376	4,575	4,541	0	0	0	4,376	
4,575 4,541	0	0	0	0	0	0	0	0	
554476321	3,919	4,376	4,575	4,541	0	0	0	4,376	
4,575 4,541	0	0	0	0	0	0	0	0	
554476331	10,004	11,099	11,498	11,535	0	0	0	11,099	
11,498 11,535	0	0	0	0	0	0	0	0	
554476332	4,470	4,814	4,975	4,993	0	0	0	4,810	
4,981 4,989	0	0	0	0	0	0	0	0	
554476337	9,714	10,842	11,195	11,235	0	0	0	10,842	
11,195 11,235	0	0	0	0	0	0	0	0	
554476339	9,714	10,842	11,195	11,235	0	0	0	10,842	
11,195 11,235	0	0	0	0	0	0	0	0	
554476344	9,714	10,842	11,195	11,235	0	0	0	10,842	
11,195 11,235	0	0	0	0	0	0	0	0	
554476347	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
554478297	4,974	5,547	5,730	5,745	0	0	0	5,547	
5,730 5,745	0	0	0	0	0	0	0	0	
554478964	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
554478965	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
554479189	2,456	2,777	2,809	2,792	0	0	0	2,777	
2,809 2,792	0	0	0	0	0	0	0	0	
554479190	2,456	2,777	2,809	2,792	0	0	0	2,777	
2,809 2,792	0	0	0	0	0	0	0	0	
554499930	2,794	3,045	3,161	3,198	0	0	0	3,045	
3,160 3,198	0	0	0	0	0	0	0	0	
554499931	2,794	3,045	3,161	3,198	0	0	0	3,045	
3,160 3,198	0	0	0	0	0	0	0	0	
554499943	118	132	131	133	0	0	0	127	
131 132	0	0	0	0	0	0	0	0	
559752177	1,742	1,948	2,028	2,050	0	0	0	1,948	
2,028 2,050	0	0	0	0	0	0	0	0	
562717850	11,199	12,305	12,709	12,744	0	0	0	12,398	
12,758 12,786	0	0	0	0	0	0	0	0	
578082733	4,455	5,188	5,540	5,600	0	0	0	5,204	
5,563 5,612	0	0	0	0	0	0	0	0	
578088741	118	132	131	133	0	0	0	127	
131 132	0	0	0	0	0	0	0	0	
587814444	4,060	4,610	4,760	4,806	0	0	0	4,626	
4,787 4,820	0	0	0	0	0	0	0	0	
587814449	4,663	5,275	5,437	5,478	0	0	0	5,291	
5,464 5,492	0	0	0	0	0	0	0	0	
587814450	4,663	5,275	5,437	5,478	0	0	0	5,291	
5,464 5,492	0	0	0	0	0	0	0	0	
587814454	3,216	3,545	3,606	3,567	0	0	0	3,545	
3,607 3,572	0	0	0	0	0	0	0	0	
587814456	3,216	3,545	3,606	3,567	0	0	0	3,545	

3,607	3,572	0	0							
	587814797		2,603	2,907	2,978	2,974	0	0	0	2,939
3,010	2,976	0	0							
	587814807		0	0	0	0	0	0	0	0
0	0	0	0							
	587814808		3,238	3,804	4,112	4,124	0	0	0	3,833
4,135	4,121	0	0							
	587814809		3,238	3,804	4,112	4,124	0	0	0	3,833
4,135	4,121	0	0							
	587814811		0	0	0	0	0	0	0	0
0	0	0	0							
	587814819		0	0	0	0	0	0	0	0
0	0	0	0							
	587814822		0	0	0	0	0	0	0	0
0	0	0	0							
	587814825		0	0	0	0	0	0	0	0
0	0	0	0							
	587814826		0	0	0	0	0	0	0	0
0	0	0	0							
	587815160		3,238	3,804	4,112	4,124	0	0	0	3,833
4,135	4,121	0	0							
	587815163		2,585	2,611	2,637	2,632	0	0	0	2,642
2,646	2,628	0	0							
	587815170		642	859	1,075	1,091	0	0	0	859
1,075	1,092	0	0							
	587815171		642	859	1,075	1,091	0	0	0	859
1,075	1,092	0	0							
	587815173		642	859	1,075	1,091	0	0	0	859
1,075	1,092	0	0							
	587815174		642	859	1,075	1,091	0	0	0	859
1,075	1,092	0	0							
	587815269		2,391	2,809	3,023	3,054	0	0	0	2,799
2,999	3,007	0	0							
	587815271		2,391	2,809	3,023	3,054	0	0	0	2,799
2,999	3,007	0	0							
	587815272		420	742	886	898	0	0	0	748
917	928	0	0							
	587815273		2,380	3,079	3,433	3,481	0	0	0	3,075
3,440	3,463	0	0							
	587815274		2,585	2,611	2,637	2,632	0	0	0	2,642
2,646	2,628	0	0							
	587815275		2,585	2,611	2,637	2,632	0	0	0	2,642
2,646	2,628	0	0							
	587815277		0	0	0	0	0	0	0	0
0	0	0	0							
	587815278		420	742	886	898	0	0	0	748
917	928	0	0							
	587815280		2,380	3,079	3,433	3,481	0	0	0	3,075
3,440	3,463	0	0							
	587815285		0	0	0	0	0	0	0	0
0	0	0	0							
	587815287		0	0	0	0	0	0	0	0
0	0	0	0							
	587815295		8,428	9,273	9,463	9,443	0	0	0	9,268
9,466	9,465	0	0							
	587815303		0	0	0	0	0	0	0	0
0	0	0	0							
	587815773		5,528	6,231	6,278	6,476	0	0	0	6,146
6,291	6,278	0	0							



587815780		5,248		5,869	6,008	6,105	0	0	5,870
6,017	6,011	0	0						
587815785		2		142	284	308	0	0	137
274	314	0	0						
587815787		5,773		6,403	6,629	6,629	0	0	6,446
6,658	6,634	0	0						
587815790		5,354		5,907	6,067	6,080	0	0	5,933
6,080	6,054	0	0						
587815791		5,438		5,996	6,156	6,170	0	0	6,022
6,170	6,144	0	0						
587815792		0		0	0	0	0	0	0
0	0	0	0						
587815795		918		1,302	1,414	1,570	0	0	1,269
1,385	1,390	0	0						
587815802		0		0	0	0	0	0	0
0	0	0	0						
587815824		0		0	0	0	0	0	0
0	0	0	0						
587816038		3,554		4,038	4,257	4,251	0	0	4,007
4,255	4,231	0	0						
587816039		4,032		4,546	4,749	4,739	0	0	4,516
4,747	4,719	0	0						
587816041		4,032		4,546	4,749	4,739	0	0	4,516
4,747	4,719	0	0						
587816057		0		0	0	0	0	0	0
0	0	0	0						
587816058		1,020		1,133	1,148	1,141	0	0	1,133
1,148	1,141	0	0						
587816063		2,636		3,048	3,249	3,253	0	0	3,018
3,244	3,235	0	0						
587816177		0		0	0	0	0	0	0
0	0	0	0						
587816186		966		1,361	1,480	1,633	0	0	1,332
1,456	1,459	0	0						
587816709		2,636		3,048	3,249	3,253	0	0	3,018
3,244	3,235	0	0						
587816710		3,108		3,577	3,789	3,787	0	0	3,547
3,784	3,770	0	0						
587816711		830		921	936	927	0	0	921
936	927	0	0						
587816712		3,247		3,685	3,889	3,888	0	0	3,654
3,889	3,870	0	0						
587816713		3,460		3,977	4,199	4,194	0	0	3,946
4,193	4,176	0	0						
587816714		228		315	333	328	0	0	314
328	329	0	0						
587816718		228		315	333	328	0	0	314
328	329	0	0						
587816721		228		315	333	328	0	0	314
328	329	0	0						
587816722		228		315	333	328	0	0	314
328	329	0	0						
587816725		228		315	333	328	0	0	314
328	329	0	0						
587816971		1,954		2,162	2,186	2,168	0	0	2,165
2,176	2,158	0	0						
587816972		1,470		1,799	1,904	1,898	0	0	1,811
1,913	1,921	0	0						
587816973		1,242		1,484	1,571	1,570	0	0	1,497

1,584	1,592	0	0						
	587816974		1,242	1,484	1,571	1,570	0	0	1,497
1,584	1,592	0	0						
	587816975		0	0	0	0	0	0	0
0	0	0	0						
	587816978		0	0	0	0	0	0	0
0	0	0	0						
	587816980		0	0	0	0	0	0	0
0	0	0	0						
	587816981		0	0	0	0	0	0	0
0	0	0	0						
	587816984		0	0	0	0	0	0	0
0	0	0	0						
	587816985		1,470	1,799	1,904	1,898	0	0	1,811
1,913	1,921	0	0						
	587816986		0	0	0	0	0	0	0
0	0	0	0						
	587816988		2,203	2,425	2,471	2,456	0	0	2,428
2,462	2,443	0	0						
	587816989		0	0	0	0	0	0	0
0	0	0	0						
	587817206		0	0	0	0	0	0	0
0	0	0	0						
	587817207		830	921	936	927	0	0	921
936	927	0	0						
	587817216		3,807	4,071	4,135	4,152	0	0	4,109
4,146	4,113	0	0						
	587817217		2,174	2,396	2,531	2,575	0	0	2,401
2,533	2,530	0	0						
	587817219		2,320	2,698	2,869	2,912	0	0	2,742
2,908	2,902	0	0						
	587817221		2,320	2,698	2,869	2,912	0	0	2,742
2,908	2,902	0	0						
	587817223		2,387	2,742	2,821	2,809	0	0	2,754
2,828	2,823	0	0						
	587817225		0	0	0	0	0	0	0
0	0	0	0						
	587817226		0	0	0	0	0	0	0
0	0	0	0						
	587817227		0	0	0	0	0	0	0
0	0	0	0						
	587817228		2,320	2,698	2,869	2,912	0	0	2,742
2,908	2,902	0	0						
	587817230		2,585	2,611	2,637	2,632	0	0	2,642
2,646	2,628	0	0						
	587817231		2,585	2,611	2,637	2,632	0	0	2,642
2,646	2,628	0	0						
	587817234		0	0	0	0	0	0	0
0	0	0	0						
	587817269		2,320	2,698	2,869	2,912	0	0	2,742
2,908	2,902	0	0						
	587817271		2,387	2,742	2,821	2,809	0	0	2,754
2,828	2,823	0	0						
	587817272		2,283	2,601	2,684	2,678	0	0	2,599
2,680	2,665	0	0						
	587817274		938	1,114	1,157	1,145	0	0	1,112
1,152	1,151	0	0						
	587817275		256	292	301	292	0	0	292
301	301	0	0						

587817314	967	1,183	1,310	1,325	0	0	1,224
1,358 1,359	0 0						
587817316	1,287	1,447	1,479	1,469	0	0	1,445
1,482 1,479	0 0						
587817318	156	163	157	148	0	0	162
157 158	0 0						
587817319	1,254	1,386	1,415	1,443	0	0	1,388
1,406 1,400	0 0						
587817447	0	0	0	0	0	0	0
0 0	0 0						
587817448	1,410	1,549	1,572	1,591	0	0	1,550
1,563 1,558	0 0						
587817453	2,596	2,850	2,941	2,925	0	0	2,853
2,940 2,939	0 0						
589015491	3,507	3,876	3,957	3,973	0	0	3,895
3,959 3,950	0 0						
589015493	4,531	4,918	5,058	5,059	0	0	4,949
5,074 5,042	0 0						
589015494	4,285	4,784	4,963	4,965	0	0	4,790
4,975 4,953	0 0						
589626976	4,162	4,561	4,704	4,730	0	0	4,561
4,704 4,730	0 0						
590481852	3,992	4,459	4,657	4,620	0	0	4,459
4,657 4,620	0 0						
590481853	3,992	4,459	4,657	4,620	0	0	4,459
4,657 4,620	0 0						
590481868	956	1,092	1,147	1,157	0	0	1,092
1,147 1,157	0 0						
590522243	8,497	9,025	9,067	8,948	0	0	9,002
9,058 9,040	0 0						
590522244	8,497	9,025	9,067	8,948	0	0	9,002
9,058 9,040	0 0						
590522245	0	0	0	0	0	0	0
0 0	0 0						
1139400830	956	1,092	1,147	1,157	0	0	1,092
1,147 1,157	0 0						
1148054292	8,425	9,282	9,661	9,612	0	0	9,282
9,661 9,612	0 0						
1164076472	8,425	9,282	9,661	9,612	0	0	9,282
9,661 9,612	0 0						
1165618763	956	1,092	1,147	1,157	0	0	1,092
1,147 1,157	0 0						
1167345578	2,456	2,777	2,809	2,792	0	0	2,777
2,809 2,792	0 0						
1176181443	9,714	10,842	11,195	11,235	0	0	10,842
11,195 11,235	0 0						
1176242672	8,425	9,282	9,661	9,612	0	0	9,282
9,661 9,612	0 0						
1186121768	846	938	958	954	0	0	938
958 954	0 0						
2122362473	5,269	5,812	6,042	6,055	0	0	5,812
6,042 6,055	0 0						
2147474988	6,000	6,684	6,947	6,964	0	0	6,684
6,947 6,964	0 0						
2147475007	8,525	9,340	9,379	9,370	0	0	9,350
9,389 9,344	0 0						
2147475798	8,460	9,322	9,704	9,657	0	0	9,322
9,704 9,657	0 0						
2147475799	8,107	8,882	9,223	9,201	0	0	8,882

9,223	9,201	0	0							
	2147475801		5,729	6,242	6,390	6,421	0	0	0	6,176
6,380	6,401	0	0							
	2147475949		4,128	4,915	5,307	5,439	0	0	0	4,915
5,307	5,439	0	0							
	2147481733		35	41	44	45	0	0	0	41
44	45	0	0							
	2147481754		956	1,092	1,147	1,157	0	0	0	1,092
1,147	1,157	0	0							
	2147481911		5,431	6,343	6,722	6,842	0	0	0	6,343
6,722	6,842	0	0							
	2147481977		2,456	2,777	2,809	2,792	0	0	0	2,777
2,809	2,792	0	0							
	2147482906		3,481	3,756	3,840	3,862	0	0	0	3,719
3,825	3,863	0	0							
	2147482907		3,481	3,756	3,840	3,862	0	0	0	3,719
3,825	3,863	0	0							
	2147482908		2,459	2,889	3,012	3,008	0	0	0	2,865
2,990	3,006	0	0							
	2147482912		486	641	678	679	0	0	0	641
674	677	0	0							
	2147482916		3,729	4,207	4,361	4,376	0	0	0	4,214
4,354	4,388	0	0							
	2147482917		3,585	4,168	4,365	4,388	0	0	0	4,175
4,357	4,400	0	0							
	2147482919		5,171	5,718	5,905	5,958	0	0	0	5,718
5,905	5,958	0	0							
	2147482922		1,923	2,204	2,295	2,297	0	0	0	2,184
2,276	2,293	0	0							
	2147482923		1,923	2,204	2,295	2,297	0	0	0	2,184
2,276	2,293	0	0							
	2147482924		3,529	4,123	4,277	4,291	0	0	0	4,106
4,254	4,283	0	0							
	2147482925		203	211	207	205	0	0	0	212
208	205	0	0							
	2147482926		226	241	240	238	0	0	0	242
241	239	0	0							
	2147482927		22	30	33	33	0	0	0	30
33	33	0	0							
	2147482928		2,003	2,423	2,559	2,567	0	0	0	2,401
2,534	2,560	0	0							
	2147482930		1,964	2,378	2,511	2,519	0	0	0	2,356
2,486	2,512	0	0							
	2147482931		1,964	2,378	2,511	2,519	0	0	0	2,356
2,486	2,512	0	0							
	2147482932		0	0	0	0	0	0	0	0
0	0	0	0							
	2147482933		22	30	33	33	0	0	0	30
33	33	0	0							
	2147482937		1,850	2,054	2,087	2,070	0	0	0	2,053
2,087	2,069	0	0							
	2147482940		3,216	3,545	3,606	3,567	0	0	0	3,545
3,607	3,572	0	0							
	2147482941		1,997	2,228	2,268	2,252	0	0	0	2,228
2,268	2,250	0	0							
	2147482942		1,442	1,606	1,632	1,619	0	0	0	1,606
1,632	1,619	0	0							
	2147482943		14	32	38	38	0	0	0	32
37	37	0	0							

	2147482944		283		430	471	474	0	0	429
466	472	0	0							
	2147482945		14		32	38	38	0	0	32
37	37	0	0							
	2147482946		337		413	444	455	0	0	413
442	454	0	0							
	2147482947		283		430	471	474	0	0	429
466	472	0	0							
	2147482949		322		381	406	417	0	0	381
405	417	0	0							
	2147482950		323		384	410	421	0	0	384
409	420	0	0							
	2147482951		323		384	410	421	0	0	384
409	420	0	0							
	2147482952		0		0	0	0	0	0	0
0	0	0	0							
	2147482953		0		0	0	0	0	0	0
0	0	0	0							
	2147482954		0		0	0	0	0	0	0
0	0	0	0							
	2147482957		378		543	584	592	0	0	542
579	588	0	0							
	2147482958		1		3	3	4	0	0	3
3	4	0	0							
	2147482959		378		540	581	588	0	0	539
575	584	0	0							
	2147482960		96		113	114	118	0	0	113
113	116	0	0							
	2147482963		0		1	1	4	0	0	1
1	2	0	0							
	2147482964		8,525		9,340	9,379	9,370	0	0	9,350
9,389	9,344	0	0							
	2147482966		2		142	284	308	0	0	137
274	314	0	0							
	2147482967		317		359	367	366	0	0	359
367	366	0	0							
	2147482968		169		185	186	184	0	0	184
186	184	0	0							
	2147482969		147		174	181	182	0	0	174
180	182	0	0							
	2147482970		147		174	181	182	0	0	174
180	182	0	0							
	2147482973		8,577		9,636	10,054	10,185	0	0	9,636
10,055	10,186	0	0							
	2147482974		8,521		9,566	9,974	10,101	0	0	9,566
9,975	10,102	0	0							
	2147482975		0		0	1	1	0	0	0
1	1	0	0							
	2147482976		7,738		8,709	9,119	9,261	0	0	8,709
9,119	9,261	0	0							
	2147482977		7,415		8,326	8,709	8,841	0	0	8,326
8,710	8,842	0	0							
	2147482979		323		383	409	420	0	0	383
408	420	0	0							
	2147482980		323		383	409	420	0	0	383
408	420	0	0							
	2147482981		0		0	0	0	0	0	0
0	0	0	0							
	2147482982		0		0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0
6,441	2147482985	6,497	0	5,644	6,242	6,441	6,497	0	0	6,242
0	2147482989	0	0	0	0	0	0	0	0	0
0	2147482990	0	0	0	0	0	0	0	0	0
6,441	2147482992	6,497	0	5,644	6,242	6,441	6,497	0	0	6,242
0	2147482993	0	0	0	0	0	0	0	0	0
6,441	2147482994	6,497	0	5,644	6,242	6,441	6,497	0	0	6,242
6,441	2147482995	6,497	0	5,644	6,242	6,441	6,497	0	0	6,242
0	2147482996	0	0	0	0	0	0	0	0	0
0	2147482997	0	0	0	0	0	0	0	0	0
0	2147482998	0	0	0	0	0	0	0	0	0
0	2147482999	0	0	0	0	0	0	0	0	0
0	2147483000	0	0	0	0	0	0	0	0	0
0	2147483001	0	0	0	0	0	0	0	0	0
0	2147483002	0	0	0	0	0	0	0	0	0
0	2147483003	0	0	0	0	0	0	0	0	0
0	2147483004	0	0	0	0	0	0	0	0	0
0	2147483005	0	0	0	0	0	0	0	0	0
6,441	2147483006	6,497	0	5,644	6,242	6,441	6,497	0	0	6,242
6,441	2147483007	6,497	0	5,644	6,242	6,441	6,497	0	0	6,242
0	2147483008	0	0	0	0	0	0	0	0	0
2,440	2147483009	2,445	0	2,157	2,369	2,437	2,441	0	0	2,366
2,358	2147483011	2,361	0	2,089	2,290	2,354	2,357	0	0	2,288
2,358	2147483012	2,361	0	2,089	2,290	2,354	2,357	0	0	2,288
2,951	2147483015	2,963	0	2,455	2,881	2,959	2,970	0	0	2,879
2,619	2147483016	2,626	0	2,258	2,559	2,621	2,628	0	0	2,558
801	2147483017	807	0	723	802	803	808	0	0	800
1,494	2147483019	1,501	0	1,335	1,481	1,494	1,501	0	0	1,481
801	2147483020	807	0	723	802	803	808	0	0	800
5,905	2147483021	5,958	0	5,171	5,718	5,905	5,958	0	0	5,718

2147483024	5,644	6,242	6,441	6,497	0	0	6,242
6,441 6,497	0 0						
2147483025	5,644	6,242	6,441	6,497	0	0	6,242
6,441 6,497	0 0						
2147483026	5,644	6,242	6,441	6,497	0	0	6,242
6,441 6,497	0 0						
2147483027	0	0	0	0	0	0	0
0 0	0 0						
2147483028	29	34	36	36	0	0	34
35 36	0 0						
2147483029	29	34	36	36	0	0	34
35 36	0 0						
2147483030	39	45	47	48	0	0	45
47 48	0 0						
2147483031	39	45	47	48	0	0	45
47 48	0 0						
2147483032	68	79	83	83	0	0	79
83 83	0 0						
2147483033	68	78	82	83	0	0	78
82 83	0 0						
2147483034	0	1	1	0	0	0	1
1 0	0 0						
2147483035	1,023	1,284	1,335	1,345	0	0	1,285
1,330 1,339	0 0						
2147483037	1,023	1,283	1,335	1,344	0	0	1,284
1,329 1,339	0 0						
2147483038	1,023	1,283	1,335	1,344	0	0	1,284
1,329 1,339	0 0						
2147483039	1,023	1,283	1,335	1,344	0	0	1,284
1,329 1,339	0 0						
2147483040	1,023	1,283	1,335	1,344	0	0	1,284
1,329 1,339	0 0						
2147483041	0	0	0	0	0	0	0
0 0	0 0						
2147483042	0	0	0	0	0	0	0
0 0	0 0						
2147483043	0	0	0	0	0	0	0
0 0	0 0						
2147483044	0	0	0	0	0	0	0
0 0	0 0						
2147483045	1,635	1,962	2,026	2,037	0	0	1,964
2,022 2,034	0 0						
2147483046	612	679	691	693	0	0	680
693 695	0 0						
2147483047	612	679	691	693	0	0	680
693 695	0 0						
2147483048	1,085	1,203	1,227	1,232	0	0	1,204
1,229 1,234	0 0						
2147483049	473	524	536	539	0	0	524
536 539	0 0						
2147483050	1,496	1,808	1,871	1,884	0	0	1,809
1,866 1,878	0 0						
2147483051	473	524	536	539	0	0	524
536 539	0 0						
2147483052	0	0	0	0	0	0	0
0 0	0 0						
2147483054	5,729	6,242	6,390	6,421	0	0	6,176
6,380 6,401	0 0						
2147483055	3,739	4,185	4,463	4,532	0	0	4,173

4,470	4,516	0	0						
	2147483058		2,299	2,541	2,666	2,682	0	0	2,537
2,668	2,684	0	0						
	2147483060		2,299	2,541	2,666	2,682	0	0	2,537
2,668	2,684	0	0						
	2147483061		2,727	3,019	3,154	3,156	0	0	3,015
3,153	3,164	0	0						
	2147483062		4,308	4,894	5,096	5,101	0	0	4,894
5,096	5,101	0	0						
	2147483063		8,505	9,238	9,302	9,241	0	0	9,217
9,294	9,253	0	0						
	2147483066		9,103	10,002	10,153	10,027	0	0	10,029
10,140	10,117	0	0						
	2147483067		6,857	7,646	7,866	7,786	0	0	7,638
7,849	7,854	0	0						
	2147483071		10,234	11,471	11,918	12,028	0	0	11,471
11,919	12,029	0	0						
	2147483073		10,234	11,471	11,918	12,028	0	0	11,471
11,919	12,029	0	0						
	2147483074		8,521	9,566	9,973	10,100	0	0	9,566
9,975	10,101	0	0						
	2147483075		55	70	80	84	0	0	70
79	84	0	0						
	2147483076		55	70	80	84	0	0	70
79	84	0	0						
	2147483077		55	70	80	84	0	0	70
79	84	0	0						
	2147483078		55	70	80	84	0	0	70
79	84	0	0						
	2147483079		262	321	341	347	0	0	320
339	343	0	0						
	2147483080		1,543	1,809	1,880	1,884	0	0	1,813
1,881	1,875	0	0						
	2147483081		1,543	1,809	1,880	1,884	0	0	1,813
1,881	1,875	0	0						
	2147483083		0	0	0	0	0	0	0
0	0	0	0						
	2147483084		0	0	0	0	0	0	0
0	0	0	0						
	2147483085		0	0	0	0	0	0	0
0	0	0	0						
	2147483086		9,732	10,792	11,196	11,301	0	0	10,794
11,203	11,306	0	0						
	2147483088		9,857	10,930	11,337	11,441	0	0	10,932
11,344	11,445	0	0						
	2147483089		9,857	10,930	11,337	11,441	0	0	10,932
11,344	11,445	0	0						
	2147483090		125	138	141	139	0	0	138
141	139	0	0						
	2147483091		0	0	0	0	0	0	0
0	0	0	0						
	2147483092		207	251	261	263	0	0	251
259	259	0	0						
	2147483093		207	251	261	263	0	0	251
259	259	0	0						
	2147483094		125	138	141	139	0	0	138
141	139	0	0						
	2147483095		125	138	141	139	0	0	138
141	139	0	0						



	2147483096		207		251	261	263	0	0	251
259	259	0	0							
	2147483097		0		0	0	0	0	0	0
0	0	0	0							
	2147483098		1,281		1,488	1,540	1,538	0	0	1,493
1,543	1,533	0	0							
	2147483099		1,281		1,488	1,540	1,538	0	0	1,493
1,543	1,533	0	0							
	2147483101		1,370		1,721	1,917	1,936	0	0	1,709
1,878	1,912	0	0							
	2147483102		1,370		1,721	1,917	1,936	0	0	1,709
1,878	1,912	0	0							
	2147483103		758		1,042	1,228	1,253	0	0	1,029
1,189	1,229	0	0							
	2147483104		428		479	488	474	0	0	478
485	480	0	0							
	2147483105		428		479	488	474	0	0	478
485	480	0	0							
	2147483106		0		0	0	0	0	0	0
0	0	0	0							
	2147483107		428		479	488	474	0	0	478
485	480	0	0							
	2147483108		0		0	0	0	0	0	0
0	0	0	0							
	2147483109		331		563	740	779	0	0	551
704	749	0	0							
	2147483110		331		563	740	779	0	0	551
704	749	0	0							
	2147483111		331		563	740	779	0	0	551
704	749	0	0							
	2147483112		50		56	58	58	0	0	56
58	58	0	0							
	2147483113		50		56	58	58	0	0	56
58	58	0	0							
	2147483114		50		56	58	58	0	0	56
58	58	0	0							
	2147483115		50		56	58	58	0	0	56
58	58	0	0							
	2147483117		0		0	0	0	0	0	0
0	0	0	0							
	2147483118		0		0	0	0	0	0	0
0	0	0	0							
	2147483119		8,003		8,907	9,089	9,113	0	0	8,912
9,088	9,090	0	0							
	2147483121		82		113	120	123	0	0	112
119	120	0	0							
	2147483122		82		113	120	123	0	0	112
119	120	0	0							
	2147483123		0		0	0	0	0	0	0
0	0	0	0							
	2147483124		82		113	120	123	0	0	112
119	120	0	0							
	2147483125		0		0	0	0	0	0	0
0	0	0	0							
	2147483126		0		0	0	0	0	0	0
0	0	0	0							
	2147483127		0		0	0	0	0	0	0
0	0	0	0							
	2147483128		1,281		1,488	1,540	1,538	0	0	1,493

1,543	1,533	0	0						
	2147483129		1,281	1,488	1,540	1,538	0	0	1,493
1,543	1,533	0	0						
	2147483131		5,778	6,295	6,445	6,476	0	0	6,229
6,435	6,456	0	0						
	2147483132		3,408	3,623	3,723	3,753	0	0	3,622
3,765	3,768	0	0						
	2147483134		0	0	0	0	0	0	0
0	0	0	0						
	2147483135		0	0	0	0	0	0	0
0	0	0	0						
	2147483136		0	0	0	0	0	0	0
0	0	0	0						
	2147483137		1,837	2,111	2,319	2,387	0	0	2,103
2,324	2,369	0	0						
	2147483139		1,837	2,111	2,319	2,387	0	0	2,103
2,324	2,369	0	0						
	2147483141		1,837	2,111	2,319	2,387	0	0	2,103
2,324	2,369	0	0						
	2147483143		3,949	4,655	4,916	5,003	0	0	4,655
4,916	5,003	0	0						
	2147483145		523	621	645	650	0	0	621
645	649	0	0						
	2147483146		523	621	645	650	0	0	621
645	649	0	0						
	2147483147		523	621	645	650	0	0	621
645	649	0	0						
	2147483148		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483149		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483150		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483151		0	0	0	0	0	0	0
0	0	0	0						
	2147483152		0	0	0	0	0	0	0
0	0	0	0						
	2147483153		0	0	0	0	0	0	0
0	0	0	0						
	2147483154		0	0	0	0	0	0	0
0	0	0	0						
	2147483155		0	0	0	0	0	0	0
0	0	0	0						
	2147483156		0	0	0	0	0	0	0
0	0	0	0						
	2147483157		0	0	0	0	0	0	0
0	0	0	0						
	2147483158		0	0	0	0	0	0	0
0	0	0	0						
	2147483159		0	0	0	0	0	0	0
0	0	0	0						
	2147483161		2,767	3,271	3,503	3,585	0	0	3,280
3,499	3,603	0	0						
	2147483162		2,767	3,271	3,503	3,585	0	0	3,280
3,499	3,603	0	0						
	2147483163		0	0	0	0	0	0	0
0	0	0	0						
	2147483164		2,767	3,271	3,503	3,585	0	0	3,280
3,499	3,603	0	0						

	2147483165		531	697	853	910	0	0	696
840	906	0	0						
	2147483166		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483168		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483169		2,236	2,574	2,650	2,675	0	0	2,583
2,659	2,697	0	0						
	2147483170		2,368	2,809	3,172	3,297	0	0	2,799
3,164	3,275	0	0						
	2147483171		1,191	1,461	1,620	1,679	0	0	1,451
1,613	1,657	0	0						
	2147483172		0	0	0	0	0	0	0
0	0	0	0						
	2147483173		0	0	0	0	0	0	0
0	0	0	0						
	2147483174		0	0	0	0	0	0	0
0	0	0	0						
	2147483175		1,860	2,173	2,285	2,305	0	0	2,173
2,285	2,305	0	0						
	2147483178		1,198	1,295	1,349	1,354	0	0	1,297
1,355	1,360	0	0						
	2147483179		1,198	1,295	1,349	1,354	0	0	1,297
1,355	1,360	0	0						
	2147483180		1,198	1,295	1,349	1,354	0	0	1,297
1,355	1,360	0	0						
	2147483181		959	1,074	1,088	1,086	0	0	1,070
1,086	1,084	0	0						
	2147483182		959	1,074	1,088	1,086	0	0	1,070
1,086	1,084	0	0						
	2147483183		0	0	0	0	0	0	0
0	0	0	0						
	2147483184		662	877	937	951	0	0	876
930	945	0	0						
	2147483185		662	877	937	951	0	0	876
930	945	0	0						
	2147483186		0	0	0	0	0	0	0
0	0	0	0						
	2147483187		662	877	937	951	0	0	876
930	945	0	0						
	2147483188		0	0	0	0	0	0	0
0	0	0	0						
	2147483189		0	0	0	0	0	0	0
0	0	0	0						
	2147483190		612	679	691	693	0	0	680
693	695	0	0						
	2147483191		612	679	691	693	0	0	680
693	695	0	0						
	2147483192		612	679	691	693	0	0	680
693	695	0	0						
	2147483193		612	679	691	693	0	0	680
693	695	0	0						
	2147483194		612	679	691	693	0	0	680
693	695	0	0						
	2147483195		612	679	691	693	0	0	680
693	695	0	0						
	2147483196		612	679	691	693	0	0	680
693	695	0	0						
	2147483197		0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0
	2147483198	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483199	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483200	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483201	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483202	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483206	2,348	0	2,785	3,024	3,097	0	0	0	2,785
3,024	3,097	0	0							
	2147483207	1,958	0	2,338	2,527	2,582	0	0	0	2,338
2,527	2,582	0	0							
	2147483208	1,958	0	2,338	2,527	2,582	0	0	0	2,338
2,527	2,582	0	0							
	2147483209	4,128	0	4,915	5,307	5,439	0	0	0	4,915
5,307	5,439	0	0							
	2147483210	4,128	0	4,915	5,307	5,439	0	0	0	4,915
5,307	5,439	0	0							
	2147483211	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483212	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483213	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483214	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483215	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483216	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483217	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483218	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483219	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483222	1,380	0	1,678	1,770	1,810	0	0	0	1,678
1,770	1,810	0	0							
	2147483224	1,385	0	1,681	1,777	1,818	0	0	0	1,681
1,777	1,818	0	0							
	2147483226	182	0	222	249	258	0	0	0	222
249	258	0	0							
	2147483227	1,780	0	2,130	2,282	2,342	0	0	0	2,130
2,282	2,342	0	0							
	2147483229	1,780	0	2,130	2,282	2,342	0	0	0	2,130
2,282	2,342	0	0							
	2147483230	1,780	0	2,130	2,282	2,342	0	0	0	2,130
2,282	2,342	0	0							
	2147483231	1,380	0	1,678	1,770	1,810	0	0	0	1,678
1,770	1,810	0	0							
	2147483234	1,380	0	1,678	1,770	1,810	0	0	0	1,678
1,770	1,810	0	0							
	2147483236	1,958	0	2,338	2,527	2,582	0	0	0	2,338
2,527	2,582	0	0							
	2147483237	1,958	0	2,338	2,527	2,582	0	0	0	2,338
2,527	2,582	0	0							

2147483238	1,958		2,338	2,527	2,582	0	0	2,338
2,527 2,582	0 0							
2147483239	1,380		1,678	1,770	1,810	0	0	1,678
1,770 1,810	0 0							
2147483240	1,380		1,678	1,770	1,810	0	0	1,678
1,770 1,810	0 0							
2147483241	0		0	0	0	0	0	0
0 0	0 0							
2147483242	0		0	0	0	0	0	0
0 0	0 0							
2147483243	0		0	0	0	0	0	0
0 0	0 0							
2147483244	0		0	0	0	0	0	0
0 0	0 0							
2147483245	0		0	0	0	0	0	0
0 0	0 0							
2147483246	0		0	0	0	0	0	0
0 0	0 0							
2147483247	0		0	0	0	0	0	0
0 0	0 0							
2147483248	0		0	0	0	0	0	0
0 0	0 0							
2147483249	0		0	0	0	0	0	0
0 0	0 0							
2147483250	0		0	0	0	0	0	0
0 0	0 0							
2147483251	0		0	0	0	0	0	0
0 0	0 0							
2147483252	0		0	0	0	0	0	0
0 0	0 0							
2147483254	2,794		3,045	3,161	3,198	0	0	3,045
3,160 3,198	0 0							
2147483256	2,794		3,045	3,161	3,198	0	0	3,045
3,160 3,198	0 0							
2147483258	3,112		3,408	3,547	3,593	0	0	3,408
3,547 3,593	0 0							
2147483260	3,112		3,408	3,547	3,593	0	0	3,408
3,547 3,593	0 0							
2147483264	2,254		2,447	2,534	2,562	0	0	2,447
2,534 2,562	0 0							
2147483265	0		0	0	0	0	0	0
0 0	0 0							
2147483266	0		0	0	0	0	0	0
0 0	0 0							
2147483267	0		0	0	0	0	0	0
0 0	0 0							
2147483270	118		132	131	133	0	0	127
131 132	0 0							
2147483271	318		363	387	395	0	0	363
387 396	0 0							
2147483272	0		0	0	0	0	0	0
0 0	0 0							
2147483273	0		0	0	0	0	0	0
0 0	0 0							
2147483274	2,521		2,732	2,827	2,857	0	0	2,732
2,827 2,857	0 0							
2147483275	2,521		2,733	2,827	2,858	0	0	2,733
2,827 2,858	0 0							
2147483278	439		489	498	507	0	0	411

434	442	0	0							
	2147483280	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483281	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483282	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483283	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483284	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483285	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483286	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483290DN	12,894	0	14,322	15,038	15,162	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483290DS	0	0	0	0	0	0	0	0	316
331	335	0	0							
	2147483297	8,394	0	9,201	9,657	9,740	0	0	0	0
0	0	0	0							
	2147483300	6,860	0	7,623	8,018	8,111	0	0	0	0
0	0	0	0							
	2147483303	4,397	0	4,813	5,048	5,069	0	0	0	4,881
5,095	5,115	0	0							
	2147483304	4,424	0	4,845	5,082	5,103	0	0	0	4,936
5,151	5,171	0	0							
	2147483305DN	12,843	0	14,309	15,042	15,170	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483305DS	0	0	0	0	0	0	0	0	243
256	259	0	0							
	2147483306	12,751	0	14,204	14,936	15,064	0	0	0	0
0	0	0	0							
	2147483308	4,424	0	4,845	5,082	5,103	0	0	0	4,936
5,151	5,171	0	0							
	2147483309	4,424	0	4,845	5,082	5,103	0	0	0	4,936
5,151	5,171	0	0							
	2147483311	3,112	0	3,408	3,547	3,593	0	0	0	3,408
3,547	3,593	0	0							
	2147483312	2,405	0	2,617	2,713	2,744	0	0	0	2,617
2,713	2,744	0	0							
	2147483316	2,254	0	2,447	2,534	2,562	0	0	0	2,447
2,534	2,562	0	0							
	2147483319	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483320	16	0	21	42	44	0	0	0	99
106	108	0	0							
	2147483321	16	0	21	42	44	0	0	0	99
106	108	0	0							
	2147483323	16	0	21	42	44	0	0	0	99
106	108	0	0							
	2147483325	16	0	19	22	37	0	0	0	99
106	108	0	0							
	2147483326	16	0	19	22	37	0	0	0	99
106	108	0	0							
	2147483327DN	13,437	0	14,998	15,790	15,922	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483327DS	0	0	0	0	0	0	0	0	950
1,031	1,052	0	0							

	2147483330	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483331	478		630	716	729	0	0	819
895	916	0	0						
	2147483333	395		515	578	597	0	0	560
619	643	0	0						
	2147483334	395		515	578	597	0	0	560
619	643	0	0						
	2147483335DN	447		527	574	590	0	0	0
0	0	0	0						
	2147483335DS	0		0	0	0	0	0	633
694	719	0	0						
	2147483336	369		418	430	431	0	0	423
430	431	0	0						
	2147483337	369		418	430	431	0	0	423
430	431	0	0						
	2147483338	369		418	430	431	0	0	423
430	431	0	0						
	2147483339	0		0	0	0	0	0	0
0	0	0	0						
	2147483340	0		0	0	0	0	0	0
0	0	0	0						
	2147483341	0		0	0	0	0	0	0
0	0	0	0						
	2147483342	0		0	0	0	0	0	0
0	0	0	0						
	2147483343	0		0	0	0	0	0	0
0	0	0	0						
	2147483344	0		0	0	0	0	0	0
0	0	0	0						
	2147483345	0		0	0	0	0	0	0
0	0	0	0						
	2147483346	0		0	0	0	0	0	0
0	0	0	0						
	2147483347	0		0	0	0	0	0	0
0	0	0	0						
	2147483348	0		0	0	0	0	0	0
0	0	0	0						
	2147483349	0		0	0	0	0	0	0
0	0	0	0						
	2147483350	0		0	0	0	0	0	0
0	0	0	0						
	2147483352	2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0						
	2147483355	334		378	394	400	0	0	374
393	400	0	0						
	2147483356	334		378	394	400	0	0	374
393	400	0	0						
	2147483357	82		91	88	88	0	0	86
87	86	0	0						
	2147483358	82		91	88	88	0	0	86
87	86	0	0						
	2147483359	82		91	88	88	0	0	86
87	86	0	0						
	2147483360	0		0	0	0	0	0	0
0	0	0	0						
	2147483362	0		0	0	0	0	0	0
0	0	0	0						
	2147483363	0		0	0	0	0	0	0







0	0	0	0						
	2147483431		199	213	202	200	0	0	227
234	235	0	0						
	2147483432		114	108	92	89	0	0	130
132	132	0	0						
	2147483433		85	105	110	110	0	0	97
102	103	0	0						
	2147483434		0	0	0	0	0	0	0
0	0	0	0						
	2147483435		0	0	0	0	0	0	0
0	0	0	0						
	2147483436		0	0	0	0	0	0	0
0	0	0	0						
	2147483437		0	0	0	0	0	0	0
0	0	0	0						
	2147483438		0	0	0	0	0	0	0
0	0	0	0						
	2147483439		0	0	0	0	0	0	0
0	0	0	0						
	2147483440		0	0	0	0	0	0	0
0	0	0	0						
	2147483441		0	0	0	0	0	0	0
0	0	0	0						
	2147483442		0	0	0	0	0	0	0
0	0	0	0						
	2147483443		2,254	2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0						
	2147483444		2,254	2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0						
	2147483445		3	3	3	3	0	0	3
3	3	0	0						
	2147483446		3	3	3	3	0	0	3
3	3	0	0						
	2147483447		3	3	3	3	0	0	3
3	3	0	0						
	2147483448		3	3	3	3	0	0	3
3	3	0	0						
	2147483449		3	3	3	3	0	0	3
3	3	0	0						
	2147483450		0	0	0	0	0	0	0
0	0	0	0						
	2147483451		0	0	0	0	0	0	0
0	0	0	0						
	2147483452		0	0	0	0	0	0	0
0	0	0	0						
	2147483453		3	3	3	3	0	0	3
3	3	0	0						
	2147483454		3	3	3	3	0	0	3
3	3	0	0						
	2147483455		0	0	0	0	0	0	0
0	0	0	0						
	2147483456		0	0	0	0	0	0	0
0	0	0	0						
	2147483457		0	0	0	0	0	0	0
0	0	0	0						
	2147483458		0	0	0	0	0	0	0
0	0	0	0						
	2147483459		152	170	179	182	0	0	170
179	182	0	0						

	2147483460		152		170	179	182	0	0	170
179	182	0	0							
	2147483461		0		0	0	0	0	0	0
0	0	0	0							
	2147483464		152		170	179	182	0	0	170
179	182	0	0							
	2147483465		152		170	179	182	0	0	170
179	182	0	0							
	2147483466		0		0	0	0	0	0	0
0	0	0	0							
	2147483468		0		0	0	0	0	0	0
0	0	0	0							
	2147483469		0		0	0	0	0	0	0
0	0	0	0							
	2147483471		2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0							
	2147483472		2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0							
	2147483473		2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0							
	2147483474		0		0	0	0	0	0	0
0	0	0	0							
	2147483475		0		0	0	0	0	0	0
0	0	0	0							
	2147483476		0		0	0	0	0	0	0
0	0	0	0							
	2147483477		0		0	0	0	0	0	0
0	0	0	0							
	2147483478		0		0	0	0	0	0	0
0	0	0	0							
	2147483479		0		0	0	0	0	0	0
0	0	0	0							
	2147483480		0		0	0	0	0	0	0
0	0	0	0							
	2147483481		0		0	0	0	0	0	0
0	0	0	0							
	2147483482		0		0	0	0	0	0	0
0	0	0	0							
	2147483483		0		0	0	0	0	0	0
0	0	0	0							
	2147483484		0		0	0	0	0	0	0
0	0	0	0							
	2147483485		0		0	0	0	0	0	0
0	0	0	0							
	2147483486		0		0	0	0	0	0	0
0	0	0	0							
	2147483487		0		0	0	0	0	0	0
0	0	0	0							
	2147483488		0		0	0	0	0	0	0
0	0	0	0							
	2147483489		0		0	0	0	0	0	0
0	0	0	0							
	2147483490		0		0	0	0	0	0	0
0	0	0	0							
	2147483491		0		0	0	0	0	0	0
0	0	0	0							
	2147483492		152		170	179	182	0	0	170
179	182	0	0							
	2147483493		0		0	0	0	0	0	0



2147483537	2,533		2,798	2,850	2,829	0	0	2,798
2,853	2,830	0	0					
2147483540	1,067		1,313	1,454	1,469	0	0	1,354
1,502	1,502	0	0					
2147483543	9,732		10,792	11,196	11,301	0	0	10,794
11,203	11,306	0	0					
2147483544	9,732		10,792	11,196	11,301	0	0	10,794
11,203	11,306	0	0					
2147483545	8,125		9,043	9,224	9,243	0	0	9,048
9,223	9,223	0	0					
2147483546	8,125		9,043	9,224	9,243	0	0	9,048
9,223	9,223	0	0					
2147483547	710		789	803	796	0	0	789
803	796	0	0					
2147483548	27		32	34	34	0	0	56
58	57	0	0					
2147483549	4,424		4,845	5,082	5,103	0	0	4,936
5,151	5,171	0	0					
2147483550	4,424		4,845	5,082	5,103	0	0	4,936
5,151	5,171	0	0					
2147483551	1		2	20	34	0	0	0
0	0	0	0					
2147483552	0		0	0	0	0	0	0
0	0	0	0					
2147483553	0		0	0	0	0	0	0
0	0	0	0					
2147483554	0		0	0	0	0	0	0
0	0	0	0					
2147483555DN	14,012		15,649	16,479	16,635	0	0	0
0	0	0	0					
2147483555DS	0		0	0	0	0	0	1,781
1,905	1,939	0	0					
2147483556DN	13,878		15,503	16,322	16,476	0	0	0
0	0	0	0					
2147483556DS	0		0	0	0	0	0	1,615
1,729	1,761	0	0					
2147483557	518		584	617	628	0	0	584
617	628	0	0					
2147483558	7,596		8,561	9,065	9,158	0	0	8,561
9,065	9,158	0	0					
2147483561	0		0	0	0	0	0	0
0	0	0	0					
2147483562	0		0	0	0	0	0	0
0	0	0	0					
2147483563	0		0	0	0	0	0	0
0	0	0	0					
2147483564	1,281		1,488	1,540	1,538	0	0	1,493
1,543	1,533	0	0					
2147483565	1,281		1,488	1,540	1,538	0	0	1,493
1,543	1,533	0	0					
2147483566	167		173	171	181	0	0	11
12	13	0	0					
2147483567	167		173	171	181	0	0	11
12	13	0	0					
2147483568	0		0	0	0	0	0	0
0	0	0	0					
2147483569	4,231		4,868	5,206	5,259	0	0	4,880
5,215	5,263	0	0					
2147483572	6,645		7,481	7,862	7,938	0	0	7,457

7,856	7,946	0	0						
	2147483573		416	462	468	465	0	0	462
468	465	0	0						
	2147483575		3,841	4,408	4,658	4,697	0	0	4,404
4,667	4,718	0	0						
	2147483576		3,822	4,387	4,636	4,677	0	0	4,382
4,645	4,697	0	0						
	2147483577		448	595	679	691	0	0	786
861	881	0	0						
	2147483578		448	595	679	691	0	0	786
861	881	0	0						
	2147483579		0	0	0	0	0	0	0
0	0	0	0						
	2147483580		5,104	5,614	5,865	5,896	0	0	5,712
5,916	5,939	0	0						
	2147483581		3,982	4,333	4,534	4,542	0	0	4,433
4,582	4,585	0	0						
	2147483582		1,863	2,170	2,307	2,361	0	0	2,170
2,307	2,361	0	0						
	2147483585		3,560	4,130	4,328	4,354	0	0	4,137
4,322	4,366	0	0						
	2147483588		8,041	8,969	9,158	9,185	0	0	8,974
9,156	9,159	0	0						
	2147483590		5,935	6,739	6,977	7,006	0	0	6,760
6,975	7,003	0	0						
	2147483593		7,543	8,265	8,508	8,615	0	0	8,271
8,511	8,596	0	0						
	2147483595		5,900	6,642	6,858	6,920	0	0	6,667
6,869	6,915	0	0						
	2147483596		6,403	7,010	7,382	7,463	0	0	7,160
7,509	7,587	0	0						
	2147483599		9,732	10,792	11,196	11,301	0	0	10,794
11,203	11,306	0	0						
	2147483600		7,758	8,571	8,834	8,904	0	0	8,572
8,830	8,894	0	0						
	2147483601		5,232	6,020	6,378	6,488	0	0	5,999
6,368	6,485	0	0						
	2147483603		1,974	2,221	2,362	2,398	0	0	2,221
2,373	2,412	0	0						
	2147483605		0	0	0	0	0	0	0
0	0	0	0						
	2147483606		2,293	2,514	2,670	2,720	0	0	2,516
2,662	2,708	0	0						
	2147483608		811	944	1,022	1,054	0	0	943
1,020	1,054	0	0						
	2147483610		323	380	399	405	0	0	380
399	405	0	0						
	2147483612		7,206	8,241	8,740	8,886	0	0	8,220
8,741	8,897	0	0						
	2147483615		6,126	6,955	7,327	7,420	0	0	6,934
7,331	7,432	0	0						
	2147483617		488	563	623	648	0	0	563
621	648	0	0						
	2147483618		6,175	6,894	7,225	7,337	0	0	6,902
7,264	7,370	0	0						
	2147483619		6,005	6,719	6,990	7,074	0	0	6,653
6,986	7,066	0	0						
	2147483621		2,055	2,457	2,624	2,664	0	0	2,382
2,580	2,622	0	0						

2147483622	593	723	790	817	0	0	723
788 817 0 0							
2147483626	9,041	10,227	10,798	10,927	0	0	10,134
10,749 10,885 0 0							
2147483627	4,685	5,224	5,519	5,602	0	0	5,467
5,792 5,886 0 0							
2147483630	1,651	1,775	1,884	1,911	0	0	1,776
1,873 1,898 0 0							
2147483631	0	0	0	0	0	0	0
0 0 0 0							
2	0	0	0	0	0	0	243
252 255 0 0							
2147483597	0	0	0	0	0	0	2,769
2,877 2,888 0 0							
2147483633	0	0	0	0	0	0	7,713
8,128 8,232 0 0							
2147483637	0	0	0	0	0	0	9,238
9,771 9,917 0 0							
2147483641	0	0	0	0	0	0	9,238
9,771 9,917 0 0							
2147483644	0	0	0	0	0	0	9,448
9,875 9,958 0 0							
2147483645	0	0	0	0	0	0	13,888
14,593 14,715 0 0							
2147483646	0	0	0	0	0	0	14,116
14,832 14,956 0 0							

Combined Local Collision Rate Subsection

Link Name	Observed Collisions	First Observed Collision Year	Local Severity Ratio	Split Year
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[Section 5] Input Data - Parameter File

COBALT Parameter File  
Version 2,019.10

Cost Base Year  
2011

Appraisal Period  
30

Years from Current Year	Discount Rate (%)
30	4.00
60	3.50
100	3.00

Severity	Cost
Fatal	2,310,500
Serious	331,400
Slight	31,100

Severity	Cost per Collision		
	Insurance Administration	Damage to Property Urban	Rural Motorway

Fatal	375	13,952	13,952	13,952
Serious	233	6,225	6,225	6,225
Slight	142	3,713	3,713	3,713
Damage	67	2,346	2,346	2,346

Gardai Cost

	Urban	Rural	Motorway
Fatal	21,521	21,521	21,521
Serious	2,519	2,519	2,519
Slight	653	653	653
Damage	42	42	42

Compound Annual Rates of Growth of Collision Values

Range of Years Rate of Growth (%p.a.)

2011-2015	1.040
2015-2020	1.036
2020-2025	1.022
2025-2111	1.023

Number of Damage Only Collisions per PIA

	Urban	Rural	Motorway
Damage	0.0	0.0	0.0

Link and Junction Combined Collision Proportions

Base Year

2011

Road Type	Speed Limit (km/h)	Collision Proportions		
		Fatal	Serious	Slight
1	70	0.013	0.027	0.960
1	80	0.013	0.027	0.960
1	90	0.013	0.027	0.960
1	100	0.013	0.027	0.960
1	110	0.013	0.027	0.960
1	120	0.013	0.027	0.960
1	130	0.013	0.027	0.960
2	70	0.023	0.053	0.925
2	80	0.023	0.053	0.925
2	90	0.023	0.053	0.925
2	100	0.023	0.053	0.925
2	110	0.023	0.053	0.925
2	120	0.023	0.053	0.925
2	130	0.023	0.053	0.925
3	50	0.005	0.032	0.963
3	60	0.005	0.032	0.963
4	70	0.012	0.026	0.962
4	80	0.012	0.026	0.962
4	90	0.012	0.026	0.962
4	100	0.012	0.026	0.962
4	110	0.012	0.026	0.962
4	120	0.012	0.026	0.962
4	130	0.012	0.026	0.962
5	50	0.008	0.028	0.963
5	60	0.008	0.028	0.963
6	70	0.023	0.053	0.925
6	80	0.023	0.053	0.925
6	90	0.023	0.053	0.925
6	100	0.023	0.053	0.925
6	110	0.023	0.053	0.925
6	120	0.023	0.053	0.925
6	130	0.023	0.053	0.925



7	50	0.005	0.032	0.963
7	60	0.005	0.032	0.963
8	70	0.012	0.026	0.962
8	80	0.012	0.026	0.962
8	90	0.012	0.026	0.962
8	100	0.012	0.026	0.962
8	110	0.012	0.026	0.962
8	120	0.012	0.026	0.962
8	130	0.012	0.026	0.962
9	50	0.008	0.028	0.963
9	60	0.008	0.028	0.963
10	30	0.005	0.032	0.963
10	40	0.005	0.032	0.963
10	50	0.005	0.032	0.963
10	60	0.005	0.032	0.963
11	70	0.123	0.140	0.737
11	80	0.123	0.140	0.737
11	90	0.123	0.140	0.737
11	100	0.123	0.140	0.737
11	110	0.123	0.140	0.737
11	120	0.123	0.140	0.737
11	130	0.123	0.140	0.737

Link and Junction Combined Collision Rates and Change Factors

Base Year

2011

Road Type	Speed Limit (km/h)	Collision Rate	Beta Factor
1	70	0.057	0.956
1	80	0.057	0.956
1	90	0.057	0.956
1	100	0.057	0.956
1	110	0.057	0.956
1	120	0.057	0.956
1	130	0.057	0.956
2	70	0.219	0.955
2	80	0.219	0.955
2	90	0.219	0.955
2	100	0.219	0.955
2	110	0.219	0.955
2	120	0.219	0.955
2	130	0.219	0.955
3	50	0.613	0.959
3	60	0.613	0.959
4	70	0.094	0.956
4	80	0.094	0.956
4	90	0.094	0.956
4	100	0.094	0.956
4	110	0.094	0.956
4	120	0.094	0.956
4	130	0.094	0.956
5	50	0.402	0.967
5	60	0.402	0.967
6	70	0.219	0.955
6	80	0.219	0.955
6	90	0.219	0.955
6	100	0.219	0.955
6	110	0.219	0.955
6	120	0.219	0.955

6	130	0.219	0.955
7	50	0.613	0.959
7	60	0.613	0.959
8	70	0.094	0.955
8	80	0.094	0.955
8	90	0.094	0.955
8	100	0.094	0.955
8	110	0.094	0.955
8	120	0.094	0.955
8	130	0.094	0.955
9	50	0.402	0.959
9	60	0.402	0.959
10	30	0.449	0.959
10	40	0.449	0.959
10	50	0.449	0.959
10	60	0.449	0.959
11	70	0.115	0.955
11	80	0.115	0.955
11	90	0.115	0.955
11	100	0.115	0.955
11	110	0.115	0.955
11	120	0.115	0.955
11	130	0.115	0.955

Link and Junction Combined Collision Beta Factor Changes over Time

Range of Years Change to Beta Factor

2011-2016	1.000
2017-2026	0.500
2027-2036	0.250
2037-2160	0.000

Link and Junction Combined Casualty Rates

Base Year

2011

Road Type	Speed Limit (km/h)	Casualties per P.I.A.		
		Fatal	Serious	Slight
1	70	0.025	0.033	1.393
1	80	0.025	0.033	1.393
1	90	0.025	0.033	1.393
1	100	0.025	0.033	1.393
1	110	0.025	0.033	1.393
1	120	0.025	0.033	1.393
1	130	0.025	0.033	1.393
2	70	0.050	0.106	1.451
2	80	0.050	0.106	1.451
2	90	0.050	0.106	1.451
2	100	0.050	0.106	1.451
2	110	0.050	0.106	1.451
2	120	0.050	0.106	1.451
2	130	0.050	0.106	1.451
3	50	0.007	0.051	1.325
3	60	0.007	0.051	1.325
4	70	0.018	0.043	1.342
4	80	0.018	0.043	1.342
4	90	0.018	0.043	1.342
4	100	0.018	0.043	1.342
4	110	0.018	0.043	1.342
4	120	0.018	0.043	1.342
4	130	0.018	0.043	1.342

5	50	0.008	0.045	1.233
5	60	0.008	0.045	1.233
6	70	0.050	0.106	1.451
6	80	0.050	0.106	1.451
6	90	0.050	0.106	1.451
6	100	0.050	0.106	1.451
6	110	0.050	0.106	1.451
6	120	0.050	0.106	1.451
6	130	0.050	0.106	1.451
7	50	0.007	0.051	1.325
7	60	0.007	0.051	1.325
8	70	0.018	0.043	1.342
8	80	0.018	0.043	1.342
8	90	0.018	0.043	1.342
8	100	0.018	0.043	1.342
8	110	0.018	0.043	1.342
8	120	0.018	0.043	1.342
8	130	0.018	0.043	1.342
9	50	0.008	0.045	1.233
9	60	0.008	0.045	1.233
10	30	0.007	0.051	1.325
10	40	0.007	0.051	1.325
10	50	0.007	0.051	1.325
10	60	0.007	0.051	1.325
11	70	0.050	0.106	1.451
11	80	0.050	0.106	1.451
11	90	0.050	0.106	1.451
11	100	0.050	0.106	1.451
11	110	0.050	0.106	1.451
11	120	0.050	0.106	1.451
11	130	0.050	0.106	1.451

Link and Junction Combined Casualty Change Factors

Base Year

2011

Road Type	Speed Limit (km/h)	Beta Factor		
		Fatal	Serious	Slight
1	70	0.978	0.979	1.002
1	80	0.978	0.979	1.002
1	90	0.978	0.979	1.002
1	100	0.978	0.979	1.002
1	110	0.978	0.979	1.002
1	120	0.978	0.979	1.002
1	130	0.978	0.979	1.002
2	70	0.979	0.983	1.002
2	80	0.979	0.983	1.002
2	90	0.979	0.983	1.002
2	100	0.979	0.983	1.002
2	110	0.979	0.983	1.002
2	120	0.979	0.983	1.002
2	130	0.979	0.983	1.002
3	50	0.971	0.995	1.001
3	60	0.971	0.995	1.001
4	70	0.984	0.985	0.998
4	80	0.984	0.985	0.998
4	90	0.984	0.985	0.998
4	100	0.984	0.985	0.998
4	110	0.984	0.985	0.998
4	120	0.984	0.985	0.998

4	130	0.984	0.985	0.998
5	50	0.998	0.990	1.002
5	60	0.998	0.990	1.002
6	70	0.979	0.983	1.002
6	80	0.979	0.983	1.002
6	90	0.979	0.983	1.002
6	100	0.979	0.983	1.002
6	110	0.979	0.983	1.002
6	120	0.979	0.983	1.002
6	130	0.979	0.983	1.002
7	50	0.971	0.995	1.001
7	60	0.971	0.995	1.001
8	70	0.979	0.983	1.002
8	80	0.979	0.983	1.002
8	90	0.979	0.983	1.002
8	100	0.979	0.983	1.002
8	110	0.979	0.983	1.002
8	120	0.979	0.983	1.002
8	130	0.979	0.983	1.002
9	50	0.971	0.995	1.001
9	60	0.971	0.995	1.001
10	30	0.971	0.995	1.001
10	40	0.971	0.995	1.001
10	50	0.971	0.995	1.001
10	60	0.971	0.995	1.001
11	70	0.979	0.983	1.002
11	80	0.979	0.983	1.002
11	90	0.979	0.983	1.002
11	100	0.979	0.983	1.002
11	110	0.979	0.983	1.002
11	120	0.979	0.983	1.002
11	130	0.979	0.983	1.002

Link and Junction Combined Casualty Beta Factor Changes over Time

Range of Years    Change to Beta Factor

2011-2016	1.000
2017-2026	0.500
2027-2036	0.250
2037-2160	0.000



[Section 1.1] Economic Summary

Total Without-Scheme Collision Costs =	68,891.8
Total With-Scheme Collision Costs =	65,735.8
Total Collision Benefits Saved by Scheme =	3,156.1

Costs and benefits discounted to 2011 in multiples of a thousand euros.

[Section 1.2] Collision Summary

Total Without-Scheme Collisions =	1,192.0
Total With-Scheme Collisions =	1,182.3
Total Collisions Saved by Scheme =	9.7

This analysis includes 228 serious error(s).  
These results should not be considered usable.

This analysis includes 117 warning(s).  
These results should be considered carefully before using.

[Section 1.3] Casualty Summary

Total Without-Scheme Casualties (Fatal) =	37.1
(Serious) =	90.0
(Slight) =	1,726.8
Total With-Scheme Casualties (Fatal) =	34.8
(Serious) =	85.2
(Slight) =	1,698.1
Total Casualties Saved by Scheme (Fatal) =	2.3
(Serious) =	4.8
(Slight) =	28.7

This analysis includes 228 serious error(s).  
These results should not be considered usable.

This analysis includes 117 warning(s).  
These results should be considered carefully before using.

[Section 2] Combined Link and Junction Collision Statistics

Scheme	*----- Without-Scheme -----*			*----- With-			
	*----- Benefits -----*			*-----			
Collisions -*	Total*	*-- Number of Collisions -*	Total*	*-- Number of	Total*		
Link Name	*	2030	2045	Total*	Cost* *	2030	2045

Total*	Cost* *	2030	2045	Total*	Benefit*		
897		0.1	0.1	1.7	50.4	0.1	0.1
1.7	50.4	0.0	0.0	0.0	0.0		
900		0.1	0.1	2.0	57.9	0.1	0.1
2.0	57.9	0.0	0.0	0.0	0.0		
901		0.2	0.2	5.1	146.9	0.0	0.0
0.0	0.0	0.2	0.2	5.1	146.9		
906		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
923		0.2	0.2	6.2	407.4	0.2	0.2
6.2	407.4	0.0	0.0	0.0	0.0		
1495		0.1	0.1	1.8	120.0	0.1	0.1
1.8	120.0	0.0	0.0	0.0	0.0		
1497		0.0	0.0	1.4	93.6	0.0	0.0
1.4	93.6	0.0	0.0	0.0	0.0		
1499		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1504		0.1	0.1	2.8	186.3	0.1	0.1
2.8	186.3	0.0	0.0	0.0	0.0		
1505		0.4	0.4	11.0	730.1	0.4	0.4
11.0	730.1	0.0	0.0	0.0	0.0		
1506		0.1	0.1	4.2	275.5	0.1	0.1
4.2	275.5	0.0	0.0	0.0	0.0		
1515		1.1	1.1	33.9	1,217.0	1.1	1.1
33.9	1,217.0	0.0	0.0	0.0	0.0		
1590		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1591		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
44747		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
45876		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48840		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48953		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49089		0.1	0.1	3.4	97.4	0.1	0.1
3.4	97.7	0.0	0.0	0.0	-0.3		
49185		0.8	0.7	22.0	638.3	0.8	0.7
22.1	639.7	0.0	0.0	-0.1	-1.4		
49353		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49552		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49560		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49630		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49684		0.1	0.1	3.9	257.4	0.1	0.1
3.9	256.2	0.0	0.0	0.0	1.2		
49717		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49842		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
50060		0.3	0.3	9.4	272.7	0.3	0.3
9.4	272.8	0.0	0.0	0.0	-0.1		
50401		1.0	1.0	28.7	831.7	1.0	1.0
28.6	827.9	0.0	0.0	0.1	3.8		

50515		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50542		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50600		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50648		0.3	0.2	7.3	486.2	0.3	0.2	
7.3	486.2	0.0	0.0	0.0	0.0			
50653		0.1	0.1	3.1	89.1	0.1	0.1	
3.1	89.4	0.0	0.0	0.0	-0.3			
50686		0.3	0.3	9.5	275.3	0.3	0.3	
9.6	278.1	0.0	0.0	-0.1	-2.9			
554437085		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554437089		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445417		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445421		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445424		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445434		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445603		0.3	0.3	8.9	258.0	0.3	0.3	
8.9	258.2	0.0	0.0	0.0	-0.2			
554445605		0.1	0.1	3.2	91.5	0.1	0.1	
3.2	91.5	0.0	0.0	0.0	0.0			
554445606		0.1	0.1	2.1	59.7	0.1	0.1	
2.1	59.9	0.0	0.0	0.0	-0.2			
554445611		0.1	0.1	2.0	58.0	0.1	0.1	
2.0	58.4	0.0	0.0	0.0	-0.4			
554445616		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445660		0.1	0.1	3.8	110.9	0.1	0.1	
3.8	111.2	0.0	0.0	0.0	-0.3			
554445681		0.0	0.0	0.7	19.6	0.0	0.0	
0.7	19.7	0.0	0.0	0.0	-0.1			
554451601		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451604		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451606		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451619		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451621		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469301		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469376		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469377		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469379		0.1	0.1	4.0	114.9	0.1	0.1	
4.0	115.6	0.0	0.0	0.0	-0.7			
554469380		0.1	0.1	2.8	81.8	0.1	0.1	
2.8	82.1	0.0	0.0	0.0	-0.3			
554469383		0.1	0.1	2.9	83.5	0.1	0.1	





554499943	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
559752177	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
562717850	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578082733	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578088741	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814444	0.1	0.1	1.7	47.9	0.1	0.1	
1.7	48.0	0.0	0.0	0.0	-0.2		
587814449	0.1	0.1	2.2	62.9	0.1	0.1	
2.2	63.1	0.0	0.0	0.0	-0.2		
587814450	0.0	0.0	0.6	18.2	0.0	0.0	
0.6	18.3	0.0	0.0	0.0	-0.1		
587814454	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814456	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814797	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814807	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814808	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814809	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814811	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814819	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814822	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814825	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814826	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815160	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815163	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815170	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815171	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815173	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815174	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815269	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815274	0.0	0.0	0.0	0.0	0.0	0.0	0.0





0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817228	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817230	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817231	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817234	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817269	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817271	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817272	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817274	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817275	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817314	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817316	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817318	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817319	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817447	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817448	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817453	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015491	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015493	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015494	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589626976	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481852	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481853	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481868	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2.1	590522243	0.1	0.1	2.1	60.1	0.1	0.1
0.9	60.1	0.0	0.0	0.0	0.0		
0.0	590522244	0.0	0.0	0.9	25.3	0.0	0.0
0.0	25.3	0.0	0.0	0.0	0.0		
0.0	590522245	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1139400830	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1148054292	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1164076472	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

	1165618763	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1167345578	0.0	0.0	1.0	69.2	0.0	0.0	0.0
1.0	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1176181443	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1176242672	0.1	0.1	4.2	280.6	0.1	0.1	0.1
4.2	280.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1186121768	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2122362473	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147474988	1.1	1.1	31.6	2,096.4	1.1	1.1	1.1
31.6	2,096.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475007	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475798	0.5	0.5	14.7	973.5	0.5	0.5	0.5
14.7	973.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475799	0.3	0.3	8.1	539.8	0.3	0.3	0.3
8.1	539.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475801	0.2	0.2	5.3	354.4	0.2	0.2	0.2
5.3	352.7	0.0	0.0	0.0	1.7	0.0	0.0	0.0
	2147475949	0.2	0.2	5.2	342.9	0.2	0.2	0.2
5.2	342.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481733	0.0	0.0	0.1	3.5	0.0	0.0	0.0
0.1	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481754	0.0	0.0	1.2	79.0	0.0	0.0	0.0
1.2	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481911	0.3	0.3	8.1	535.8	0.3	0.3	0.3
8.1	535.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481977	0.5	0.4	13.1	869.9	0.5	0.4	0.4
13.1	869.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482906	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482907	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482908	0.1	0.1	3.5	231.7	0.1	0.1	0.1
3.5	230.3	0.0	0.0	0.0	1.4	0.0	0.0	0.0
	2147482912	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482916	0.0	0.0	1.2	34.7	0.0	0.0	0.0
1.2	34.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482917	0.0	0.0	1.3	38.6	0.0	0.0	0.0
1.3	38.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482919	0.3	0.3	8.1	538.5	0.3	0.3	0.3
8.1	538.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482922	0.2	0.2	5.0	329.9	0.2	0.2	0.2
4.9	327.5	0.0	0.0	0.0	2.4	0.0	0.0	0.0
	2147482923	0.0	0.0	0.6	41.2	0.0	0.0	0.0
0.6	40.9	0.0	0.0	0.0	0.3	0.0	0.0	0.0
	2147482924	0.0	0.0	0.9	62.7	0.0	0.0	0.0
0.9	62.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0
	2147482925	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482926	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482927	0.0	0.0	0.0	0.2	0.0	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482928	0.0	0.0	0.1	6.6	0.0	0.0	0.0

0.1	6.6	0.0	0.0	0.0	0.1		
	2147482930	0.0	0.0	1.5	96.5	0.0	0.0
1.4	95.7	0.0	0.0	0.0	0.8		
	2147482931	0.1	0.1	3.6	237.6	0.1	0.1
3.6	235.6	0.0	0.0	0.0	2.0		
	2147482932	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482933	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482937	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482940	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482941	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482942	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482943	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482944	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482945	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482946	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482947	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482949	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482950	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482951	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482952	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482953	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482954	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482957	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482958	0.0	0.0	0.0	0.7	0.0	0.0
0.0	0.7	0.0	0.0	0.0	0.0		
	2147482959	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482960	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482963	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482964	0.2	0.2	6.3	416.6	0.2	0.2
6.3	416.8	0.0	0.0	0.0	-0.2		
	2147482966	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482967	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482968	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147482969	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		







2147483045	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483046	0.0	0.0	0.0	0.9	62.6	0.0	0.0
0.9	62.7	0.0	0.0	0.0	-0.2	0.0	0.0
2147483047	0.0	0.0	0.0	0.4	26.6	0.0	0.0
0.4	26.7	0.0	0.0	0.0	-0.1	0.0	0.0
2147483048	0.1	0.1	2.5	167.8	0.1	0.1	
2.5	168.0	0.0	0.0	0.0	-0.2		
2147483049	0.1	0.1	1.6	104.6	0.1	0.1	
1.6	104.6	0.0	0.0	0.0	0.0		
2147483050	0.0	0.0	0.1	8.3	0.0	0.0	
0.1	8.2	0.0	0.0	0.0	0.0		
2147483051	0.0	0.0	1.0	64.2	0.0	0.0	
1.0	64.2	0.0	0.0	0.0	0.0		
2147483052	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483054	0.2	0.2	7.2	476.1	0.2	0.2	
7.1	473.9	0.0	0.0	0.0	2.2		
2147483055	0.2	0.2	4.6	301.5	0.2	0.2	
4.5	301.2	0.0	0.0	0.0	0.3		
2147483058	0.0	0.0	0.9	61.1	0.0	0.0	
0.9	61.1	0.0	0.0	0.0	0.0		
2147483060	0.0	0.0	0.5	33.2	0.0	0.0	
0.5	33.2	0.0	0.0	0.0	0.0		
2147483061	0.5	0.5	13.6	904.6	0.5	0.5	
13.6	904.5	0.0	0.0	0.0	0.1		
2147483062	0.9	0.9	26.1	1,733.1	0.9	0.9	
26.1	1,733.1	0.0	0.0	0.0	0.0		
2147483063	0.3	0.2	7.2	479.9	0.3	0.2	
7.2	479.3	0.0	0.0	0.0	0.5		
2147483066	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483067	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483071	0.0	0.0	0.7	45.0	0.0	0.0	
0.7	45.0	0.0	0.0	0.0	0.0		
2147483073	0.1	0.1	3.8	252.9	0.1	0.1	
3.8	252.9	0.0	0.0	0.0	0.0		
2147483074	0.7	0.7	20.2	1,340.0	0.7	0.7	
20.2	1,340.2	0.0	0.0	0.0	-0.2		
2147483075	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483076	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483077	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483078	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483079	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483080	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483081	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483083	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483084	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483085	0.0	0.0	0.0	0.0	0.0	0.0	0.0



2147483118	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483119	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483121	0.0	0.0	0.0	0.2	13.9	0.0	0.0
0.2	13.7	0.0	0.0	0.0	0.2	0.0	0.0
2147483122	0.0	0.0	0.0	0.2	10.0	0.0	0.0
0.1	9.9	0.0	0.0	0.0	0.1	0.0	0.0
2147483123	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483124	0.0	0.0	0.0	0.2	12.3	0.0	0.0
0.2	12.2	0.0	0.0	0.0	0.1	0.0	0.0
2147483125	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483126	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483127	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483128	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483129	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483131	0.1	0.1	3.0	200.2	0.1	0.1	0.1
3.0	199.3	0.0	0.0	0.0	0.9	0.0	0.0
2147483132	0.2	0.1	4.5	296.0	0.2	0.1	0.1
4.5	297.8	0.0	0.0	0.0	-1.8	0.0	0.0
2147483134	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483135	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483136	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483137	0.1	0.1	2.0	132.5	0.1	0.1	0.1
2.0	132.2	0.0	0.0	0.0	0.2	0.0	0.0
2147483139	0.0	0.0	0.6	41.5	0.0	0.0	0.0
0.6	41.4	0.0	0.0	0.0	0.1	0.0	0.0
2147483141	0.1	0.1	3.8	253.9	0.1	0.1	0.1
3.8	253.4	0.0	0.0	0.0	0.5	0.0	0.0
2147483143	1.1	1.1	33.1	2,190.8	1.1	1.1	1.1
33.1	2,190.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483145	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483146	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483147	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483148	0.0	0.0	0.8	51.2	0.0	0.0	0.0
0.8	51.4	0.0	0.0	0.0	-0.2	0.0	0.0
2147483149	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483150	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483151	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483152	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483153	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483154	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483155	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483156	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483157	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483158	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483159	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483161	0.1	0.1	2.5	164.7	0.1	0.1	
2.5	164.9	0.0	0.0	0.0	-0.2			
	2147483162	0.2	0.2	5.7	376.0	0.2	0.2	
5.7	376.5	0.0	0.0	0.0	-0.5			
	2147483163	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483164	0.2	0.2	5.1	336.3	0.2	0.2	
5.1	336.8	0.0	0.0	0.0	-0.5			
	2147483165	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483166	0.0	0.0	0.6	42.3	0.0	0.0	
0.6	42.5	0.0	0.0	0.0	-0.2			
	2147483168	0.0	0.0	0.6	40.6	0.0	0.0	
0.6	40.8	0.0	0.0	0.0	-0.2			
	2147483169	0.2	0.2	5.6	369.1	0.2	0.2	
5.6	370.6	0.0	0.0	0.0	-1.5			
	2147483170	0.1	0.1	1.9	127.2	0.1	0.1	
1.9	126.8	0.0	0.0	0.0	0.4			
	2147483171	0.1	0.1	2.6	170.1	0.1	0.1	
2.6	169.1	0.0	0.0	0.0	1.1			
	2147483172	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483173	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483174	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483175	0.9	0.8	25.3	1,680.0	0.9	0.8	
25.3	1,680.0	0.0	0.0	0.0	0.0			
	2147483178	0.0	0.0	1.2	77.9	0.0	0.0	
1.2	78.0	0.0	0.0	0.0	-0.2			
	2147483179	0.0	0.0	0.9	57.3	0.0	0.0	
0.9	57.4	0.0	0.0	0.0	-0.1			
	2147483180	0.2	0.2	6.0	401.0	0.2	0.2	
6.1	401.9	0.0	0.0	0.0	-0.8			
	2147483181	0.1	0.1	1.6	109.6	0.1	0.1	
1.6	109.4	0.0	0.0	0.0	0.3			
	2147483182	0.1	0.1	3.1	203.4	0.1	0.1	
3.0	202.9	0.0	0.0	0.0	0.5			
	2147483183	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483184	0.1	0.1	2.0	135.3	0.1	0.1	
2.0	134.8	0.0	0.0	0.0	0.5			
	2147483185	0.1	0.1	1.6	106.9	0.1	0.1	
1.6	106.5	0.0	0.0	0.0	0.4			
	2147483186	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483187	0.1	0.1	1.8	122.1	0.1	0.1	
1.8	121.6	0.0	0.0	0.0	0.4			

2147483188	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483189	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483190	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483191	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483192	0.0	0.0	0.2	0.0	13.0	0.0	0.0
0.2	13.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483193	0.0	0.0	0.3	0.0	19.4	0.0	0.0
0.3	19.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483194	0.0	0.0	0.7	0.0	48.3	0.0	0.0
0.7	48.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483195	0.0	0.0	0.1	0.0	4.4	0.0	0.0
0.1	4.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483196	0.0	0.0	0.2	0.0	12.3	0.0	0.0
0.2	12.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483197	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483198	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483199	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483201	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483202	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483206	0.2	0.2	7.4	0.0	488.9	0.2	0.2
7.4	488.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483207	0.0	0.0	0.8	0.0	50.3	0.0	0.0
0.8	50.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483208	0.0	0.0	0.8	0.0	52.8	0.0	0.0
0.8	52.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483209	0.4	0.4	12.1	0.0	798.8	0.4	0.4
12.1	798.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483210	0.1	0.1	1.7	0.0	111.9	0.1	0.1
1.7	111.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483211	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483212	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483213	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483214	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483215	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483216	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483217	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483218	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483219	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483222	0.0	0.0	0.1	0.0	4.0	0.0	0.0



2147483265	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483266	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483267	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483270	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483274	0.0	0.0	1.4	90.1	0.0	0.0	0.0
1.4	90.1	0.0	0.0	0.0	0.0	0.0	0.0
2147483275	1.0	1.0	30.4	2,018.4	1.0	1.0	1.0
30.4	2,018.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483278	0.0	0.0	0.6	36.6	0.0	0.0	0.0
0.5	33.8	0.0	0.0	0.0	2.8	0.0	0.0
2147483280	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483281	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483282	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483283	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483284	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483285	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483286	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483290	0.1	0.1	2.7	183.3	0.0	0.0	0.0
0.0	0.0	0.1	0.1	2.7	183.3	0.0	0.0
2147483297	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483300	0.0	0.0	1.3	36.8	0.0	0.0	0.0
0.0	0.0	0.0	0.0	1.3	36.8	0.0	0.0
2147483303	0.2	0.2	4.9	327.3	0.2	0.2	0.2
5.0	333.3	0.0	0.0	-0.1	-6.0	0.0	0.0
2147483304	0.0	0.0	1.4	90.6	0.0	0.0	0.0
1.4	92.0	0.0	0.0	0.0	-1.4	0.0	0.0
2147483305	0.3	0.2	7.4	496.1	0.0	0.0	0.0
0.0	0.0	0.3	0.2	7.4	496.1	0.0	0.0
2147483306	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483308	0.2	0.2	5.0	333.6	0.2	0.2	0.2
5.1	338.7	0.0	0.0	-0.1	-5.1	0.0	0.0
2147483309	0.2	0.2	6.0	397.3	0.2	0.2	0.2
6.1	403.4	0.0	0.0	-0.1	-6.1	0.0	0.0
2147483311	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483312	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483316	0.1	0.1	1.9	127.1	0.1	0.1	0.1
1.9	127.1	0.0	0.0	0.0	0.0	0.0	0.0
2147483319	0.0	0.0	0.0	0.0	0.0	0.0	0.0





	2147483352	0.1	0.1	2.1	136.2	0.1	0.1
2.1	136.2	0.0	0.0	0.0	0.0		
0.0	2147483355	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.4	2147483356	0.0	0.0	0.4	28.4	0.0	0.0
0.4	28.3	0.0	0.0	0.0	0.1		
0.2	2147483357	0.0	0.0	0.2	10.6	0.0	0.0
0.2	10.3	0.0	0.0	0.0	0.3		
0.0	2147483358	0.0	0.0	0.0	3.0	0.0	0.0
0.0	2.9	0.0	0.0	0.0	0.1		
0.1	2147483359	0.0	0.0	0.1	9.5	0.0	0.0
0.1	9.2	0.0	0.0	0.0	0.3		
0.0	2147483360	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483362	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483363	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483364	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483365	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483366	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483367	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483368	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483369	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483371	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483373	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483374	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483375	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483376	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483377	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483378	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483380	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483383DN	0.4	0.4	12.8	859.5	0.0	0.0
0.0	0.0	0.4	0.4	12.8	859.5		
0.5	2147483383DS	0.0	0.0	0.0	0.0	0.0	0.0
0.5	32.0	0.0	0.0	-0.5	-32.0		
0.0	2147483387	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483388	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.3		
0.0	2147483389	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.1	0.0	0.0	0.0	-0.1		
0.0	2147483390	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	2147483391	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0		
	2147483392	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483393	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483394	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483395	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.3		
	2147483396	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.4	0.0	0.0	0.0	-0.3		
	2147483397	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.3		
	2147483398	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483400	0.0	0.0	0.0	1.4	0.0	0.0
0.0	1.4	0.0	0.0	0.0	0.0		
	2147483401	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483402	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483403	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483404	0.0	0.0	0.3	20.8	0.0	0.0
0.3	20.8	0.0	0.0	0.0	0.0		
	2147483405	0.0	0.0	0.0	0.7	0.0	0.0
0.0	0.7	0.0	0.0	0.0	0.0		
	2147483406	0.1	0.1	4.1	270.4	0.1	0.1
4.1	274.8	0.0	0.0	-0.1	-4.4		
	2147483408	0.0	0.0	0.6	38.0	0.0	0.0
0.6	37.6	0.0	0.0	0.0	0.4		
	2147483409	0.0	0.0	0.0	0.9	0.0	0.0
0.0	1.9	0.0	0.0	0.0	-1.0		
	2147483410	0.0	0.0	0.0	0.2	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0		
	2147483411	0.0	0.0	0.0	1.8	0.0	0.0
0.0	1.6	0.0	0.0	0.0	0.2		
	2147483412	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483413	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483414	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483415	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483416	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483417DN	0.2	0.1	4.5	299.9	0.0	0.0
0.0	0.0	0.2	0.1	4.5	299.9		
	2147483417DS	0.0	0.0	0.0	0.0	0.0	0.0
0.1	4.0	0.0	0.0	-0.1	-4.0		
	2147483418	0.4	0.4	11.3	756.1	0.0	0.0
0.0	0.0	0.4	0.4	11.3	756.1		
	2147483419	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483420	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483421	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

0.0	2147483423DN	0.7	0.7	20.3	1,361.2	0.0	0.0
0.0	0.0	0.7	0.7	20.3	1,361.2	0.0	0.0
0.7	2147483423DS	0.0	0.0	0.0	0.0	0.0	0.0
0.7	48.8	0.0	0.0	-0.7	-48.8	0.0	0.0
0.0	2147483424	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483425	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483426DN	0.4	0.4	11.9	799.7	0.0	0.0
0.0	0.0	0.4	0.4	11.9	799.7	0.0	0.0
0.3	2147483426DS	0.0	0.0	0.0	0.0	0.0	0.0
0.3	17.4	0.0	0.0	-0.3	-17.4	0.0	0.0
0.0	2147483428DN	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.4	2147483428DS	0.0	0.0	0.0	0.0	0.0	0.0
0.4	24.8	0.0	0.0	-0.4	-24.8	0.0	0.0
0.0	2147483429	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	2147483431	0.0	0.0	0.1	8.9	0.0	0.0
0.2	13.8	0.0	0.0	-0.1	-4.9	0.0	0.0
0.0	2147483432	0.0	0.0	0.1	7.4	0.0	0.0
0.0	0.9	0.0	0.0	0.1	6.5	0.0	0.0
0.0	2147483433	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483434	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483435	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483436	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483437	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483438	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483439	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483440	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483441	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483442	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.8	2147483443	0.2	0.2	6.8	452.8	0.2	0.2
6.8	452.8	0.0	0.0	0.0	0.0	0.0	0.0
1.0	2147483444	0.0	0.0	1.0	68.2	0.0	0.0
1.0	68.2	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483445	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483446	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483447	0.0	0.0	0.0	0.3	0.0	0.0
0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483448	0.0	0.0	0.0	0.6	0.0	0.0
0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483449	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483450	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2147483451	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0		
	2147483452	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483453	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483454	0.0	0.0	0.0	0.0	0.4	0.0
0.0	0.4	0.0	0.0	0.0	0.0		
	2147483455	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483456	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483457	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483458	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483459	0.0	0.0	0.3	17.2	0.0	0.0
0.3	17.2	0.0	0.0	0.0	0.0		
	2147483460	0.0	0.0	0.0	1.6	0.0	0.0
0.0	1.6	0.0	0.0	0.0	0.0		
	2147483461	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483464	0.0	0.0	0.2	16.2	0.0	0.0
0.2	16.2	0.0	0.0	0.0	0.0		
	2147483465	0.0	0.0	0.3	20.1	0.0	0.0
0.3	20.1	0.0	0.0	0.0	0.0		
	2147483466	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483468	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483469	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483471	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483472	0.0	0.0	1.4	95.4	0.0	0.0
1.4	95.4	0.0	0.0	0.0	0.0		
	2147483473	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483474	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483475	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483476	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483477	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483478	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483479	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483480	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483481	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483482	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483483	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483484	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

2147483485	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483486	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483487	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483488	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483489	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483490	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483491	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483492	0.0	0.0	0.3	0.0	21.9	0.0	0.0
0.3	21.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483493	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483494	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483495	0.0	0.0	0.2	0.0	5.3	0.0	0.0
0.2	5.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483497	0.1	0.1	1.6	0.0	45.6	0.1	0.1
1.6	45.4	0.0	0.0	0.0	0.3	0.0	0.0
2147483498	0.1	0.1	1.7	0.0	48.2	0.1	0.1
1.7	48.0	0.0	0.0	0.0	0.3	0.0	0.0
2147483499	0.2	0.2	5.3	0.0	353.3	0.2	0.2
5.3	352.8	0.0	0.0	0.0	0.5	0.0	0.0
2147483501	0.1	0.1	3.0	0.0	198.7	0.1	0.1
3.0	198.3	0.0	0.0	0.0	0.4	0.0	0.0
2147483502	0.2	0.2	4.8	0.0	320.0	0.2	0.2
4.8	319.5	0.0	0.0	0.0	0.5	0.0	0.0
2147483504	0.2	0.2	5.0	0.0	145.4	0.2	0.2
5.0	145.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483505	0.4	0.4	11.7	0.0	339.3	0.4	0.4
11.7	339.6	0.0	0.0	0.0	-0.2	0.0	0.0
2147483506	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483507	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483508	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483510	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483511	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483512	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483513	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483517	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483518	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483519	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483520	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483521	0.0	0.0	0.0	0.0	0.0	0.0	0.0



2147483562	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483563	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483564	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483565	0.1	0.1	2.8	183.7	0.1	0.1	
2.8	183.9	0.0	0.0	0.0	-0.2		
2147483566	0.0	0.0	0.0	2.7	0.0	0.0	
0.0	0.0	0.0	0.0	2.7			
2147483567	0.0	0.0	0.1	5.8	0.0	0.0	
0.0	0.0	0.0	0.1	5.8			
2147483568	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0			
2147483569	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0			
2147483572	0.3	0.3	7.6	503.6	0.3	0.3	
7.6	502.8	0.0	0.0	0.0	0.7		
2147483573	0.0	0.0	0.1	4.6	0.0	0.0	
0.1	4.6	0.0	0.0	0.0	0.0		
2147483575	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0			
2147483576	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0			
2147483577DN	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0			
2147483577DS	0.0	0.0	0.0	0.0	0.0	0.0	
0.9	60.0	0.0	0.0	-0.9	-60.0		
2147483578	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0			
2147483579	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0			
2147483580	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0			
2147483581	0.2	0.2	5.8	385.5	0.2	0.2	
5.9	390.7	0.0	0.0	-0.1	-5.2		
2147483582	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0			
2147483585	0.0	0.0	0.7	21.4	0.0	0.0	
0.7	21.4	0.0	0.0	0.0	0.0		
2147483588	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0			
2147483590	0.1	0.0	1.5	42.7	0.1	0.0	
1.5	42.7	0.0	0.0	0.0	0.0		
2147483593	0.1	0.1	2.4	68.9	0.1	0.1	
2.4	69.0	0.0	0.0	0.0	0.0		
2147483595	0.7	0.7	20.0	718.0	0.7	0.7	
20.0	719.4	0.0	0.0	0.0	-1.5		
2147483596	0.1	0.1	2.1	60.2	0.1	0.1	
2.1	61.7	0.0	0.0	-0.1	-1.5		
2147483599	0.4	0.4	12.8	847.2	0.4	0.4	
12.8	847.5	0.0	0.0	0.0	-0.3		
2147483600	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0			
2147483601	0.0	0.0	0.6	22.4	0.0	0.0	
0.6	22.4	0.0	0.0	0.0	0.0		
2147483603	0.0	0.0	1.1	69.6	0.0	0.0	
1.1	69.9	0.0	0.0	0.0	-0.2		
2147483605	0.0	0.0	0.0	0.0	0.0	0.0	



0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483606	0.0	0.0	0.5	32.0	0.0	0.0	0.0
0.5	31.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	2147483608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483610	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483612	0.8	0.8	23.1	830.1	0.8	0.8	0.8
23.1	830.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	2147483615	0.1	0.1	2.6	93.9	0.1	0.1	0.1
2.6	93.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483617	0.0	0.0	0.2	14.1	0.0	0.0	0.0
0.2	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483618	0.1	0.1	2.9	190.7	0.1	0.1	0.1
2.9	191.4	0.0	0.0	0.0	-0.7	0.0	0.0	0.0
	2147483619	0.1	0.1	1.9	124.5	0.1	0.1	0.1
1.9	124.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
	2147483621	0.0	0.0	0.2	15.7	0.0	0.0	0.0
0.2	15.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0
	2147483622	0.0	0.0	0.2	15.4	0.0	0.0	0.0
0.2	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483626	0.7	0.7	20.4	730.7	0.7	0.7	0.7
20.3	726.7	0.0	0.0	0.1	4.0	0.0	0.0	0.0
	2147483627	0.0	0.0	0.5	16.2	0.0	0.0	0.0
0.5	16.6	0.0	0.0	0.0	-0.4	0.0	0.0	0.0
	2147483630	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483631	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2.8	0.0	0.0	0.0	-2.8	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	4.8	0.0	0.0	-0.2	-4.8	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	16.4	0.0	0.0	-0.2	-16.4	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	1.8	1.8	1.8
53.7	1,929.0	-1.8	-1.8	-53.7	-1,929.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	14.2	0.0	0.0	-0.2	-14.2	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	24.9	0.0	0.0	-0.9	-24.9	0.0	0.0	0.0
	2147483597	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.7	19.6	0.0	0.0	-0.7	-19.6	0.0	0.0	0.0
	2147483633	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	25.2	0.0	0.0	-0.9	-25.2	0.0	0.0	0.0
	2147483637	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1.9	53.8	-0.1	-0.1	-1.9	-53.8	0.0	0.0	0.0
	2147483641	0.0	0.0	0.0	0.0	0.1	0.1	0.1
1.9	53.8	-0.1	-0.1	-1.9	-53.8	0.0	0.0	0.0
	2147483644	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	32.3	0.0	0.0	-0.9	-32.3	0.0	0.0	0.0
	2147483645	0.0	0.0	0.0	0.0	0.7	0.7	0.7
20.8	747.5	-0.7	-0.7	-20.8	-747.5	0.0	0.0	0.0
	2147483646	0.0	0.0	0.0	0.0	0.1	0.1	0.1
3.6	130.6	-0.1	-0.1	-3.6	-130.6	0.0	0.0	0.0
	2147483647	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.7	20.9	0.0	0.0	-0.7	-20.9	0.0	0.0	0.0
	Total	40.8	39.8	1,192.0	68,892.0	40.4	39.5	39.5

1,182.3    65,735.9            0.4    0.3    9.7    3,156.1

Costs and benefits discounted to 2011 in multiples of a thousand euros.

[Section 3]      Combined Link and Junction Collision Rates

Link Name	*----- Collision Rate -----*	
	*      2030	2045    *
897	0.387882	0.364630
900	0.387882	0.364630
901	0.387882	0.364630
906	0.000000	0.000000
923	0.132426	0.123735
1495	0.132426	0.123735
1497	0.132426	0.123735
1499	0.132426	0.123735
1504	0.132426	0.123735
1505	0.132426	0.123735
1506	0.132426	0.123735
1515	0.057490	0.053798
1590	0.132426	0.123735
1591	0.132426	0.123735
44747	0.000000	0.000000
45876	0.000000	0.000000
48840	0.000000	0.000000
48953	0.000000	0.000000
49089	0.387882	0.364630
49185	0.387882	0.364630
49353	0.000000	0.000000
49552	0.000000	0.000000
49560	0.000000	0.000000
49630	0.000000	0.000000
49684	0.132426	0.123735
49717	0.000000	0.000000
49842	0.000000	0.000000
50060	0.387882	0.364630
50401	0.387882	0.364630
50515	0.000000	0.000000
50542	0.000000	0.000000
50600	0.000000	0.000000
50648	0.132426	0.123735
50653	0.387882	0.364630
50686	0.387882	0.364630
554437085	0.000000	0.000000
554437089	0.000000	0.000000
554445417	0.000000	0.000000
554445421	0.000000	0.000000
554445424	0.000000	0.000000
554445434	0.000000	0.000000
554445603	0.387882	0.364630
554445605	0.387882	0.364630
554445606	0.387882	0.364630
554445611	0.387882	0.364630
554445616	0.000000	0.000000
554445660	0.387882	0.364630

554445681	0.387882	0.364630
554451601	0.000000	0.000000
554451604	0.000000	0.000000
554451606	0.000000	0.000000
554451619	0.000000	0.000000
554451621	0.000000	0.000000
554469301	0.000000	0.000000
554469376	0.000000	0.000000
554469377	0.000000	0.000000
554469379	0.387882	0.364630
554469380	0.387882	0.364630
554469383	0.387882	0.364630
554469386	0.387882	0.364630
554469390	0.132426	0.123735
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554476251	0.000000	0.000000
554476254	0.000000	0.000000
554476255	0.000000	0.000000
554476258	0.000000	0.000000
554476263	0.000000	0.000000
554476268	0.000000	0.000000
554476273	0.000000	0.000000
554476275	0.000000	0.000000
554476276	0.000000	0.000000
554476314	0.000000	0.000000
554476317	0.000000	0.000000
554476318	0.000000	0.000000
554476321	0.000000	0.000000
554476331	0.000000	0.000000
554476332	0.000000	0.000000
554476337	0.000000	0.000000
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554476344	0.000000	0.000000
554476347	0.000000	0.000000
554478297	0.000000	0.000000
554478964	0.000000	0.000000
554478965	0.000000	0.000000
554479189	0.132426	0.123735
554479190	0.132426	0.123735
554499930	0.000000	0.000000
554499931	0.000000	0.000000
554499943	0.000000	0.000000
559752177	0.000000	0.000000
562717850	0.000000	0.000000
578082733	0.000000	0.000000
578088741	0.000000	0.000000
587814444	0.387882	0.364630
587814449	0.387882	0.364630
587814450	0.387882	0.364630
587814454	0.000000	0.000000
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587814797	0.000000	0.000000
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587815287	0.000000	0.000000
587815295	0.387882	0.364630
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587815773	0.387882	0.364630
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2147483201	0.000000	0.000000
2147483202	0.132426	0.123735
2147483206	0.132426	0.123735
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2147483208	0.132426	0.123735

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2147483219	0.000000	0.000000
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2147483241	0.132426	0.123735
2147483242	0.132426	0.123735
2147483243	0.132426	0.123735
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2147483254	0.000000	0.000000
2147483256	0.000000	0.000000
2147483258	0.000000	0.000000
2147483260	0.000000	0.000000
2147483264	0.000000	0.000000
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2147483270	0.000000	0.000000
2147483271	0.000000	0.000000
2147483272	0.000000	0.000000
2147483273	0.000000	0.000000
2147483274	0.132426	0.123735
2147483275	0.132426	0.123735
2147483278	0.132426	0.123735
2147483280	0.132426	0.123735
2147483281	0.132426	0.123735
2147483282	0.132426	0.123735
2147483283	0.132426	0.123735
2147483284	0.132426	0.123735
2147483285	0.132426	0.123735
2147483286	0.132426	0.123735
2147483290	0.069539	0.064975

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2147483300	0.387882	0.364630
2147483303	0.132426	0.123735
2147483304	0.132426	0.123735
2147483305	0.069539	0.064975
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2147483325	0.132426	0.123735
2147483326	0.132426	0.123735
2147483327DN	0.069539	0.064975
2147483327DS	0.069539	0.064975
2147483330	0.132426	0.123735
2147483331DN	0.000000	0.000000
2147483331DS	0.132426	0.123735
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2147483335DN	0.000000	0.000000
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2147483336	0.132426	0.123735
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2147483338	0.132426	0.123735
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2147483340	0.000000	0.000000
2147483341	0.132426	0.123735
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2147483362	0.132426	0.123735
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2147483373	0.132426	0.123735
2147483374	0.132426	0.123735

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2147483377	0.132426	0.123735
2147483378	0.000000	0.000000
2147483380	0.000000	0.000000
2147483383DN	0.069539	0.064975
2147483383DS	0.069539	0.064975
2147483387	0.132426	0.123735
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2147483393	0.000000	0.000000
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2147483416	0.000000	0.000000
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2147483423DS	0.069539	0.064975
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2147483426DN	0.069539	0.064975
2147483426DS	0.069539	0.064975
2147483428DN	0.000000	0.000000
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2147483472	0.132426	0.123735
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2147483474	0.000000	0.000000
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2147483482	0.000000	0.000000
2147483483	0.000000	0.000000
2147483484	0.000000	0.000000
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2147483486	0.000000	0.000000
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2147483488	0.132426	0.123735
2147483489	0.132426	0.123735
2147483490	0.132426	0.123735
2147483491	0.132426	0.123735
2147483492	0.132426	0.123735
2147483493	0.000000	0.000000
2147483494	0.132426	0.123735
2147483495	0.387882	0.364630
2147483497	0.387882	0.364630
2147483498	0.387882	0.364630
2147483499	0.132426	0.123735
2147483501	0.132426	0.123735
2147483502	0.132426	0.123735
2147483504	0.387882	0.364630
2147483505	0.387882	0.364630

2147483506	0.000000	0.000000
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2147483519	0.000000	0.000000
2147483520	0.000000	0.000000
2147483521	0.000000	0.000000
2147483522	0.000000	0.000000
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2147483528	0.000000	0.000000
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2147483543	0.132426	0.123735
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2147483548	0.000000	0.000000
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2147483552	0.132426	0.123735
2147483553	0.132426	0.123735
2147483554	0.132426	0.123735
2147483555DN	0.069539	0.064975
2147483555DS	0.069539	0.064975
2147483556DN	0.069539	0.064975
2147483556DS	0.069539	0.064975
2147483557	0.132426	0.123735
2147483558	0.387882	0.364630
2147483561	0.132426	0.123735
2147483562	0.132426	0.123735
2147483563	0.132426	0.123735
2147483564	0.000000	0.000000
2147483565	0.132426	0.123735
2147483566	0.132426	0.123735
2147483567	0.132426	0.123735
2147483568	0.132426	0.123735
2147483569	0.000000	0.000000
2147483572	0.132426	0.123735
2147483573	0.132426	0.123735
2147483575	0.000000	0.000000
2147483576	0.000000	0.000000
2147483577DN	0.000000	0.000000
2147483577DS	0.132426	0.123735
2147483578	0.000000	0.000000
2147483579	0.000000	0.000000
2147483580	0.000000	0.000000
2147483581	0.132426	0.123735

2147483582	0.000000	0.000000
2147483585	0.387882	0.364630
2147483588	0.000000	0.000000
2147483590	0.387882	0.364630
2147483593	0.387882	0.364630
2147483595	0.057490	0.053798
2147483596	0.387882	0.364630
2147483599	0.132426	0.123735
2147483600	0.000000	0.000000
2147483601	0.057490	0.053798
2147483603	0.132426	0.123735
2147483605	0.132426	0.123735
2147483606	0.132426	0.123735
2147483608	0.000000	0.000000
2147483610	0.000000	0.000000
2147483612	0.057490	0.053798
2147483615	0.057490	0.053798
2147483617	0.132426	0.123735
2147483618	0.132426	0.123735
2147483619	0.132426	0.123735
2147483621	0.132426	0.123735
2147483622	0.132426	0.123735
2147483626	0.057490	0.053798
2147483627	0.057490	0.053798
2147483630	0.000000	0.000000
2147483631	0.132426	0.123735
1	0.132426	0.123735
2	0.387882	0.364630
3	0.132426	0.123735
4	0.057490	0.053798
5	0.132426	0.123735
6	0.387882	0.364630
2147483597	0.387882	0.364630
2147483633	0.387882	0.364630
2147483637	0.387882	0.364630
2147483641	0.387882	0.364630
2147483644	0.057490	0.053798
2147483645	0.057490	0.053798
2147483646	0.057490	0.053798
2147483647	0.387882	0.364630

Collision rates are in collisions per million vehicle kilometres.

[Section 4] Input Data - Scheme File

Scheme Name  
N25 Glenmore to Waterford

Years Subsection  
Current Year 2020  
Base Year 2020  
Without-Scheme  
Year 1 2030  
Year 2 2045  
Year 3 2060  
Year 4 0

Year 5	0
With-Scheme	
Year 1	2030
Year 2	2045
Year 3	2060
Year 4	0
Year 5	0

Scheme Opening Year 2030

Link and Junction Combined Input Section

Combined Classification Subsection

Link Name	Road Type	Length (km)	Speed Limit (km/h)	Error/Warning Summary (!=Error, #=Warning)
897	3	0.06	50	
900	3	0.08	50	
901	3	0.13	50	
906	11	0.55	65	#Unusual speed limit (65) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link.
923	2	1.17	100	
1495	2	1.12	70	
1497	2	0.88	70	
1499	2	0.32	70	
1504	2	0.22	70	
1505	2	0.68	100	
1506	2	0.79	100	
1515	4	5.69	100	
1590	2	0.65	70	
1591	2	0.25	70	
44747	4	0.10	40	!Speed limit is too low for a fast dual carriageway.
45876	4	0.04	40	!Speed limit is too low for a fast dual carriageway.
48840	2	0.42	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
48953	4	0.44	50	!Speed limit is too low for a fast dual carriageway.
49089	3	0.15	60	
49185	3	0.70	50	
49353	3	0.87	80	!Speed limit is high. Care should be taken using the results of the calculation for this link.
49552	3	0.31	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
49560	3	0.50	80	!Speed limit is high. Care should be taken using the results of the calculation for this link.
49630	2	0.37	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
49684	2	0.45	80	
49717	3	0.23	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
49842	2	0.23	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
50060	3	0.23	50	
50401	3	1.87	50	
50515	3	0.18	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
50542	3	0.28	40	



50600	2	0.17	60	!Speed limit is low. Care
should be taken using				the results of the calculation for this link.
50648	2	4.01	80	
50653	3	0.16	60	
50686	3	0.41	60	
554437085	3	0.05	40	
554437089	2	0.08	60	!Speed limit is low. Care
should be taken using				the results of the calculation for this link.
554445417	4	0.07	40	!Speed limit is too low for a
fast dual carriageway.				
554445421	3	0.04	40	
554445424	3	0.06	40	
554445434	3	0.03	40	
554445603	3	0.24	50	
554445605	3	0.09	50	
554445606	3	0.10	50	
554445611	3	0.05	50	
554445616	3	0.11	30	#Speed limit is low. Care
should be taken using				the results of the calculation for this link.
554445660	3	0.11	50	
554445681	3	0.03	60	
554451601	3	0.07	20	#Speed limit is low. Care
should be taken using				the results of the calculation for this link.
554451604	3	0.13	10	#Speed limit is low. Care
should be taken using				the results of the calculation for this link.
554451606	3	0.02	20	#Speed limit is low. Care
should be taken using				the results of the calculation for this link.
554451619	3	0.01	10	#Speed limit is low. Care
should be taken using				the results of the calculation for this link.
554451621	3	0.04	20	#Speed limit is low. Care
should be taken using				the results of the calculation for this link.
554469301	3	0.08	40	
554469376	3	0.12	40	
554469377	2	0.04	50	!Speed limit is low. Care
should be taken using				the results of the calculation for this link.
554469379	3	0.10	50	
554469380	3	0.07	50	
554469383	3	0.09	50	
554469386	3	0.06	50	
554469390	2	0.08	100	
554476250	3	0.07	40	
554476251	3	0.17	40	
554476254	3	0.05	40	
554476255	3	0.13	40	
554476258	3	0.04	40	
554476263	3	0.08	40	
554476268	3	0.01	40	
554476273	3	0.04	40	
554476275	3	0.12	40	
554476276	3	0.04	40	
554476314	3	0.08	40	
554476317	3	0.06	40	
554476318	4	0.03	40	!Speed limit is too low for a
fast dual carriageway.				
554476321	4	0.01	40	!Speed limit is too low for a
fast dual carriageway.				
554476331	4	0.04	40	!Speed limit is too low for a
fast dual carriageway.				
554476332	3	0.04	40	

554476337	3	0.07	40	
554476339	3	0.05	40	
554476344	3	0.02	40	
554476347	3	0.01	40	
554478297	3	0.08	40	
554478964	3	0.07	40	
554478965	3	0.03	40	
554479189	2	0.17	70	
554479190	2	0.04	70	
554499930	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554499931	2	0.03	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554499943	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
559752177	3	0.39	40	
562717850	3	0.23	40	
578082733	2	0.09	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
578088741	2	0.06	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814444	3	0.09	60	
587814449	3	0.10	60	
587814450	3	0.03	60	
587814454	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814456	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814797	3	0.19	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587814807	10	0.01	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814808	3	0.05	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587814809	3	0.04	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587814811	4	0.04	10	!Speed limit is too low for a
fast dual carriageway.				
587814819	3	0.02	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814822	3	0.05	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814825	3	0.03	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814826	3	0.03	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587815160	3	0.13	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587815163	3	0.03	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587815170	3	0.30	23	#Unusual speed limit (23) is

not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815171 3 0.15 23 #Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815173 3 0.02 23 #Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815174 3 0.12 23 #Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815269 3 0.09 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815271 3 0.13 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815272 3 0.09 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815273 3 0.19 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815274 3 0.08 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815275 3 0.07 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815277 3 0.12 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815278 3 0.04 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815280 3 0.13 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815285 3 0.05 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815287 3 0.06 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815295 3 0.44 50

587815303 3 0.02 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815773 3 0.04 50

587815780 3 0.16 50

587815785 2 0.07 25 #Unusual speed limit (25) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. !Speed limit is low. Care should be taken using the results of the calculation for this link.

587815787 3 0.02 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815790 3 0.14 40

587815791 3 0.16 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815792 3 0.20 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815795	3	0.04	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587815802	3	0.04	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587815824	3	0.04	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816038	3	0.20	40		
587816039	3	0.08	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816041	3	0.02	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816057	3	0.06	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816058	3	0.02	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816063	3	0.05	50		
587816177	3	0.02	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816186	3	0.08	40		
587816709	3	0.10	50		
587816710	3	0.02	50		
587816711	3	0.22	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816712	3	0.16	40		
587816713	3	0.04	50		
587816714	3	0.34	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816718	3	0.19	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816721	3	0.08	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816722	3	0.02	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816725	3	0.04	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816971	3	0.05	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816972	3	0.12	40		
587816973	3	0.10	40		
587816974	3	0.19	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816975	4	0.07	30	!Speed limit is	too low for a
fast dual carriageway.					
587816978	4	0.06	30	!Speed limit is	too low for a
fast dual carriageway.					
587816980	4	0.06	30	!Speed limit is	too low for a
fast dual carriageway.					
587816981	4	0.06	30	!Speed limit is	too low for a
fast dual carriageway.					
587816984	10	0.04	10	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816985	3	0.09	40		
587816986	3	0.29	20	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816988	3	0.25	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587816989	3	0.33	30	#Speed limit is	low. Care
should be taken using	the results	of the	calculation	for this link.	
587817206	3	0.06	20	#Speed limit is	low. Care

should be taken using the results of the calculation for this link.

587817207	3	0.48	40	
587817216	3	0.03	40	
587817217	3	0.16	40	
587817219	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817221	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817223	3	0.08	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817225	4	0.07	30	!Speed limit is too low for a
fast dual carriageway.				
587817226	4	0.06	30	!Speed limit is too low for a
fast dual carriageway.				
587817227	4	0.10	30	!Speed limit is too low for a
fast dual carriageway.				
587817228	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817230	3	0.06	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817231	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817234	4	0.02	30	!Speed limit is too low for a
fast dual carriageway.				
587817269	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817271	3	0.03	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817272	3	0.07	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817274	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817275	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817314	5	0.12	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817316	3	0.07	25	#Unusual speed limit (25) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587817318	3	0.01	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817319	3	0.10	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817447	3	0.09	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587817448	3	0.08	25	#Unusual speed limit (25) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587817453	3	0.05	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015491	3	0.02	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015493	3	0.01	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015494	3	0.00	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589626976	2	0.13	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

590481852	3	0.05	40	
590481853	3	0.05	40	
590481868	3	0.06	40	
590522243	3	0.06	50	
590522244	3	0.02	50	
590522245	3	0.05	40	
1139400830	3	0.35	40	
1148054292	3	0.62	40	
1164076472	3	0.12	40	
1165618763	3	0.20	40	
1167345578	2	0.27	70	
1176181443	3	0.13	40	
1176242672	2	0.32	70	
1186121768	3	0.39	40	
2122362473	4	0.14	40	!Speed limit is too low for a

fast dual carriageway.

2147474988	2	3.36	80	
2147475007	2	0.07	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147475798	2	1.12	70	
2147475799	2	0.65	70	
2147475801	2	0.61	80	
2147475949	2	0.73	70	
2147481733	2	0.88	70	
2147481754	2	0.77	70	
2147481911	2	0.89	100	
2147481977	2	3.42	70	
2147482906	3	0.06	30	#Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147482907	3	0.08	30	#Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147482908	2	0.86	80	
2147482912	2	0.40	40	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147482916	3	0.07	50	
2147482917	3	0.08	50	
2147482919	2	1.01	100	
2147482922	2	1.60	80	
2147482923	2	0.20	80	
2147482924	2	0.16	80	
2147482925	2	1.59	40	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147482926	2	1.00	40	!Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147482927	2	0.07	70	
2147482928	2	0.03	80	
2147482930	2	0.43	80	
2147482931	2	1.06	80	
2147482932	2	1.24	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147482933	2	1.46	30	!Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147482937	3	0.17	40	
2147482940	3	0.09	30	#Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147482941	3	0.42	40	
2147482942	3	0.02	40	
2147482943	2	2.76	50	!Speed limit is low. Care

should be taken using the results of the calculation for this link.				
2147482944	2	1.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482945	2	1.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482946	2	1.06	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482947	2	1.52	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482949	2	2.39	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482950	2	0.75	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482951	2	0.31	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482952	2	0.28	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482953	2	0.25	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482954	2	1.53	70	
2147482957	2	0.05	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482958	2	2.45	70	
2147482959	2	1.66	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482960	2	3.36	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482963	2	1.90	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. !Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
2147482964	2	0.49	80	
2147482966	2	1.01	25	#Unusual speed limit (25) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. !Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
2147482967	2	0.16	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482968	2	0.73	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482969	2	0.57	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482970	2	0.81	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482973	3	0.11	60	
2147482974	3	0.08	60	
2147482975	2	2.53	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482976	2	2.64	100	
2147482977	2	3.02	100	
2147482979	2	2.38	70	
2147482980	2	1.98	70	
2147482981	2	1.54	70	
2147482982	2	0.22	70	
2147482985	2	0.15	100	
2147482989	2	3.07	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482990	2	1.90	70	
2147482992	2	0.06	100	

2147482993	2	1.37	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482994	2	2.04	100	
2147482995	2	0.62	100	
2147482996	2	1.93	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482997	2	0.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482998	2	0.62	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482999	2	0.28	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483000	2	0.42	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483001	2	0.55	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483002	2	2.37	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483003	2	1.43	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483004	2	1.66	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483005	2	0.92	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483006	2	1.84	100	
2147483007	2	0.07	100	
2147483008	2	1.29	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483009	2	0.70	80	
2147483011	2	0.27	80	
2147483012	2	1.67	80	
2147483015	2	0.11	80	
2147483016	2	0.21	80	
2147483017	2	2.23	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation for this link.				
2147483019	2	9.88	80	
2147483020	2	1.23	80	
2147483021	2	1.14	100	
2147483024	2	0.28	100	
2147483025	2	0.64	100	
2147483026	2	0.21	100	
2147483027	2	0.75	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483028	2	0.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483029	2	1.00	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483030	2	1.27	70	
2147483031	2	0.51	70	
2147483032	2	0.16	70	
2147483033	2	0.30	70	
2147483034	2	2.85	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483035	2	0.89	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483037	2	0.48	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483038	2	0.72	60	!Speed limit is low. Care



should be taken using the results of the calculation for this link.					
2147483039	2	0.32	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483040	2	0.52	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483041	2	0.27	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483042	2	0.31	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483043	2	2.19	70		
2147483044	2	0.72	70		
2147483045	2	0.57	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483046	2	1.00	80		
2147483047	2	0.43	80		
2147483048	2	1.51	80		
2147483049	2	2.16	80		
2147483050	2	0.05	80		
2147483051	2	1.32	70		
2147483052	2	1.11	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483054	2	0.82	80		
2147483055	2	0.76	80		
2147483058	2	0.26	80		
2147483060	2	0.14	80		
2147483061	2	3.20	80		
2147483062	2	3.79	80		
2147483063	2	0.57	100		
2147483066	2	0.21	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483067	3	0.03	40		
2147483071	2	0.04	100		
2147483073	2	0.24	100		
2147483074	2	1.50	100		
2147483075	2	1.26	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483076	2	1.66	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483077	2	1.31	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483078	2	0.90	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483079	2	0.69	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483080	2	0.32	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483081	2	0.70	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483083	2	0.04	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483084	2	3.65	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483085	2	0.23	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483086	2	0.08	100		
2147483088	2	0.17	100		
2147483089	2	0.32	100		
2147483090	2	0.02	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					

2147483091	2	0.33	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483092	2	0.77	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483093	2	1.54	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483094	2	0.89	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483095	2	1.40	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483096	2	0.73	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483097	2	1.03	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483098	2	0.68	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483099	2	0.19	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483101	2	0.64	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483102	2	0.45	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483103	2	0.46	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483104	2	0.61	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483105	2	0.59	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483106	2	1.24	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483107	2	1.13	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483108	2	0.55	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483109	2	0.75	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483110	2	0.14	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483111	2	0.93	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483112	2	0.28	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483113	2	0.20	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483114	2	0.52	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483115	2	0.95	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483117	2	1.74	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483118	2	1.57	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483119	2	0.10	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483121	2	1.29	70		
2147483122	2	0.93	70		
2147483123	2	0.75	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483124	2	1.14	70		

2147483125	2	0.60	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483126	2	1.41	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483127	2	1.32	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483128	2	0.26	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483129	2	1.48	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483131	2	0.34	80		
2147483132	2	0.88	80		
2147483134	2	0.72	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483135	2	0.25	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483136	2	0.54	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483137	2	0.64	70		
2147483139	2	0.20	70		
2147483141	2	1.24	70		
2147483143	2	4.98	70		
2147483145	2	1.74	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483146	2	1.51	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483147	2	1.06	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483148	2	0.21	70		
2147483149	2	0.22	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483150	2	0.36	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483151	2	0.20	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483152	2	0.02	70		
2147483153	2	0.95	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483154	2	0.82	70		
2147483155	2	0.16	70		
2147483156	2	0.58	70		
2147483157	2	2.22	70		
2147483158	2	0.05	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483159	2	0.18	70		
2147483161	2	0.53	70		
2147483162	2	1.20	70		
2147483163	2	1.38	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483164	2	1.08	70		
2147483165	2	1.16	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483166	2	0.18	70		
2147483168	2	0.17	70		
2147483169	2	1.54	70		
2147483170	2	0.46	70		
2147483171	2	1.19	70		
2147483172	2	1.29	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	

2147483173	2	1.38	40	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483174	2	1.73	40	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483175	2	8.21	75	#Unusual speed limit (75) is
not multiple of	10km/h.	Care should be taken	using the results of the calculation	for this link.
2147483178	2	0.64	80	
2147483179	2	0.47	80	
2147483180	2	3.31	80	
2147483181	2	1.11	80	
2147483182	2	2.06	80	
2147483183	2	3.32	50	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483184	2	1.62	70	
2147483185	2	1.28	70	
2147483186	2	0.96	70	
2147483187	2	1.46	70	
2147483188	2	0.74	70	
2147483189	2	0.90	50	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483190	2	0.39	60	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483191	2	1.50	60	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483192	2	0.21	70	
2147483193	2	0.31	80	
2147483194	2	0.77	80	
2147483195	2	0.07	80	
2147483196	2	0.20	80	
2147483197	2	0.40	70	
2147483198	2	0.21	70	
2147483199	2	1.80	75	#Unusual speed limit (75) is
not multiple of	10km/h.	Care should be taken	using the results of the calculation	for this link.
2147483200	2	0.52	75	#Unusual speed limit (75) is
not multiple of	10km/h.	Care should be taken	using the results of the calculation	for this link.
2147483201	2	1.68	60	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483202	2	0.91	70	
2147483206	2	1.82	70	
2147483207	2	0.22	70	
2147483208	2	0.24	70	
2147483209	2	1.69	70	
2147483210	2	0.24	70	
2147483211	2	1.54	40	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483212	2	1.53	40	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483213	2	0.65	40	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483214	2	1.03	50	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483215	2	0.22	60	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483216	2	1.21	60	!Speed limit is low. Care
should be taken	using	the results	of the calculation	for this link.
2147483217	2	0.48	70	

2147483218	2	0.18	70	
2147483219	2	1.73	65	#Unusual speed limit (65) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. !Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
2147483222	2	0.02	70	
2147483224	2	0.04	70	
2147483226	2	1.42	70	
2147483227	2	0.24	70	
2147483229	2	1.72	70	
2147483230	2	0.41	70	
2147483231	2	1.75	70	
2147483234	2	13.41	70	
2147483236	2	1.52	70	
2147483237	2	6.67	70	
2147483238	2	0.26	70	
2147483239	2	0.26	70	
2147483240	2	0.48	70	
2147483241	2	1.03	70	
2147483242	2	1.89	70	
2147483243	2	1.78	70	
2147483244	2	1.25	70	
2147483245	2	1.01	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483246	2	0.46	70	
2147483247	2	0.43	70	
2147483248	2	1.11	70	
2147483249	2	0.29	70	
2147483250	2	1.00	70	
2147483251	2	1.14	70	
2147483252	2	1.24	70	
2147483254	2	0.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483256	2	0.55	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483258	2	1.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483260	2	0.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483264	2	0.66	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483265	2	0.34	70	
2147483266	2	1.16	70	
2147483267	2	3.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483270	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483271	2	0.69	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483272	2	0.23	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483273	2	1.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483274	2	0.35	70	
2147483275	2	7.92	70	
2147483278	2	0.81	70	
2147483280	2	0.11	80	
2147483281	2	0.26	80	
2147483282	2	1.88	80	

2147483283	2	0.43	80	
2147483284	2	0.13	80	
2147483285	2	0.87	80	
2147483286	2	1.88	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483290	11	0.26	100	
2147483297	11	0.15	50	
2147483300	3	0.04	50	
2147483303	2	0.72	90	
2147483304	2	0.20	100	
2147483305	11	0.69	100	
2147483306	11	0.25	60	
2147483308	2	0.73	100	
2147483309	2	0.87	100	
2147483311	2	0.56	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483312	2	0.14	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483316	2	0.56	70	
2147483319	2	2.13	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483320	2	0.08	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483321	2	0.07	80	
2147483323	2	1.44	70	
2147483325	2	0.55	70	
2147483326	2	0.39	70	
2147483327DN	11	0.48	100	
2147483327DS	11	0.48	80	
2147483330	2	2.37	70	
2147483331DN	2	0.10	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483331DS	2	0.10	70	
2147483333	2	0.18	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483334	2	0.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483335DN	2	0.95	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483335DS	2	0.95	70	
2147483336	2	0.57	70	
2147483337	2	0.09	70	
2147483338	2	1.01	70	
2147483339	2	2.08	70	
2147483340	2	1.31	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483341	2	1.11	80	
2147483342	2	0.19	80	
2147483343	2	0.89	80	
2147483344	2	0.59	80	
2147483345	2	0.22	80	
2147483346	2	1.92	80	
2147483347	2	1.15	80	
2147483348	2	0.32	80	
2147483349	2	0.94	80	
2147483350	2	1.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483352	2	0.60	70	

2147483355	2	1.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483356	2	0.80	70	
2147483357	2	1.31	80	
2147483358	2	0.37	80	
2147483359	2	1.17	70	
2147483360	2	0.23	70	
2147483362	2	0.20	70	
2147483363	2	1.76	70	
2147483364	2	0.77	70	
2147483365	2	0.78	70	
2147483366	2	1.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483367	2	0.92	80	
2147483368	2	0.70	80	
2147483369	2	0.61	80	
2147483371	2	0.29	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483373	2	0.75	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation for this link.				
2147483374	2	0.84	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation for this link.				
2147483375	2	0.40	70	
2147483376	2	0.93	70	
2147483377	2	0.45	70	
2147483378	2	0.14	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483380	2	0.18	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483383DN	11	1.12	100	
2147483383DS	11	1.12	80	
2147483387	2	0.51	80	
2147483388	2	0.37	70	
2147483389	2	0.16	70	
2147483390	2	0.82	70	
2147483391	2	0.06	70	
2147483392	2	0.19	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483393	2	0.50	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483394	2	0.38	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483395	2	0.34	70	
2147483396	2	0.43	70	
2147483397	2	0.39	70	
2147483398	2	0.86	70	
2147483400	2	0.05	70	
2147483401	2	1.73	70	
2147483402	2	0.34	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483403	2	0.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483404	2	0.70	80	
2147483405	2	0.02	80	
2147483406	2	0.63	100	
2147483408	2	0.54	80	
2147483409	2	1.32	80	

2147483410	2	0.29	80	
2147483411	2	2.93	80	
2147483412	2	0.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483413	2	0.05	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483414	2	1.65	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483415	2	0.55	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483416	2	0.07	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483417DN	11	0.42	100	
2147483417DS	11	0.08	80	
2147483418	11	1.04	100	
2147483419	2	1.07	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483420	2	0.77	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483421	2	0.36	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483423DN	11	1.79	100	
2147483423DS	11	1.79	80	
2147483424	2	1.77	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483425	2	1.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483426DN	11	1.06	100	
2147483426DS	11	1.06	80	
2147483428DN	2	0.34	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483428DS	2	0.34	70	
2147483429	2	2.00	70	
2147483431	2	0.48	70	
2147483432	2	0.84	80	
2147483433	2	0.61	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483434	2	0.90	70	
2147483435	2	0.67	70	
2147483436	2	0.15	70	
2147483437	2	0.66	70	
2147483438	2	1.47	70	
2147483439	2	1.22	70	
2147483440	2	0.54	70	
2147483441	2	0.05	70	
2147483442	2	1.26	70	
2147483443	2	1.98	70	
2147483444	2	0.30	70	
2147483445	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483446	2	0.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483447	2	0.95	80	
2147483448	2	2.19	70	
2147483449	2	0.22	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483450	2	0.10	70	
2147483451	2	0.25	70	
2147483452	2	0.06	50	!Speed limit is low. Care



should be taken using the results of the calculation for this link.

2147483453	2	0.10	70	
2147483454	2	1.29	70	
2147483455	2	1.25	70	
2147483456	2	2.21	70	
2147483457	2	1.67	70	
2147483458	2	1.13	70	
2147483459	2	1.07	70	
2147483460	2	0.10	70	
2147483461	2	0.49	70	
2147483464	2	1.01	70	
2147483465	2	1.25	70	
2147483466	2	0.86	70	
2147483468	2	0.56	70	
2147483469	2	0.29	70	
2147483471	2	0.71	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483472	2	0.42	70	
2147483473	2	0.11	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483474	2	0.43	60	!Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483475	2	0.30	70	
2147483476	2	0.44	70	
2147483477	2	0.14	70	
2147483478	2	0.63	70	
2147483479	2	0.27	70	
2147483480	2	0.80	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483481	2	0.34	70	
2147483482	2	0.86	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483483	2	0.22	60	!Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483484	2	0.31	60	!Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483485	2	0.48	60	!Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483486	2	0.32	30	!Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483487	2	1.08	70	
2147483488	2	0.26	70	
2147483489	2	1.12	70	
2147483490	2	1.58	70	
2147483491	2	2.24	70	
2147483492	2	1.36	70	
2147483493	2	0.58	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483494	2	0.17	70	
2147483495	3	0.06	60	
2147483497	3	0.12	50	
2147483498	3	0.13	50	
2147483499	2	0.40	100	
2147483501	2	0.23	100	
2147483502	2	0.36	100	
2147483504	3	0.14	50	
2147483505	3	0.32	50	
2147483506	2	0.03	50	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483507	3	0.04	40	
2147483508	3	0.02	40	
2147483510	3	0.21	40	
2147483511	3	0.05	40	
2147483512	3	0.08	40	
2147483513	3	0.29	40	
2147483517	3	0.05	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483518	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483519	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483520	3	0.02	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483521	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483522	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483523	3	0.09	50	
2147483524	3	0.11	50	
2147483528	3	0.11	40	
2147483531	3	0.08	40	
2147483532	3	0.15	40	
2147483533	3	0.04	40	
2147483534	3	0.39	40	
2147483537	3	0.17	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483540	4	0.05	20	!Speed limit is too low for a
fast dual carriageway.				
2147483543	2	0.98	100	
2147483544	2	0.52	100	
2147483545	2	0.55	80	
2147483546	2	0.33	80	
2147483547	2	1.29	80	
2147483548	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483549	2	0.22	100	
2147483550	2	0.37	100	
2147483551	2	0.40	80	
2147483552	2	0.70	70	
2147483553	2	0.63	70	
2147483554	2	0.75	70	
2147483555DN	11	0.83	100	
2147483555DS	11	0.83	80	
2147483556DN	11	0.78	100	
2147483556DS	11	0.19	70	
2147483557	2	1.25	70	
2147483558	3	0.05	50	
2147483561	2	0.17	70	
2147483562	2	0.19	70	
2147483563	2	0.09	70	
2147483564	2	1.80	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483565	2	1.33	80	
2147483566	2	0.17	80	
2147483567	2	0.37	80	
2147483568	2	0.10	70	
2147483569	2	0.68	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				

2147483572	2	0.72	70	
2147483573	2	0.11	70	
2147483575	3	0.04	40	
2147483576	3	0.04	40	
2147483577DN	2	0.78	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483577DS	2	0.78	70	
2147483578	2	0.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483579	2	0.09	30	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483580	2	0.84	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483581	2	0.95	80	
2147483582	3	0.41	40	
2147483585	3	0.04	50	
2147483588	2	0.23	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483590	3	0.05	50	
2147483593	3	0.07	50	
2147483595	4	4.93	100	
2147483596	3	0.07	50	
2147483599	2	0.84	80	
2147483600	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483601	4	0.17	100	
2147483603	2	0.33	80	
2147483605	2	3.35	70	
2147483606	2	0.13	70	
2147483608	2	0.02	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483610	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483612	4	4.51	100	
2147483615	4	0.61	100	
2147483617	2	0.26	80	
2147483618	2	0.29	80	
2147483619	2	0.20	80	
2147483621	2	0.07	80	
2147483622	2	0.22	80	
2147483626	4	3.21	100	
2147483627	4	0.14	80	
2147483630	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483631	2	0.02	70	
1	2	0.10	70	
2	3	0.21	60	
3	2	0.18	70	
4	4	5.92	100	
5	2	0.24	70	
6	3	0.33	60	
2147483597	3	0.06	50	
2147483633	3	0.03	50	
2147483637	3	0.05	50	
2147483641	3	0.05	50	
2147483644	4	0.15	100	
2147483645	4	2.36	100	
2147483646	4	0.41	100	
2147483647	3	0.27	60	



1,560	1,546	0	0						
50060			9,129	10,039	10,233	10,208	0	0	10,035
10,236	10,231	0	0						
50401			3,481	3,756	3,840	3,862	0	0	3,723
3,827	3,863	0	0						
50515			1,185	1,594	1,722	1,880	0	0	1,579
1,686	1,710	0	0						
50542			918	1,302	1,414	1,570	0	0	1,277
1,377	1,400	0	0						
50600			4,162	4,561	4,704	4,730	0	0	4,561
4,704	4,730	0	0						
50648			1,162	1,310	1,344	1,344	0	0	1,310
1,344	1,344	0	0						
50653			4,060	4,610	4,760	4,806	0	0	4,624
4,782	4,816	0	0						
50686			5,104	5,614	5,865	5,896	0	0	5,705
5,911	5,932	0	0						
554437085			5,960	6,627	6,754	6,754	0	0	6,655
6,765	6,776	0	0						
554437089			8,487	9,207	9,265	9,207	0	0	9,185
9,254	9,217	0	0						
554445417			3,919	4,376	4,575	4,541	0	0	4,376
4,575	4,541	0	0						
554445421			0	0	0	0	0	0	0
0	0	0	0						
554445424			1,011	1,186	1,240	1,260	0	0	1,186
1,240	1,260	0	0						
554445434			5,245	6,028	6,220	6,243	0	0	6,032
6,215	6,246	0	0						
554445603			8,498	9,054	9,100	8,980	0	0	9,029
9,097	9,078	0	0						
554445605			7,578	8,409	8,594	8,578	0	0	8,394
8,591	8,592	0	0						
554445606			4,663	5,275	5,437	5,478	0	0	5,289
5,459	5,488	0	0						
554445611			8,753	9,938	10,262	10,288	0	0	9,999
10,328	10,362	0	0						
554445616			3,349	3,572	3,660	3,646	0	0	3,599
3,671	3,666	0	0						
554445660			7,786	8,754	8,952	8,963	0	0	8,776
8,973	9,004	0	0						
554445681			4,455	5,188	5,540	5,600	0	0	5,199
5,559	5,612	0	0						
554451601			2,585	2,611	2,637	2,632	0	0	2,639
2,643	2,626	0	0						
554451604			0	0	0	0	0	0	0
0	0	0	0						
554451606			2,585	2,611	2,637	2,632	0	0	2,639
2,643	2,626	0	0						
554451619			3,716	3,920	3,957	3,936	0	0	3,946
3,970	3,946	0	0						
554451621			2,585	2,611	2,637	2,632	0	0	2,639
2,643	2,626	0	0						
554469301			8,177	9,001	9,377	9,335	0	0	9,001
9,377	9,335	0	0						
554469376			1,402	1,554	1,582	1,571	0	0	1,554
1,582	1,571	0	0						
554469377			7,354	8,097	8,371	8,378	0	0	8,184
8,416	8,413	0	0						

554469379	8,753	9,938	10,262	10,288	0	0	9,999
10,328 10,362	0						
554469380	8,473	9,521	9,847	9,909	0	0	9,562
9,877 9,920	0						
554469383	7,104	7,933	8,096	8,109	0	0	7,956
8,123 8,155	0						
554469386	8,969	9,946	10,101	10,080	0	0	9,962
10,106 10,109	0						
554469390	8,505	9,238	9,302	9,241	0	0	9,217
9,292 9,251	0						
554476250	0	0	0	0	0	0	0
0 0	0						
554476251	0	0	0	0	0	0	0
0 0	0						
554476254	0	0	0	0	0	0	0
0 0	0						
554476255	0	0	0	0	0	0	0
0 0	0						
554476258	0	0	0	0	0	0	0
0 0	0						
554476263	0	0	0	0	0	0	0
0 0	0						
554476268	0	0	0	0	0	0	0
0 0	0						
554476273	0	0	0	0	0	0	0
0 0	0						
554476275	0	0	0	0	0	0	0
0 0	0						
554476276	0	0	0	0	0	0	0
0 0	0						
554476314	8,177	9,001	9,377	9,335	0	0	9,001
9,377 9,335	0						
554476317	0	0	0	0	0	0	0
0 0	0						
554476318	3,919	4,376	4,575	4,541	0	0	4,376
4,575 4,541	0						
554476321	3,919	4,376	4,575	4,541	0	0	4,376
4,575 4,541	0						
554476331	10,004	11,099	11,498	11,535	0	0	11,099
11,498 11,535	0						
554476332	4,470	4,814	4,975	4,993	0	0	4,810
4,981 4,989	0						
554476337	9,714	10,842	11,195	11,235	0	0	10,842
11,195 11,235	0						
554476339	9,714	10,842	11,195	11,235	0	0	10,842
11,195 11,235	0						
554476344	9,714	10,842	11,195	11,235	0	0	10,842
11,195 11,235	0						
554476347	0	0	0	0	0	0	0
0 0	0						
554478297	4,974	5,547	5,730	5,745	0	0	5,547
5,730 5,745	0						
554478964	0	0	0	0	0	0	0
0 0	0						
554478965	0	0	0	0	0	0	0
0 0	0						
554479189	2,456	2,777	2,809	2,792	0	0	2,777
2,809 2,792	0						
554479190	2,456	2,777	2,809	2,792	0	0	2,777

2,809	2,792	0	0							
	554499930		2,794	3,045	3,161	3,198	0	0		3,045
3,160	3,198	0	0							
	554499931		2,794	3,045	3,161	3,198	0	0		3,045
3,160	3,198	0	0							
	554499943		118	132	131	133	0	0		128
131	132	0	0							
	559752177		1,742	1,948	2,028	2,050	0	0		1,948
2,028	2,050	0	0							
	562717850		11,199	12,305	12,709	12,744	0	0		12,392
12,754	12,780	0	0							
	578082733		4,455	5,188	5,540	5,600	0	0		5,199
5,559	5,612	0	0							
	578088741		118	132	131	133	0	0		128
131	132	0	0							
	587814444		4,060	4,610	4,760	4,806	0	0		4,624
4,782	4,816	0	0							
	587814449		4,663	5,275	5,437	5,478	0	0		5,289
5,459	5,488	0	0							
	587814450		4,663	5,275	5,437	5,478	0	0		5,289
5,459	5,488	0	0							
	587814454		3,216	3,545	3,606	3,567	0	0		3,545
3,607	3,572	0	0							
	587814456		3,216	3,545	3,606	3,567	0	0		3,545
3,607	3,572	0	0							
	587814797		2,603	2,907	2,978	2,974	0	0		2,934
3,007	2,972	0	0							
	587814807		0	0	0	0	0	0		0
0	0	0	0							
	587814808		3,238	3,804	4,112	4,124	0	0		3,827
4,133	4,121	0	0							
	587814809		3,238	3,804	4,112	4,124	0	0		3,827
4,133	4,121	0	0							
	587814811		0	0	0	0	0	0		0
0	0	0	0							
	587814819		0	0	0	0	0	0		0
0	0	0	0							
	587814822		0	0	0	0	0	0		0
0	0	0	0							
	587814825		0	0	0	0	0	0		0
0	0	0	0							
	587814826		0	0	0	0	0	0		0
0	0	0	0							
	587815160		3,238	3,804	4,112	4,124	0	0		3,827
4,133	4,121	0	0							
	587815163		2,585	2,611	2,637	2,632	0	0		2,639
2,643	2,626	0	0							
	587815170		642	859	1,075	1,091	0	0		857
1,075	1,096	0	0							
	587815171		642	859	1,075	1,091	0	0		857
1,075	1,096	0	0							
	587815173		642	859	1,075	1,091	0	0		857
1,075	1,096	0	0							
	587815174		642	859	1,075	1,091	0	0		857
1,075	1,096	0	0							
	587815269		2,391	2,809	3,023	3,054	0	0		2,800
2,998	3,010	0	0							
	587815271		2,391	2,809	3,023	3,054	0	0		2,800
2,998	3,010	0	0							

587815272	420	742	886	898	0	0	746
917 924	0 0						
587815273	2,380	3,079	3,433	3,481	0	0	3,074
3,439 3,462	0 0						
587815274	2,585	2,611	2,637	2,632	0	0	2,639
2,643 2,626	0 0						
587815275	2,585	2,611	2,637	2,632	0	0	2,639
2,643 2,626	0 0						
587815277	0	0	0	0	0	0	0
0 0	0 0						
587815278	420	742	886	898	0	0	746
917 924	0 0						
587815280	2,380	3,079	3,433	3,481	0	0	3,074
3,439 3,462	0 0						
587815285	0	0	0	0	0	0	0
0 0	0 0						
587815287	0	0	0	0	0	0	0
0 0	0 0						
587815295	8,428	9,273	9,463	9,443	0	0	9,269
9,465 9,465	0 0						
587815303	0	0	0	0	0	0	0
0 0	0 0						
587815773	5,528	6,231	6,278	6,476	0	0	6,142
6,282 6,278	0 0						
587815780	5,248	5,869	6,008	6,105	0	0	5,865
6,008 6,011	0 0						
587815785	2	142	284	308	0	0	137
278 307	0 0						
587815787	5,773	6,403	6,629	6,629	0	0	6,448
6,653 6,634	0 0						
587815790	5,354	5,907	6,067	6,080	0	0	5,933
6,076 6,049	0 0						
587815791	5,438	5,996	6,156	6,170	0	0	6,023
6,165 6,138	0 0						
587815792	0	0	0	0	0	0	0
0 0	0 0						
587815795	918	1,302	1,414	1,570	0	0	1,277
1,377 1,400	0 0						
587815802	0	0	0	0	0	0	0
0 0	0 0						
587815824	0	0	0	0	0	0	0
0 0	0 0						
587816038	3,554	4,038	4,257	4,251	0	0	4,004
4,255 4,230	0 0						
587816039	4,032	4,546	4,749	4,739	0	0	4,513
4,746 4,717	0 0						
587816041	4,032	4,546	4,749	4,739	0	0	4,513
4,746 4,717	0 0						
587816057	0	0	0	0	0	0	0
0 0	0 0						
587816058	1,020	1,133	1,148	1,141	0	0	1,133
1,148 1,141	0 0						
587816063	2,636	3,048	3,249	3,253	0	0	3,015
3,243 3,234	0 0						
587816177	0	0	0	0	0	0	0
0 0	0 0						
587816186	966	1,361	1,480	1,633	0	0	1,339
1,448 1,469	0 0						
587816709	2,636	3,048	3,249	3,253	0	0	3,015



3,243	3,234	0	0						
	587816710		3,108	3,577	3,789	3,787	0	0	3,544
3,783	3,768	0	0						
	587816711		830	921	936	927	0	0	921
936	927	0	0						
	587816712		3,247	3,685	3,889	3,888	0	0	3,652
3,889	3,870	0	0						
	587816713		3,460	3,977	4,199	4,194	0	0	3,943
4,193	4,175	0	0						
	587816714		228	315	333	328	0	0	314
328	328	0	0						
	587816718		228	315	333	328	0	0	314
328	328	0	0						
	587816721		228	315	333	328	0	0	314
328	328	0	0						
	587816722		228	315	333	328	0	0	314
328	328	0	0						
	587816725		228	315	333	328	0	0	314
328	328	0	0						
	587816971		1,954	2,162	2,186	2,168	0	0	2,164
2,175	2,156	0	0						
	587816972		1,470	1,799	1,904	1,898	0	0	1,812
1,913	1,922	0	0						
	587816973		1,242	1,484	1,571	1,570	0	0	1,498
1,585	1,594	0	0						
	587816974		1,242	1,484	1,571	1,570	0	0	1,498
1,585	1,594	0	0						
	587816975		0	0	0	0	0	0	0
0	0	0	0						
	587816978		0	0	0	0	0	0	0
0	0	0	0						
	587816980		0	0	0	0	0	0	0
0	0	0	0						
	587816981		0	0	0	0	0	0	0
0	0	0	0						
	587816984		0	0	0	0	0	0	0
0	0	0	0						
	587816985		1,470	1,799	1,904	1,898	0	0	1,812
1,913	1,922	0	0						
	587816986		0	0	0	0	0	0	0
0	0	0	0						
	587816988		2,203	2,425	2,471	2,456	0	0	2,426
2,462	2,442	0	0						
	587816989		0	0	0	0	0	0	0
0	0	0	0						
	587817206		0	0	0	0	0	0	0
0	0	0	0						
	587817207		830	921	936	927	0	0	921
936	927	0	0						
	587817216		3,807	4,071	4,135	4,152	0	0	4,109
4,144	4,114	0	0						
	587817217		2,174	2,396	2,531	2,575	0	0	2,400
2,531	2,532	0	0						
	587817219		2,320	2,698	2,869	2,912	0	0	2,740
2,905	2,900	0	0						
	587817221		2,320	2,698	2,869	2,912	0	0	2,740
2,905	2,900	0	0						
	587817223		2,387	2,742	2,821	2,809	0	0	2,754
2,828	2,822	0	0						

587817225	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
587817226	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
587817227	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
587817228	2,320	2,698	2,869	2,912	0	0	0	2,740	
2,905 2,900	0	0	0	0	0	0	0	0	
587817230	2,585	2,611	2,637	2,632	0	0	0	2,639	
2,643 2,626	0	0	0	0	0	0	0	0	
587817231	2,585	2,611	2,637	2,632	0	0	0	2,639	
2,643 2,626	0	0	0	0	0	0	0	0	
587817234	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
587817269	2,320	2,698	2,869	2,912	0	0	0	2,740	
2,905 2,900	0	0	0	0	0	0	0	0	
587817271	2,387	2,742	2,821	2,809	0	0	0	2,754	
2,828 2,822	0	0	0	0	0	0	0	0	
587817272	2,283	2,601	2,684	2,678	0	0	0	2,599	
2,680 2,664	0	0	0	0	0	0	0	0	
587817274	938	1,114	1,157	1,145	0	0	0	1,111	
1,151 1,150	0	0	0	0	0	0	0	0	
587817275	256	292	301	292	0	0	0	292	
301 301	0	0	0	0	0	0	0	0	
587817314	967	1,183	1,310	1,325	0	0	0	1,223	
1,355 1,357	0	0	0	0	0	0	0	0	
587817316	1,287	1,447	1,479	1,469	0	0	0	1,445	
1,483 1,480	0	0	0	0	0	0	0	0	
587817318	156	163	157	148	0	0	0	163	
157 158	0	0	0	0	0	0	0	0	
587817319	1,254	1,386	1,415	1,443	0	0	0	1,388	
1,407 1,399	0	0	0	0	0	0	0	0	
587817447	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
587817448	1,410	1,549	1,572	1,591	0	0	0	1,551	
1,563 1,557	0	0	0	0	0	0	0	0	
587817453	2,596	2,850	2,941	2,925	0	0	0	2,854	
2,940 2,939	0	0	0	0	0	0	0	0	
589015491	3,507	3,876	3,957	3,973	0	0	0	3,898	
3,958 3,945	0	0	0	0	0	0	0	0	
589015493	4,531	4,918	5,058	5,059	0	0	0	4,950	
5,069 5,041	0	0	0	0	0	0	0	0	
589015494	4,285	4,784	4,963	4,965	0	0	0	4,788	
4,972 4,952	0	0	0	0	0	0	0	0	
589626976	4,162	4,561	4,704	4,730	0	0	0	4,561	
4,704 4,730	0	0	0	0	0	0	0	0	
590481852	3,992	4,459	4,657	4,620	0	0	0	4,459	
4,657 4,620	0	0	0	0	0	0	0	0	
590481853	3,992	4,459	4,657	4,620	0	0	0	4,459	
4,657 4,620	0	0	0	0	0	0	0	0	
590481868	956	1,092	1,147	1,157	0	0	0	1,092	
1,147 1,157	0	0	0	0	0	0	0	0	
590522243	8,497	9,025	9,067	8,948	0	0	0	8,999	
9,064 9,047	0	0	0	0	0	0	0	0	
590522244	8,497	9,025	9,067	8,948	0	0	0	8,999	
9,064 9,047	0	0	0	0	0	0	0	0	
590522245	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
1139400830	956	1,092	1,147	1,157	0	0	0	1,092	

1,147	1,157	0	0						
	1148054292		8,425	9,282	9,661	9,612	0	0	9,282
9,661	9,612	0	0						
	1164076472		8,425	9,282	9,661	9,612	0	0	9,282
9,661	9,612	0	0						
	1165618763		956	1,092	1,147	1,157	0	0	1,092
1,147	1,157	0	0						
	1167345578		2,456	2,777	2,809	2,792	0	0	2,777
2,809	2,792	0	0						
	1176181443		9,714	10,842	11,195	11,235	0	0	10,842
11,195	11,235	0	0						
	1176242672		8,425	9,282	9,661	9,612	0	0	9,282
9,661	9,612	0	0						
	1186121768		846	938	958	954	0	0	938
958	954	0	0						
	2122362473		5,269	5,812	6,042	6,055	0	0	5,812
6,042	6,055	0	0						
	2147474988		6,000	6,684	6,947	6,964	0	0	6,684
6,947	6,964	0	0						
	2147475007		8,525	9,340	9,379	9,370	0	0	9,348
9,388	9,351	0	0						
	2147475798		8,460	9,322	9,704	9,657	0	0	9,322
9,704	9,657	0	0						
	2147475799		8,107	8,882	9,223	9,201	0	0	8,882
9,223	9,201	0	0						
	2147475801		5,729	6,242	6,390	6,421	0	0	6,182
6,378	6,403	0	0						
	2147475949		4,128	4,915	5,307	5,439	0	0	4,915
5,307	5,439	0	0						
	2147481733		35	41	44	45	0	0	41
44	45	0	0						
	2147481754		956	1,092	1,147	1,157	0	0	1,092
1,147	1,157	0	0						
	2147481911		5,431	6,343	6,722	6,842	0	0	6,343
6,722	6,842	0	0						
	2147481977		2,456	2,777	2,809	2,792	0	0	2,777
2,809	2,792	0	0						
	2147482906		3,481	3,756	3,840	3,862	0	0	3,723
3,827	3,863	0	0						
	2147482907		3,481	3,756	3,840	3,862	0	0	3,723
3,827	3,863	0	0						
	2147482908		2,459	2,889	3,012	3,008	0	0	2,867
2,989	3,009	0	0						
	2147482912		486	641	678	679	0	0	641
674	677	0	0						
	2147482916		3,729	4,207	4,361	4,376	0	0	4,216
4,356	4,389	0	0						
	2147482917		3,585	4,168	4,365	4,388	0	0	4,178
4,359	4,401	0	0						
	2147482919		5,171	5,718	5,905	5,958	0	0	5,718
5,905	5,958	0	0						
	2147482922		1,923	2,204	2,295	2,297	0	0	2,185
2,275	2,295	0	0						
	2147482923		1,923	2,204	2,295	2,297	0	0	2,185
2,275	2,295	0	0						
	2147482924		3,529	4,123	4,277	4,291	0	0	4,108
4,255	4,286	0	0						
	2147482925		203	211	207	205	0	0	212
208	205	0	0						

	2147482926		226	241	240	238	0	0	242
241	238	0	0						
	2147482927		22	30	33	33	0	0	30
33	33	0	0						
	2147482928		2,003	2,423	2,559	2,567	0	0	2,403
2,533	2,562	0	0						
	2147482930		1,964	2,378	2,511	2,519	0	0	2,358
2,485	2,514	0	0						
	2147482931		1,964	2,378	2,511	2,519	0	0	2,358
2,485	2,514	0	0						
	2147482932		0	0	0	0	0	0	0
0	0	0	0						
	2147482933		22	30	33	33	0	0	30
33	33	0	0						
	2147482937		1,850	2,054	2,087	2,070	0	0	2,054
2,087	2,068	0	0						
	2147482940		3,216	3,545	3,606	3,567	0	0	3,545
3,607	3,572	0	0						
	2147482941		1,997	2,228	2,268	2,252	0	0	2,228
2,268	2,250	0	0						
	2147482942		1,442	1,606	1,632	1,619	0	0	1,606
1,632	1,619	0	0						
	2147482943		14	32	38	38	0	0	32
37	37	0	0						
	2147482944		283	430	471	474	0	0	429
466	472	0	0						
	2147482945		14	32	38	38	0	0	32
37	37	0	0						
	2147482946		337	413	444	455	0	0	413
442	454	0	0						
	2147482947		283	430	471	474	0	0	429
466	472	0	0						
	2147482949		322	381	406	417	0	0	381
405	417	0	0						
	2147482950		323	384	410	421	0	0	384
409	420	0	0						
	2147482951		323	384	410	421	0	0	384
409	420	0	0						
	2147482952		0	0	0	0	0	0	0
0	0	0	0						
	2147482953		0	0	0	0	0	0	0
0	0	0	0						
	2147482954		0	0	0	0	0	0	0
0	0	0	0						
	2147482957		378	543	584	592	0	0	542
579	588	0	0						
	2147482958		1	3	3	4	0	0	3
3	4	0	0						
	2147482959		378	540	581	588	0	0	539
575	584	0	0						
	2147482960		96	113	114	118	0	0	113
113	116	0	0						
	2147482963		0	1	1	4	0	0	1
1	2	0	0						
	2147482964		8,525	9,340	9,379	9,370	0	0	9,348
9,388	9,351	0	0						
	2147482966		2	142	284	308	0	0	137
278	307	0	0						
	2147482967		317	359	367	366	0	0	359

367	366	0	0						
	2147482968		169	185	186	184	0	0	184
186	184	0	0						
	2147482969		147	174	181	182	0	0	174
180	182	0	0						
	2147482970		147	174	181	182	0	0	174
180	182	0	0						
	2147482973		8,577	9,636	10,054	10,185	0	0	9,636
10,055	10,186	0	0						
	2147482974		8,521	9,566	9,974	10,101	0	0	9,566
9,975	10,102	0	0						
	2147482975		0	0	1	1	0	0	0
1	1	0	0						
	2147482976		7,738	8,709	9,119	9,261	0	0	8,709
9,119	9,261	0	0						
	2147482977		7,415	8,326	8,709	8,841	0	0	8,326
8,710	8,842	0	0						
	2147482979		323	383	409	420	0	0	383
408	420	0	0						
	2147482980		323	383	409	420	0	0	383
408	420	0	0						
	2147482981		0	0	0	0	0	0	0
0	0	0	0						
	2147482982		0	0	0	0	0	0	0
0	0	0	0						
	2147482985		5,644	6,242	6,441	6,497	0	0	6,242
6,441	6,497	0	0						
	2147482989		0	0	0	0	0	0	0
0	0	0	0						
	2147482990		0	0	0	0	0	0	0
0	0	0	0						
	2147482992		5,644	6,242	6,441	6,497	0	0	6,242
6,441	6,497	0	0						
	2147482993		0	0	0	0	0	0	0
0	0	0	0						
	2147482994		5,644	6,242	6,441	6,497	0	0	6,242
6,441	6,497	0	0						
	2147482995		5,644	6,242	6,441	6,497	0	0	6,242
6,441	6,497	0	0						
	2147482996		0	0	0	0	0	0	0
0	0	0	0						
	2147482997		0	0	0	0	0	0	0
0	0	0	0						
	2147482998		0	0	0	0	0	0	0
0	0	0	0						
	2147482999		0	0	0	0	0	0	0
0	0	0	0						
	2147483000		0	0	0	0	0	0	0
0	0	0	0						
	2147483001		0	0	0	0	0	0	0
0	0	0	0						
	2147483002		0	0	0	0	0	0	0
0	0	0	0						
	2147483003		0	0	0	0	0	0	0
0	0	0	0						
	2147483004		0	0	0	0	0	0	0
0	0	0	0						
	2147483005		0	0	0	0	0	0	0
0	0	0	0						

2147483006	5,644	6,242	6,441	6,497	0	0	6,242
6,441 6,497	0 0						
2147483007	5,644	6,242	6,441	6,497	0	0	6,242
6,441 6,497	0 0						
2147483008	0	0	0	0	0	0	0
0 0	0 0						
2147483009	2,157	2,369	2,437	2,441	0	0	2,365
2,439 2,443	0 0						
2147483011	2,089	2,290	2,354	2,357	0	0	2,287
2,357 2,360	0 0						
2147483012	2,089	2,290	2,354	2,357	0	0	2,287
2,357 2,360	0 0						
2147483015	2,455	2,881	2,959	2,970	0	0	2,881
2,953 2,964	0 0						
2147483016	2,258	2,559	2,621	2,628	0	0	2,558
2,619 2,626	0 0						
2147483017	723	802	803	808	0	0	801
801 807	0 0						
2147483019	1,335	1,481	1,494	1,501	0	0	1,481
1,494 1,501	0 0						
2147483020	723	802	803	808	0	0	801
801 807	0 0						
2147483021	5,171	5,718	5,905	5,958	0	0	5,718
5,905 5,958	0 0						
2147483024	5,644	6,242	6,441	6,497	0	0	6,242
6,441 6,497	0 0						
2147483025	5,644	6,242	6,441	6,497	0	0	6,242
6,441 6,497	0 0						
2147483026	5,644	6,242	6,441	6,497	0	0	6,242
6,441 6,497	0 0						
2147483027	0	0	0	0	0	0	0
0 0	0 0						
2147483028	29	34	36	36	0	0	34
35 36	0 0						
2147483029	29	34	36	36	0	0	34
35 36	0 0						
2147483030	39	45	47	48	0	0	45
47 48	0 0						
2147483031	39	45	47	48	0	0	45
47 48	0 0						
2147483032	68	79	83	83	0	0	79
83 83	0 0						
2147483033	68	78	82	83	0	0	78
82 83	0 0						
2147483034	0	1	1	0	0	0	1
1 0	0 0						
2147483035	1,023	1,284	1,335	1,345	0	0	1,287
1,331 1,340	0 0						
2147483037	1,023	1,283	1,335	1,344	0	0	1,286
1,331 1,340	0 0						
2147483038	1,023	1,283	1,335	1,344	0	0	1,286
1,331 1,340	0 0						
2147483039	1,023	1,283	1,335	1,344	0	0	1,286
1,331 1,340	0 0						
2147483040	1,023	1,283	1,335	1,344	0	0	1,286
1,331 1,340	0 0						
2147483041	0	0	0	0	0	0	0
0 0	0 0						
2147483042	0	0	0	0	0	0	0



	2147483083	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483084	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483085	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483086	9,732	10,792	11,196	11,301	0	0	10,793	
11,203	11,306	0							
	2147483088	9,857	10,930	11,337	11,441	0	0	10,931	
11,344	11,445	0							
	2147483089	9,857	10,930	11,337	11,441	0	0	10,931	
11,344	11,445	0							
	2147483090	125	138	141	139	0	0	138	
141	139	0							
	2147483091	0	0	0	0	0	0	0	
0	0	0							
	2147483092	207	251	261	263	0	0	251	
259	259	0							
	2147483093	207	251	261	263	0	0	251	
259	259	0							
	2147483094	125	138	141	139	0	0	138	
141	139	0							
	2147483095	125	138	141	139	0	0	138	
141	139	0							
	2147483096	207	251	261	263	0	0	251	
259	259	0							
	2147483097	0	0	0	0	0	0	0	
0	0	0							
	2147483098	1,281	1,488	1,540	1,538	0	0	1,492	
1,543	1,533	0							
	2147483099	1,281	1,488	1,540	1,538	0	0	1,492	
1,543	1,533	0							
	2147483101	1,370	1,721	1,917	1,936	0	0	1,708	
1,878	1,914	0							
	2147483102	1,370	1,721	1,917	1,936	0	0	1,708	
1,878	1,914	0							
	2147483103	758	1,042	1,228	1,253	0	0	1,029	
1,189	1,231	0							
	2147483104	428	479	488	474	0	0	478	
485	480	0							
	2147483105	428	479	488	474	0	0	478	
485	480	0							
	2147483106	0	0	0	0	0	0	0	
0	0	0							
	2147483107	428	479	488	474	0	0	478	
485	480	0							
	2147483108	0	0	0	0	0	0	0	
0	0	0							
	2147483109	331	563	740	779	0	0	550	
704	751	0							
	2147483110	331	563	740	779	0	0	550	
704	751	0							
	2147483111	331	563	740	779	0	0	550	
704	751	0							
	2147483112	50	56	58	58	0	0	56	
58	58	0							
	2147483113	50	56	58	58	0	0	56	
58	58	0							
	2147483114	50	56	58	58	0	0	56	



58	58	0	0						
	2147483115		50	56	58	58	0	0	56
58	58	0	0						
	2147483117		0	0	0	0	0	0	0
0	0	0	0						
	2147483118		0	0	0	0	0	0	0
0	0	0	0						
	2147483119		8,003	8,907	9,089	9,113	0	0	8,910
9,092	9,089	0	0						
	2147483121		82	113	120	123	0	0	112
119	120	0	0						
	2147483122		82	113	120	123	0	0	112
119	120	0	0						
	2147483123		0	0	0	0	0	0	0
0	0	0	0						
	2147483124		82	113	120	123	0	0	112
119	120	0	0						
	2147483125		0	0	0	0	0	0	0
0	0	0	0						
	2147483126		0	0	0	0	0	0	0
0	0	0	0						
	2147483127		0	0	0	0	0	0	0
0	0	0	0						
	2147483128		1,281	1,488	1,540	1,538	0	0	1,492
1,543	1,533	0	0						
	2147483129		1,281	1,488	1,540	1,538	0	0	1,492
1,543	1,533	0	0						
	2147483131		5,778	6,295	6,445	6,476	0	0	6,235
6,433	6,458	0	0						
	2147483132		3,408	3,623	3,723	3,753	0	0	3,623
3,765	3,766	0	0						
	2147483134		0	0	0	0	0	0	0
0	0	0	0						
	2147483135		0	0	0	0	0	0	0
0	0	0	0						
	2147483136		0	0	0	0	0	0	0
0	0	0	0						
	2147483137		1,837	2,111	2,319	2,387	0	0	2,102
2,323	2,370	0	0						
	2147483139		1,837	2,111	2,319	2,387	0	0	2,102
2,323	2,370	0	0						
	2147483141		1,837	2,111	2,319	2,387	0	0	2,102
2,323	2,370	0	0						
	2147483143		3,949	4,655	4,916	5,003	0	0	4,655
4,916	5,003	0	0						
	2147483145		523	621	645	650	0	0	621
645	649	0	0						
	2147483146		523	621	645	650	0	0	621
645	649	0	0						
	2147483147		523	621	645	650	0	0	621
645	649	0	0						
	2147483148		2,236	2,574	2,650	2,675	0	0	2,581
2,660	2,696	0	0						
	2147483149		2,236	2,574	2,650	2,675	0	0	2,581
2,660	2,696	0	0						
	2147483150		2,236	2,574	2,650	2,675	0	0	2,581
2,660	2,696	0	0						
	2147483151		0	0	0	0	0	0	0
0	0	0	0						

2147483152	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483153	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483154	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483155	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483156	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483157	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483158	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483159	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483161	2,767	3,271	3,503	3,585	0	0	0	3,280	
3,500 3,602	0	0	0	0	0	0	0	0	
2147483162	2,767	3,271	3,503	3,585	0	0	0	3,280	
3,500 3,602	0	0	0	0	0	0	0	0	
2147483163	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483164	2,767	3,271	3,503	3,585	0	0	0	3,280	
3,500 3,602	0	0	0	0	0	0	0	0	
2147483165	531	697	853	910	0	0	0	700	
840 906	0	0	0	0	0	0	0	0	
2147483166	2,236	2,574	2,650	2,675	0	0	0	2,581	
2,660 2,696	0	0	0	0	0	0	0	0	
2147483168	2,236	2,574	2,650	2,675	0	0	0	2,581	
2,660 2,696	0	0	0	0	0	0	0	0	
2147483169	2,236	2,574	2,650	2,675	0	0	0	2,581	
2,660 2,696	0	0	0	0	0	0	0	0	
2147483170	2,368	2,809	3,172	3,297	0	0	0	2,802	
3,163 3,276	0	0	0	0	0	0	0	0	
2147483171	1,191	1,461	1,620	1,679	0	0	0	1,454	
1,612 1,658	0	0	0	0	0	0	0	0	
2147483172	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483173	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483174	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483175	1,860	2,173	2,285	2,305	0	0	0	2,173	
2,285 2,305	0	0	0	0	0	0	0	0	
2147483178	1,198	1,295	1,349	1,354	0	0	0	1,295	
1,353 1,359	0	0	0	0	0	0	0	0	
2147483179	1,198	1,295	1,349	1,354	0	0	0	1,295	
1,353 1,359	0	0	0	0	0	0	0	0	
2147483180	1,198	1,295	1,349	1,354	0	0	0	1,295	
1,353 1,359	0	0	0	0	0	0	0	0	
2147483181	959	1,074	1,088	1,086	0	0	0	1,070	
1,086 1,084	0	0	0	0	0	0	0	0	
2147483182	959	1,074	1,088	1,086	0	0	0	1,070	
1,086 1,084	0	0	0	0	0	0	0	0	
2147483183	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483184	662	877	937	951	0	0	0	877	
932 946	0	0	0	0	0	0	0	0	
2147483185	662	877	937	951	0	0	0	877	

932	946	0	0							
	2147483186	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483187	0	662	877	937	951	0	0	0	877
932	946	0	0							
	2147483188	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483189	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483190	0	612	679	691	693	0	0	0	680
693	695	0	0							
	2147483191	0	612	679	691	693	0	0	0	680
693	695	0	0							
	2147483192	0	612	679	691	693	0	0	0	680
693	695	0	0							
	2147483193	0	612	679	691	693	0	0	0	680
693	695	0	0							
	2147483194	0	612	679	691	693	0	0	0	680
693	695	0	0							
	2147483195	0	612	679	691	693	0	0	0	680
693	695	0	0							
	2147483196	0	612	679	691	693	0	0	0	680
693	695	0	0							
	2147483197	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483198	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483199	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483200	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483201	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483202	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483206	0	2,348	2,785	3,024	3,097	0	0	0	2,785
3,024	3,097	0	0							
	2147483207	0	1,958	2,338	2,527	2,582	0	0	0	2,338
2,527	2,582	0	0							
	2147483208	0	1,958	2,338	2,527	2,582	0	0	0	2,338
2,527	2,582	0	0							
	2147483209	0	4,128	4,915	5,307	5,439	0	0	0	4,915
5,307	5,439	0	0							
	2147483210	0	4,128	4,915	5,307	5,439	0	0	0	4,915
5,307	5,439	0	0							
	2147483211	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483212	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483213	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483214	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483215	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483216	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483217	0	0	0	0	0	0	0	0	0
0	0	0	0							

2147483218	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483219	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483222	1,380	1,678	1,770	1,810	0	0	0	1,678	1,678
1,770 1,810	0	0	0	0	0	0	0	0	0
2147483224	1,385	1,681	1,777	1,818	0	0	0	1,681	1,681
1,777 1,818	0	0	0	0	0	0	0	0	0
2147483226	182	222	249	258	0	0	0	222	222
249 258	0	0	0	0	0	0	0	0	0
2147483227	1,780	2,130	2,282	2,342	0	0	0	2,130	2,130
2,282 2,342	0	0	0	0	0	0	0	0	0
2147483229	1,780	2,130	2,282	2,342	0	0	0	2,130	2,130
2,282 2,342	0	0	0	0	0	0	0	0	0
2147483230	1,780	2,130	2,282	2,342	0	0	0	2,130	2,130
2,282 2,342	0	0	0	0	0	0	0	0	0
2147483231	1,380	1,678	1,770	1,810	0	0	0	1,678	1,678
1,770 1,810	0	0	0	0	0	0	0	0	0
2147483234	1,380	1,678	1,770	1,810	0	0	0	1,678	1,678
1,770 1,810	0	0	0	0	0	0	0	0	0
2147483236	1,958	2,338	2,527	2,582	0	0	0	2,338	2,338
2,527 2,582	0	0	0	0	0	0	0	0	0
2147483237	1,958	2,338	2,527	2,582	0	0	0	2,338	2,338
2,527 2,582	0	0	0	0	0	0	0	0	0
2147483238	1,958	2,338	2,527	2,582	0	0	0	2,338	2,338
2,527 2,582	0	0	0	0	0	0	0	0	0
2147483239	1,380	1,678	1,770	1,810	0	0	0	1,678	1,678
1,770 1,810	0	0	0	0	0	0	0	0	0
2147483240	1,380	1,678	1,770	1,810	0	0	0	1,678	1,678
1,770 1,810	0	0	0	0	0	0	0	0	0
2147483241	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483242	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483243	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483244	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483245	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483246	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483247	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483248	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483249	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483250	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483251	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483252	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483254	2,794	3,045	3,161	3,198	0	0	0	3,045	3,045
3,160 3,198	0	0	0	0	0	0	0	0	0
2147483256	2,794	3,045	3,161	3,198	0	0	0	3,045	3,045
3,160 3,198	0	0	0	0	0	0	0	0	0
2147483258	3,112	3,408	3,547	3,593	0	0	0	3,408	3,408

3,547	3,593	0	0						
	2147483260		3,112	3,408	3,547	3,593	0	0	3,408
3,547	3,593	0	0						
	2147483264		2,254	2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0						
	2147483265		0	0	0	0	0	0	0
0	0	0	0						
	2147483266		0	0	0	0	0	0	0
0	0	0	0						
	2147483267		0	0	0	0	0	0	0
0	0	0	0						
	2147483270		118	132	131	133	0	0	128
131	132	0	0						
	2147483271		318	363	387	395	0	0	363
387	396	0	0						
	2147483272		0	0	0	0	0	0	0
0	0	0	0						
	2147483273		0	0	0	0	0	0	0
0	0	0	0						
	2147483274		2,521	2,732	2,827	2,857	0	0	2,732
2,827	2,857	0	0						
	2147483275		2,521	2,733	2,827	2,858	0	0	2,733
2,827	2,858	0	0						
	2147483278		439	489	498	507	0	0	433
457	514	0	0						
	2147483280		0	0	0	0	0	0	0
0	0	0	0						
	2147483281		0	0	0	0	0	0	0
0	0	0	0						
	2147483282		0	0	0	0	0	0	0
0	0	0	0						
	2147483283		0	0	0	0	0	0	0
0	0	0	0						
	2147483284		0	0	0	0	0	0	0
0	0	0	0						
	2147483285		0	0	0	0	0	0	0
0	0	0	0						
	2147483286		0	0	0	0	0	0	0
0	0	0	0						
	2147483290		12,894	14,322	15,038	15,162	0	0	0
0	0	0	0						
	2147483297		8,394	9,201	9,657	9,740	0	0	0
0	0	0	0						
	2147483300		6,860	7,623	8,018	8,111	0	0	0
0	0	0	0						
	2147483303		4,397	4,813	5,048	5,069	0	0	4,916
5,134	5,151	0	0						
	2147483304		4,424	4,845	5,082	5,103	0	0	4,934
5,153	5,170	0	0						
	2147483305		12,843	14,309	15,042	15,170	0	0	0
0	0	0	0						
	2147483306		12,751	14,204	14,936	15,064	0	0	0
0	0	0	0						
	2147483308		4,424	4,845	5,082	5,103	0	0	4,934
5,153	5,170	0	0						
	2147483309		4,424	4,845	5,082	5,103	0	0	4,934
5,153	5,170	0	0						
	2147483311		3,112	3,408	3,547	3,593	0	0	3,408
3,547	3,593	0	0						

	2147483312		2,405		2,617	2,713	2,744	0	0	2,617
2,713	2,744	0	0							
	2147483316		2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0							
	2147483319		0		0	0	0	0	0	0
0	0	0	0							
	2147483320		16		21	42	44	0	0	77
83	36	0	0							
	2147483321		16		21	42	44	0	0	77
83	36	0	0							
	2147483323		16		21	42	44	0	0	77
83	36	0	0							
	2147483325		16		19	22	37	0	0	77
83	36	0	0							
	2147483326		16		19	22	37	0	0	77
83	36	0	0							
	2147483327DN		13,437		14,998	15,790	15,922	0	0	0
0	0	0	0							
	2147483327DS		0		0	0	0	0	0	307
324	379	0	0							
	2147483330		0		0	0	0	0	0	0
0	0	0	0							
	2147483331DN		478		630	716	729	0	0	0
0	0	0	0							
	2147483331DS		0		0	0	0	0	0	829
909	884	0	0							
	2147483333		395		515	578	597	0	0	544
603	574	0	0							
	2147483334		395		515	578	597	0	0	544
603	574	0	0							
	2147483335DN		447		527	574	590	0	0	0
0	0	0	0							
	2147483335DS		0		0	0	0	0	0	544
603	574	0	0							
	2147483336		369		418	430	431	0	0	423
430	431	0	0							
	2147483337		369		418	430	431	0	0	423
430	431	0	0							
	2147483338		369		418	430	431	0	0	423
430	431	0	0							
	2147483339		0		0	0	0	0	0	0
0	0	0	0							
	2147483340		0		0	0	0	0	0	0
0	0	0	0							
	2147483341		0		0	0	0	0	0	0
0	0	0	0							
	2147483342		0		0	0	0	0	0	0
0	0	0	0							
	2147483343		0		0	0	0	0	0	0
0	0	0	0							
	2147483344		0		0	0	0	0	0	0
0	0	0	0							
	2147483345		0		0	0	0	0	0	0
0	0	0	0							
	2147483346		0		0	0	0	0	0	0
0	0	0	0							
	2147483347		0		0	0	0	0	0	0
0	0	0	0							
	2147483348		0		0	0	0	0	0	0



	2147483389	1		1	1	1	0	0	7
10	11	0	0						
	2147483390	0		0	0	0	0	0	0
0	0	0	0						
	2147483391	1		1	1	1	0	0	7
10	11	0	0						
	2147483392	28		33	34	34	0	0	205
211	211	0	0						
	2147483393	28		33	34	34	0	0	25
29	30	0	0						
	2147483394	28		33	34	34	0	0	25
29	30	0	0						
	2147483395	1		1	1	1	0	0	7
10	11	0	0						
	2147483396	1		1	1	1	0	0	7
10	11	0	0						
	2147483397	1		1	1	1	0	0	7
10	11	0	0						
	2147483398	0		0	0	0	0	0	0
0	0	0	0						
	2147483400	273		311	332	339	0	0	312
332	339	0	0						
	2147483401	0		0	0	0	0	0	0
0	0	0	0						
	2147483402	0		0	0	0	0	0	0
0	0	0	0						
	2147483403	0		0	0	0	0	0	0
0	0	0	0						
	2147483404	273		311	332	339	0	0	312
332	339	0	0						
	2147483405	273		311	332	339	0	0	312
332	339	0	0						
	2147483406	4,172		4,558	4,776	4,791	0	0	4,647
4,847	4,858	0	0						
	2147483408	662		743	784	799	0	0	737
776	789	0	0						
	2147483409	6		7	8	8	0	0	13
17	17	0	0						
	2147483410	5		6	7	7	0	0	6
6	6	0	0						
	2147483411	5		6	7	7	0	0	6
6	6	0	0						
	2147483412	153		178	183	183	0	0	11
12	13	0	0						
	2147483413	153		177	182	182	0	0	0
0	0	0	0						
	2147483414	9		13	15	15	0	0	11
12	13	0	0						
	2147483415	9		13	15	15	0	0	11
12	13	0	0						
	2147483416	35		71	94	96	0	0	124
130	131	0	0						
	2147483417DN	12,977		14,391	15,100	15,234	0	0	0
0	0	0	0						
	2147483417DS	0		0	0	0	0	0	933
1,009	1,080	0	0						
	2147483418	13,062		14,495	15,209	15,343	0	0	0
0	0	0	0						
	2147483419	35		71	94	96	0	0	124



130	131	0	0							
	2147483420		35	71	94	96	0	0		124
130	131	0	0							
	2147483421		35	71	94	96	0	0		124
130	131	0	0							
	2147483423DN		13,623	15,195	15,980	16,126	0	0		0
0	0	0	0							
	2147483423DS		0	0	0	0	0	0		542
573	584	0	0							
	2147483424		256	308	343	350	0	0		285
301	307	0	0							
	2147483425		96	99	103	105	0	0		23
25	27	0	0							
	2147483426DN		13,550	15,104	15,862	16,005	0	0		0
0	0	0	0							
	2147483426DS		0	0	0	0	0	0		318
336	393	0	0							
	2147483428DN		463	611	695	692	0	0		0
0	0	0	0							
	2147483428DS		0	0	0	0	0	0		752
826	848	0	0							
	2147483429		0	0	0	0	0	0		0
0	0	0	0							
	2147483431		199	213	202	200	0	0		313
323	323	0	0							
	2147483432		114	108	92	89	0	0		11
13	13	0	0							
	2147483433		85	105	110	110	0	0		0
0	0	0	0							
	2147483434		0	0	0	0	0	0		0
0	0	0	0							
	2147483435		0	0	0	0	0	0		0
0	0	0	0							
	2147483436		0	0	0	0	0	0		0
0	0	0	0							
	2147483437		0	0	0	0	0	0		0
0	0	0	0							
	2147483438		0	0	0	0	0	0		0
0	0	0	0							
	2147483439		0	0	0	0	0	0		0
0	0	0	0							
	2147483440		0	0	0	0	0	0		0
0	0	0	0							
	2147483441		0	0	0	0	0	0		0
0	0	0	0							
	2147483442		0	0	0	0	0	0		0
0	0	0	0							
	2147483443		2,254	2,447	2,534	2,562	0	0		2,447
2,534	2,562	0	0							
	2147483444		2,254	2,447	2,534	2,562	0	0		2,447
2,534	2,562	0	0							
	2147483445		3	3	3	3	0	0		3
3	3	0	0							
	2147483446		3	3	3	3	0	0		3
3	3	0	0							
	2147483447		3	3	3	3	0	0		3
3	3	0	0							
	2147483448		3	3	3	3	0	0		3
3	3	0	0							



0	0	0	0							
	2147483483	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483484	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483485	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483486	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483487	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483488	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483489	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483490	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483491	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483492	152	0	170	179	182	0	0	0	170
179	182	0	0							
	2147483493	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483494	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483495	663	0	737	745	740	0	0	0	737
745	740	0	0							
	2147483497	2,636	0	3,048	3,249	3,253	0	0	0	3,015
3,243	3,234	0	0							
	2147483498	2,636	0	3,048	3,249	3,253	0	0	0	3,015
3,243	3,234	0	0							
	2147483499	8,714	0	9,579	9,677	9,638	0	0	0	9,577
9,645	9,648	0	0							
	2147483501	8,475	0	9,303	9,424	9,366	0	0	0	9,301
9,381	9,375	0	0							
	2147483502	8,714	0	9,579	9,677	9,638	0	0	0	9,577
9,645	9,648	0	0							
	2147483504	8,430	0	8,917	8,919	8,808	0	0	0	8,899
8,912	8,896	0	0							
	2147483505	8,497	0	9,025	9,067	8,948	0	0	0	8,999
9,064	9,047	0	0							
	2147483506	8,497	0	9,025	9,067	8,948	0	0	0	8,999
9,064	9,047	0	0							
	2147483507	966	0	1,361	1,480	1,633	0	0	0	1,339
1,448	1,469	0	0							
	2147483508	966	0	1,361	1,480	1,633	0	0	0	1,339
1,448	1,469	0	0							
	2147483510	966	0	1,361	1,480	1,633	0	0	0	1,339
1,448	1,469	0	0							
	2147483511	1,337	0	1,785	1,885	2,040	0	0	0	1,766
1,872	1,881	0	0							
	2147483512	1,337	0	1,785	1,885	2,040	0	0	0	1,766
1,872	1,881	0	0							
	2147483513	1,935	0	2,144	2,189	2,174	0	0	0	2,144
2,189	2,174	0	0							
	2147483517	1,935	0	2,144	2,189	2,174	0	0	0	2,144
2,189	2,174	0	0							
	2147483518	1,935	0	2,144	2,189	2,174	0	0	0	2,144
2,189	2,174	0	0							

2147483519	1,935	2,144	2,189	2,174	0	0	2,144
2,189 2,174 0	0						
2147483520	1,935	2,144	2,189	2,174	0	0	2,144
2,189 2,174 0	0						
2147483521	1,935	2,144	2,189	2,174	0	0	2,144
2,189 2,174 0	0						
2147483522	1,935	2,144	2,189	2,174	0	0	2,144
2,189 2,174 0	0						
2147483523	2,814	3,241	3,406	3,411	0	0	3,209
3,402 3,394 0	0						
2147483524	2,814	3,241	3,406	3,411	0	0	3,209
3,402 3,394 0	0						
2147483528	1,850	2,053	2,086	2,066	0	0	2,053
2,086 2,067 0	0						
2147483531	1,850	2,053	2,086	2,066	0	0	2,053
2,086 2,067 0	0						
2147483532	1,850	2,053	2,086	2,066	0	0	2,053
2,086 2,067 0	0						
2147483533	1,850	2,053	2,086	2,066	0	0	2,053
2,086 2,067 0	0						
2147483534	0	0	0	0	0	0	0
0 0 0	0						
2147483537	2,533	2,798	2,850	2,829	0	0	2,798
2,853 2,830 0	0						
2147483540	1,067	1,313	1,454	1,469	0	0	1,352
1,499 1,501 0	0						
2147483543	9,732	10,792	11,196	11,301	0	0	10,793
11,203 11,306 0	0						
2147483544	9,732	10,792	11,196	11,301	0	0	10,793
11,203 11,306 0	0						
2147483545	8,125	9,043	9,224	9,243	0	0	9,046
9,226 9,222 0	0						
2147483546	8,125	9,043	9,224	9,243	0	0	9,046
9,226 9,222 0	0						
2147483547	710	789	803	796	0	0	789
803 796 0	0						
2147483548	27	32	34	34	0	0	20
21 21 0	0						
2147483549	4,424	4,845	5,082	5,103	0	0	4,934
5,153 5,170 0	0						
2147483550	4,424	4,845	5,082	5,103	0	0	4,934
5,153 5,170 0	0						
2147483551	1	2	20	34	0	0	0
0 0 0	0						
2147483552	0	0	0	0	0	0	0
0 0 0	0						
2147483553	0	0	0	0	0	0	0
0 0 0	0						
2147483554	0	0	0	0	0	0	0
0 0 0	0						
2147483555DN	14,012	15,649	16,479	16,635	0	0	0
0 0 0	0						
2147483555DS	0	0	0	0	0	0	973
1,030 1,050 0	0						
2147483556DN	13,878	15,503	16,322	16,476	0	0	0
0 0 0	0						
2147483556DS	0	0	0	0	0	0	827
874 892 0	0						
2147483557	518	584	617	628	0	0	584

617	628	0	0							
	2147483558		7,596	8,561	9,065	9,158	0	0	8,561	
9,065	9,158	0	0	0	0	0	0	0	0	
	2147483561		0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
	2147483562		0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
	2147483563		0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
	2147483564		1,281	1,488	1,540	1,538	0	0	1,492	
1,543	1,533	0	0	1,488	1,540	1,538	0	0	1,492	
	2147483565		1,281	1,488	1,540	1,538	0	0	1,492	
1,543	1,533	0	0	1,488	1,540	1,538	0	0	1,492	
	2147483566		167	173	171	181	0	0	0	
0	0	0	0	173	171	181	0	0	0	
	2147483567		167	173	171	181	0	0	0	
0	0	0	0	0	0	0	0	0	0	
	2147483568		0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
	2147483569		4,231	4,868	5,206	5,259	0	0	4,876	
5,218	5,263	0	0	4,868	5,206	5,259	0	0	4,876	
	2147483572		6,645	7,481	7,862	7,938	0	0	7,456	
7,854	7,946	0	0	7,481	7,862	7,938	0	0	7,456	
	2147483573		416	462	468	465	0	0	462	
468	465	0	0	462	468	465	0	0	462	
	2147483575		3,841	4,408	4,658	4,697	0	0	4,404	
4,667	4,717	0	0	4,408	4,658	4,697	0	0	4,404	
	2147483576		3,822	4,387	4,636	4,677	0	0	4,383	
4,645	4,697	0	0	4,387	4,636	4,677	0	0	4,383	
	2147483577DN		448	595	679	691	0	0	0	
0	0	0	0	595	679	691	0	0	0	
	2147483577DS		0	0	0	0	0	0	797	
874	849	0	0	0	0	0	0	0	797	
	2147483578		448	595	679	691	0	0	797	
874	849	0	0	595	679	691	0	0	797	
	2147483579		0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
	2147483580		5,104	5,614	5,865	5,896	0	0	5,705	
5,911	5,932	0	0	5,614	5,865	5,896	0	0	5,705	
	2147483581		3,982	4,333	4,534	4,542	0	0	4,427	
4,578	4,578	0	0	4,333	4,534	4,542	0	0	4,427	
	2147483582		1,863	2,170	2,307	2,361	0	0	2,170	
2,307	2,361	0	0	2,170	2,307	2,361	0	0	2,170	
	2147483585		3,560	4,130	4,328	4,354	0	0	4,140	
4,324	4,368	0	0	4,130	4,328	4,354	0	0	4,140	
	2147483588		8,041	8,969	9,158	9,185	0	0	8,972	
9,159	9,159	0	0	8,969	9,158	9,185	0	0	8,972	
	2147483590		5,935	6,739	6,977	7,006	0	0	6,760	
6,979	7,003	0	0	6,739	6,977	7,006	0	0	6,760	
	2147483593		7,543	8,265	8,508	8,615	0	0	8,270	
8,514	8,596	0	0	8,265	8,508	8,615	0	0	8,270	
	2147483595		5,900	6,642	6,858	6,920	0	0	6,667	
6,871	6,914	0	0	6,642	6,858	6,920	0	0	6,667	
	2147483596		6,403	7,010	7,382	7,463	0	0	7,202	
7,555	7,629	0	0	7,010	7,382	7,463	0	0	7,202	
	2147483599		9,732	10,792	11,196	11,301	0	0	10,793	
11,203	11,306	0	0	10,792	11,196	11,301	0	0	10,793	
	2147483600		7,758	8,571	8,834	8,904	0	0	8,572	
8,829	8,894	0	0	8,571	8,834	8,904	0	0	8,572	

2147483601	5,232		6,020	6,378	6,488	0	0	6,000
6,373 6,487	0 0							
2147483603	1,974		2,221	2,362	2,398	0	0	2,221
2,374 2,412	0 0							
2147483605	0		0	0	0	0	0	0
0 0	0 0							
2147483606	2,293		2,514	2,670	2,720	0	0	2,516
2,662 2,708	0 0							
2147483608	811		944	1,022	1,054	0	0	943
1,020 1,054	0 0							
2147483610	323		380	399	405	0	0	380
399 405	0 0							
2147483612	7,206		8,241	8,740	8,886	0	0	8,222
8,747 8,899	0 0							
2147483615	6,126		6,955	7,327	7,420	0	0	6,936
7,338 7,434	0 0							
2147483617	488		563	623	648	0	0	563
621 648	0 0							
2147483618	6,175		6,894	7,225	7,337	0	0	6,903
7,264 7,368	0 0							
2147483619	6,005		6,719	6,990	7,074	0	0	6,659
6,984 7,068	0 0							
2147483621	2,055		2,457	2,624	2,664	0	0	2,387
2,578 2,627	0 0							
2147483622	593		723	790	817	0	0	723
788 817	0 0							
2147483626	9,041		10,227	10,798	10,927	0	0	10,141
10,753 10,892	0 0							
2147483627	4,685		5,224	5,519	5,602	0	0	5,338
5,657 5,749	0 0							
2147483630	1,651		1,775	1,884	1,911	0	0	1,776
1,872 1,898	0 0							
2147483631	0		0	0	0	0	0	0
0 0	0 0							
1	0		0	0	0	0	0	314
325 326	0 0							
2	0		0	0	0	0	0	193
201 201	0 0							
3	0		0	0	0	0	0	933
1,009 1,080	0 0							
4	0		0	0	0	0	0	14,677
15,448 15,585	0 0							
5	0		0	0	0	0	0	626
668 679	0 0							
6	0		0	0	0	0	0	605
646 705	0 0							
2147483597	0		0	0	0	0	0	2,683
2,788 2,791	0 0							
2147483633	0		0	0	0	0	0	7,706
8,122 8,221	0 0							
2147483637	0		0	0	0	0	0	9,238
9,771 9,917	0 0							
2147483641	0		0	0	0	0	0	9,238
9,771 9,917	0 0							
2147483644	0		0	0	0	0	0	9,492
9,920 10,045	0 0							
2147483645	0		0	0	0	0	0	14,294
15,016 15,188	0 0							
2147483646	0		0	0	0	0	0	14,399



Base Year  
2011  
Road Type

	Speed Limit (km/h)	Collision Proportions		
		Fatal	Serious	Slight
1	70	0.013	0.027	0.960
1	80	0.013	0.027	0.960
1	90	0.013	0.027	0.960
1	100	0.013	0.027	0.960
1	110	0.013	0.027	0.960
1	120	0.013	0.027	0.960
1	130	0.013	0.027	0.960
2	70	0.023	0.053	0.925
2	80	0.023	0.053	0.925
2	90	0.023	0.053	0.925
2	100	0.023	0.053	0.925
2	110	0.023	0.053	0.925
2	120	0.023	0.053	0.925
2	130	0.023	0.053	0.925
3	50	0.005	0.032	0.963
3	60	0.005	0.032	0.963
4	70	0.012	0.026	0.962
4	80	0.012	0.026	0.962
4	90	0.012	0.026	0.962
4	100	0.012	0.026	0.962
4	110	0.012	0.026	0.962
4	120	0.012	0.026	0.962
4	130	0.012	0.026	0.962
5	50	0.008	0.028	0.963
5	60	0.008	0.028	0.963
6	70	0.023	0.053	0.925
6	80	0.023	0.053	0.925
6	90	0.023	0.053	0.925
6	100	0.023	0.053	0.925
6	110	0.023	0.053	0.925
6	120	0.023	0.053	0.925
6	130	0.023	0.053	0.925
7	50	0.005	0.032	0.963
7	60	0.005	0.032	0.963
8	70	0.012	0.026	0.962
8	80	0.012	0.026	0.962
8	90	0.012	0.026	0.962
8	100	0.012	0.026	0.962
8	110	0.012	0.026	0.962
8	120	0.012	0.026	0.962
8	130	0.012	0.026	0.962
9	50	0.008	0.028	0.963
9	60	0.008	0.028	0.963
10	30	0.005	0.032	0.963
10	40	0.005	0.032	0.963
10	50	0.005	0.032	0.963
10	60	0.005	0.032	0.963
11	70	0.123	0.140	0.737
11	80	0.123	0.140	0.737
11	90	0.123	0.140	0.737
11	100	0.123	0.140	0.737
11	110	0.123	0.140	0.737
11	120	0.123	0.140	0.737
11	130	0.123	0.140	0.737



Link and Junction Combined Collision Rates and Change Factors

Base Year

2011

Road Type	Speed Limit (km/h)	Collision Rate	Beta Factor
1	70	0.057	0.956
1	80	0.057	0.956
1	90	0.057	0.956
1	100	0.057	0.956
1	110	0.057	0.956
1	120	0.057	0.956
1	130	0.057	0.956
2	70	0.219	0.955
2	80	0.219	0.955
2	90	0.219	0.955
2	100	0.219	0.955
2	110	0.219	0.955
2	120	0.219	0.955
2	130	0.219	0.955
3	50	0.613	0.959
3	60	0.613	0.959
4	70	0.094	0.956
4	80	0.094	0.956
4	90	0.094	0.956
4	100	0.094	0.956
4	110	0.094	0.956
4	120	0.094	0.956
4	130	0.094	0.956
5	50	0.402	0.967
5	60	0.402	0.967
6	70	0.219	0.955
6	80	0.219	0.955
6	90	0.219	0.955
6	100	0.219	0.955
6	110	0.219	0.955
6	120	0.219	0.955
6	130	0.219	0.955
7	50	0.613	0.959
7	60	0.613	0.959
8	70	0.094	0.955
8	80	0.094	0.955
8	90	0.094	0.955
8	100	0.094	0.955
8	110	0.094	0.955
8	120	0.094	0.955
8	130	0.094	0.955
9	50	0.402	0.959
9	60	0.402	0.959
10	30	0.449	0.959
10	40	0.449	0.959
10	50	0.449	0.959
10	60	0.449	0.959
11	70	0.115	0.955
11	80	0.115	0.955
11	90	0.115	0.955
11	100	0.115	0.955
11	110	0.115	0.955
11	120	0.115	0.955
11	130	0.115	0.955

Link and Junction Combined Collision Beta Factor Changes over Time

Range of Years Change to Beta Factor

2011-2016	1.000
2017-2026	0.500
2027-2036	0.250
2037-2160	0.000

Link and Junction Combined Casualty Rates

Base Year

2011

Road Type	Speed Limit (km/h)	Casualties per P.I.A.		
		Fatal	Serious	Slight
1	70	0.025	0.033	1.393
1	80	0.025	0.033	1.393
1	90	0.025	0.033	1.393
1	100	0.025	0.033	1.393
1	110	0.025	0.033	1.393
1	120	0.025	0.033	1.393
1	130	0.025	0.033	1.393
2	70	0.050	0.106	1.451
2	80	0.050	0.106	1.451
2	90	0.050	0.106	1.451
2	100	0.050	0.106	1.451
2	110	0.050	0.106	1.451
2	120	0.050	0.106	1.451
2	130	0.050	0.106	1.451
3	50	0.007	0.051	1.325
3	60	0.007	0.051	1.325
4	70	0.018	0.043	1.342
4	80	0.018	0.043	1.342
4	90	0.018	0.043	1.342
4	100	0.018	0.043	1.342
4	110	0.018	0.043	1.342
4	120	0.018	0.043	1.342
4	130	0.018	0.043	1.342
5	50	0.008	0.045	1.233
5	60	0.008	0.045	1.233
6	70	0.050	0.106	1.451
6	80	0.050	0.106	1.451
6	90	0.050	0.106	1.451
6	100	0.050	0.106	1.451
6	110	0.050	0.106	1.451
6	120	0.050	0.106	1.451
6	130	0.050	0.106	1.451
7	50	0.007	0.051	1.325
7	60	0.007	0.051	1.325
8	70	0.018	0.043	1.342
8	80	0.018	0.043	1.342
8	90	0.018	0.043	1.342
8	100	0.018	0.043	1.342
8	110	0.018	0.043	1.342
8	120	0.018	0.043	1.342
8	130	0.018	0.043	1.342
9	50	0.008	0.045	1.233
9	60	0.008	0.045	1.233
10	30	0.007	0.051	1.325
10	40	0.007	0.051	1.325
10	50	0.007	0.051	1.325

10	60	0.007	0.051	1.325
11	70	0.050	0.106	1.451
11	80	0.050	0.106	1.451
11	90	0.050	0.106	1.451
11	100	0.050	0.106	1.451
11	110	0.050	0.106	1.451
11	120	0.050	0.106	1.451
11	130	0.050	0.106	1.451

Link and Junction Combined Casualty Change Factors

Base Year

2011

Road Type	Speed Limit (km/h)	Beta Factor		
		Fatal	Serious	Slight
1	70	0.978	0.979	1.002
1	80	0.978	0.979	1.002
1	90	0.978	0.979	1.002
1	100	0.978	0.979	1.002
1	110	0.978	0.979	1.002
1	120	0.978	0.979	1.002
1	130	0.978	0.979	1.002
2	70	0.979	0.983	1.002
2	80	0.979	0.983	1.002
2	90	0.979	0.983	1.002
2	100	0.979	0.983	1.002
2	110	0.979	0.983	1.002
2	120	0.979	0.983	1.002
2	130	0.979	0.983	1.002
3	50	0.971	0.995	1.001
3	60	0.971	0.995	1.001
4	70	0.984	0.985	0.998
4	80	0.984	0.985	0.998
4	90	0.984	0.985	0.998
4	100	0.984	0.985	0.998
4	110	0.984	0.985	0.998
4	120	0.984	0.985	0.998
4	130	0.984	0.985	0.998
5	50	0.998	0.990	1.002
5	60	0.998	0.990	1.002
6	70	0.979	0.983	1.002
6	80	0.979	0.983	1.002
6	90	0.979	0.983	1.002
6	100	0.979	0.983	1.002
6	110	0.979	0.983	1.002
6	120	0.979	0.983	1.002
6	130	0.979	0.983	1.002
7	50	0.971	0.995	1.001
7	60	0.971	0.995	1.001
8	70	0.979	0.983	1.002
8	80	0.979	0.983	1.002
8	90	0.979	0.983	1.002
8	100	0.979	0.983	1.002
8	110	0.979	0.983	1.002
8	120	0.979	0.983	1.002
8	130	0.979	0.983	1.002
9	50	0.971	0.995	1.001
9	60	0.971	0.995	1.001
10	30	0.971	0.995	1.001
10	40	0.971	0.995	1.001

10	50	0.971	0.995	1.001
10	60	0.971	0.995	1.001
11	70	0.979	0.983	1.002
11	80	0.979	0.983	1.002
11	90	0.979	0.983	1.002
11	100	0.979	0.983	1.002
11	110	0.979	0.983	1.002
11	120	0.979	0.983	1.002
11	130	0.979	0.983	1.002

Link and Junction Combined Casualty Beta Factor Changes over Time  
Range of Years    Change to Beta Factor

2011-2016	1.000
2017-2026	0.500
2027-2036	0.250
2037-2160	0.000



[Section 1.1] Economic Summary

Total Without-Scheme Collision Costs =	68,891.8
Total With-Scheme Collision Costs =	65,982.4
Total Collision Benefits Saved by Scheme =	2,909.4

Costs and benefits discounted to 2011 in multiples of a thousand euros.

[Section 1.2] Collision Summary

Total Without-Scheme Collisions =	1,192.0
Total With-Scheme Collisions =	1,189.7
Total Collisions Saved by Scheme =	2.3

This analysis includes 229 serious error(s).  
 These results should not be considered usable.

This analysis includes 117 warning(s).  
 These results should be considered carefully before using.

[Section 1.3] Casualty Summary

Total Without-Scheme Casualties (Fatal) =	37.1
(Serious) =	90.0
(Slight) =	1,726.8
Total With-Scheme Casualties (Fatal) =	34.9
(Serious) =	85.4
(Slight) =	1,707.7
Total Casualties Saved by Scheme (Fatal) =	2.2
(Serious) =	4.6
(Slight) =	19.1

This analysis includes 229 serious error(s).  
 These results should not be considered usable.

This analysis includes 117 warning(s).  
 These results should be considered carefully before using.

[Section 2] Combined Link and Junction Collision Statistics

	*----- Without-Scheme -----*				*----- With-	
Scheme -----*	*----- Benefits -----*					
	*-- Number of Collisions -*		Total*	*-- Number of		
Collisions -*	Total*	*-- Number of Collisions -*	Total*	Total*		
Link Name	* 2030	2045	Total*	Cost* *	2030	2045

Total*	Cost* *	2030	2045	Total*	Benefit*		
897		0.1	0.1	1.7	50.4	0.1	0.1
1.7	50.4	0.0	0.0	0.0	0.0		
900		0.1	0.1	2.0	57.9	0.1	0.1
2.0	57.9	0.0	0.0	0.0	0.0		
901		0.2	0.2	5.1	146.9	0.2	0.2
5.1	146.9	0.0	0.0	0.0	0.0		
906		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
923		0.2	0.2	6.2	407.4	0.2	0.2
6.2	407.4	0.0	0.0	0.0	0.0		
1495		0.1	0.1	1.8	120.0	0.1	0.1
1.8	120.0	0.0	0.0	0.0	0.0		
1497		0.0	0.0	1.4	93.6	0.0	0.0
1.4	93.6	0.0	0.0	0.0	0.0		
1499		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1504		0.1	0.1	2.8	186.3	0.1	0.1
2.8	186.3	0.0	0.0	0.0	0.0		
1505		0.4	0.4	11.0	730.1	0.4	0.4
11.0	730.1	0.0	0.0	0.0	0.0		
1506		0.1	0.1	4.2	275.5	0.1	0.1
4.2	275.5	0.0	0.0	0.0	0.0		
1515		1.1	1.1	33.9	1,217.0	1.1	1.1
33.9	1,217.0	0.0	0.0	0.0	0.0		
1590		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1591		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
44747		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
45876		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48840		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48953		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49089		0.1	0.1	3.4	97.4	0.1	0.1
3.4	97.5	0.0	0.0	0.0	-0.1		
49185		0.8	0.7	22.0	638.3	0.8	0.7
22.1	638.8	0.0	0.0	0.0	-0.4		
49353		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49552		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49560		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49630		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49684		0.1	0.1	3.9	257.4	0.1	0.1
3.9	256.8	0.0	0.0	0.0	0.6		
49717		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49842		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
50060		0.3	0.3	9.4	272.7	0.3	0.3
9.4	272.5	0.0	0.0	0.0	0.1		
50401		1.0	1.0	28.7	831.7	1.0	1.0
28.7	830.8	0.0	0.0	0.0	0.9		

50515		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50542		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50600		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50648		0.3	0.2	7.3	486.2	0.3	0.2	
7.3	486.2	0.0	0.0	0.0	0.0			
50653		0.1	0.1	3.1	89.1	0.1	0.1	
3.1	89.2	0.0	0.0	0.0	0.0			
50686		0.3	0.3	9.5	275.3	0.3	0.3	
9.6	276.5	0.0	0.0	0.0	-1.2			
554437085		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554437089		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445417		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445421		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445424		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445434		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445603		0.3	0.3	8.9	258.0	0.3	0.3	
8.9	257.8	0.0	0.0	0.0	0.2			
554445605		0.1	0.1	3.2	91.5	0.1	0.1	
3.2	91.5	0.0	0.0	0.0	0.1			
554445606		0.1	0.1	2.1	59.7	0.1	0.1	
2.1	59.7	0.0	0.0	0.0	0.0			
554445611		0.1	0.1	2.0	58.0	0.1	0.1	
2.0	58.2	0.0	0.0	0.0	-0.1			
554445616		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445660		0.1	0.1	3.8	110.9	0.1	0.1	
3.8	111.0	0.0	0.0	0.0	-0.1			
554445681		0.0	0.0	0.7	19.6	0.0	0.0	
0.7	19.6	0.0	0.0	0.0	0.0			
554451601		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451604		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451606		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451619		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451621		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469301		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469376		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469377		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469379		0.1	0.1	4.0	114.9	0.1	0.1	
4.0	115.1	0.0	0.0	0.0	-0.2			
554469380		0.1	0.1	2.8	81.8	0.1	0.1	
2.8	81.9	0.0	0.0	0.0	-0.1			
554469383		0.1	0.1	2.9	83.5	0.1	0.1	





554499943	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
559752177	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
562717850	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578082733	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578088741	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814444	0.1	0.1	1.7	47.9	0.1	0.1	0.1
1.7	47.9	0.0	0.0	0.0	0.0	0.0	0.0
587814449	0.1	0.1	2.2	62.9	0.1	0.1	0.1
2.2	62.9	0.0	0.0	0.0	0.0	0.0	0.0
587814450	0.0	0.0	0.6	18.2	0.0	0.0	0.0
0.6	18.2	0.0	0.0	0.0	0.0	0.0	0.0
587814454	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814456	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814797	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814807	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814808	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814809	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814811	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814819	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814822	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814825	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814826	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815160	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815163	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815170	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815171	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815173	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815174	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815269	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815274	0.0	0.0	0.0	0.0	0.0	0.0	0.0





0.0	0.0	0.0	0.0	0.0	0.0		
587817228		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817230		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817231		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817234		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817269		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817271		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817272		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817274		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817275		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817314		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817316		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817318		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817319		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817447		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817448		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
587817453		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
589015491		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
589015493		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
589015494		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
589626976		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
590481852		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
590481853		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
590481868		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
590522243		0.1	0.1	2.1	60.1	0.1	0.1
2.1	60.0	0.0	0.0	0.0	0.0		
590522244		0.0	0.0	0.9	25.3	0.0	0.0
0.9	25.3	0.0	0.0	0.0	0.0		
590522245		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1139400830		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1148054292		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1164076472		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

1165618763	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1167345578	0.0	0.0	1.0	69.2	0.0	0.0	0.0
1.0	69.2	0.0	0.0	0.0	0.0	0.0	0.0
1176181443	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1176242672	0.1	0.1	4.2	280.6	0.1	0.1	0.1
4.2	280.6	0.0	0.0	0.0	0.0	0.0	0.0
1186121768	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2122362473	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147474988	1.1	1.1	31.6	2,096.4	1.1	1.1	1.1
31.6	2,096.4	0.0	0.0	0.0	0.0	0.0	0.0
2147475007	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147475798	0.5	0.5	14.7	973.5	0.5	0.5	0.5
14.7	973.5	0.0	0.0	0.0	0.0	0.0	0.0
2147475799	0.3	0.3	8.1	539.8	0.3	0.3	0.3
8.1	539.8	0.0	0.0	0.0	0.0	0.0	0.0
2147475801	0.2	0.2	5.3	354.4	0.2	0.2	0.2
5.3	353.5	0.0	0.0	0.0	0.9	0.0	0.0
2147475949	0.2	0.2	5.2	342.9	0.2	0.2	0.2
5.2	342.9	0.0	0.0	0.0	0.0	0.0	0.0
2147481733	0.0	0.0	0.1	3.5	0.0	0.0	0.0
0.1	3.5	0.0	0.0	0.0	0.0	0.0	0.0
2147481754	0.0	0.0	1.2	79.0	0.0	0.0	0.0
1.2	79.0	0.0	0.0	0.0	0.0	0.0	0.0
2147481911	0.3	0.3	8.1	535.8	0.3	0.3	0.3
8.1	535.8	0.0	0.0	0.0	0.0	0.0	0.0
2147481977	0.5	0.4	13.1	869.9	0.5	0.4	0.4
13.1	869.9	0.0	0.0	0.0	0.0	0.0	0.0
2147482906	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482907	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482908	0.1	0.1	3.5	231.7	0.1	0.1	0.1
3.5	231.3	0.0	0.0	0.0	0.4	0.0	0.0
2147482912	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482916	0.0	0.0	1.2	34.7	0.0	0.0	0.0
1.2	34.7	0.0	0.0	0.0	0.0	0.0	0.0
2147482917	0.0	0.0	1.3	38.6	0.0	0.0	0.0
1.3	38.6	0.0	0.0	0.0	0.0	0.0	0.0
2147482919	0.3	0.3	8.1	538.5	0.3	0.3	0.3
8.1	538.5	0.0	0.0	0.0	0.0	0.0	0.0
2147482922	0.2	0.2	5.0	329.9	0.2	0.2	0.2
5.0	329.4	0.0	0.0	0.0	0.5	0.0	0.0
2147482923	0.0	0.0	0.6	41.2	0.0	0.0	0.0
0.6	41.1	0.0	0.0	0.0	0.1	0.0	0.0
2147482924	0.0	0.0	0.9	62.7	0.0	0.0	0.0
0.9	62.6	0.0	0.0	0.0	0.1	0.0	0.0
2147482925	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482926	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482927	0.0	0.0	0.0	0.2	0.0	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482928	0.0	0.0	0.1	6.6	0.0	0.0	0.0



2147482970	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482973	0.2	0.2	4.6	132.1	0.2	0.2	0.2
4.6	132.1	0.0	0.0	0.0	0.0	0.0	0.0
2147482974	0.1	0.1	3.0	86.2	0.1	0.1	0.1
3.0	86.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482975	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482976	1.1	1.1	32.5	2,157.5	1.1	1.1	1.1
32.5	2,157.5	0.0	0.0	0.0	0.0	0.0	0.0
2147482977	1.2	1.2	35.6	2,360.6	1.2	1.2	1.2
35.6	2,360.7	0.0	0.0	0.0	-0.1	0.0	0.0
2147482979	0.0	0.0	1.3	86.9	0.0	0.0	0.0
1.3	86.9	0.0	0.0	0.0	0.0	0.0	0.0
2147482980	0.0	0.0	1.1	72.3	0.0	0.0	0.0
1.1	72.3	0.0	0.0	0.0	0.0	0.0	0.0
2147482981	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482982	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482985	0.0	0.0	1.3	85.3	0.0	0.0	0.0
1.3	85.3	0.0	0.0	0.0	0.0	0.0	0.0
2147482989	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482990	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482992	0.0	0.0	0.6	37.7	0.0	0.0	0.0
0.6	37.7	0.0	0.0	0.0	0.0	0.0	0.0
2147482993	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482994	0.6	0.6	17.9	1,187.2	0.6	0.6	0.6
17.9	1,187.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482995	0.2	0.2	5.4	357.6	0.2	0.2	0.2
5.4	357.6	0.0	0.0	0.0	0.0	0.0	0.0
2147482996	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482997	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482998	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482999	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483004	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483005	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483006	0.6	0.5	16.1	1,067.0	0.6	0.5	0.5
16.1	1,067.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483007	0.0	0.0	0.6	40.6	0.0	0.0	0.0
0.6	40.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483008	0.0	0.0	0.0	0.0	0.0	0.0	0.0





2147483045	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483046	0.0	0.0	0.0	0.9	62.6	0.0	0.0
0.9	62.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483047	0.0	0.0	0.0	0.4	26.6	0.0	0.0
0.4	26.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483048	0.1	0.1	2.5	167.8	0.1	0.1	
2.5	167.8	0.0	0.0	0.0	0.0		
2147483049	0.1	0.1	1.6	104.6	0.1	0.1	
1.6	104.6	0.0	0.0	0.0	0.0		
2147483050	0.0	0.0	0.1	8.3	0.0	0.0	
0.1	8.2	0.0	0.0	0.0	0.0		
2147483051	0.0	0.0	1.0	64.2	0.0	0.0	
1.0	64.2	0.0	0.0	0.0	0.0		
2147483052	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483054	0.2	0.2	7.2	476.1	0.2	0.2	
7.1	474.9	0.0	0.0	0.0	1.2		
2147483055	0.2	0.2	4.6	301.5	0.2	0.2	
4.6	301.7	0.0	0.0	0.0	-0.2		
2147483058	0.0	0.0	0.9	61.1	0.0	0.0	
0.9	61.1	0.0	0.0	0.0	0.0		
2147483060	0.0	0.0	0.5	33.2	0.0	0.0	
0.5	33.2	0.0	0.0	0.0	0.0		
2147483061	0.5	0.5	13.6	904.6	0.5	0.5	
13.6	904.4	0.0	0.0	0.0	0.2		
2147483062	0.9	0.9	26.1	1,733.1	0.9	0.9	
26.1	1,733.1	0.0	0.0	0.0	0.0		
2147483063	0.3	0.2	7.2	479.9	0.3	0.2	
7.2	479.4	0.0	0.0	0.0	0.5		
2147483066	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483067	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483071	0.0	0.0	0.7	45.0	0.0	0.0	
0.7	45.0	0.0	0.0	0.0	0.0		
2147483073	0.1	0.1	3.8	252.9	0.1	0.1	
3.8	252.9	0.0	0.0	0.0	0.0		
2147483074	0.7	0.7	20.2	1,340.0	0.7	0.7	
20.2	1,340.1	0.0	0.0	0.0	-0.1		
2147483075	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483076	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483077	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483078	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483079	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483080	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483081	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483083	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483084	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483085	0.0	0.0	0.0	0.0	0.0	0.0	0.0



2147483118	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483119	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483121	0.0	0.0	0.0	0.2	13.9	0.0	0.0
0.2	13.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483122	0.0	0.0	0.0	0.2	10.0	0.0	0.0
0.2	10.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483123	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483124	0.0	0.0	0.0	0.2	12.3	0.0	0.0
0.2	12.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483125	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483126	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483127	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483128	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483129	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483131	0.1	0.1	3.0	200.2	0.1	0.1	0.1
3.0	199.7	0.0	0.0	0.0	0.5	0.0	0.0
2147483132	0.2	0.1	4.5	296.0	0.2	0.1	0.1
4.5	296.8	0.0	0.0	0.0	-0.8	0.0	0.0
2147483134	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483135	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483136	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483137	0.1	0.1	2.0	132.5	0.1	0.1	0.1
2.0	132.7	0.0	0.0	0.0	-0.2	0.0	0.0
2147483139	0.0	0.0	0.6	41.5	0.0	0.0	0.0
0.6	41.6	0.0	0.0	0.0	-0.1	0.0	0.0
2147483141	0.1	0.1	3.8	253.9	0.1	0.1	0.1
3.9	254.2	0.0	0.0	0.0	-0.4	0.0	0.0
2147483143	1.1	1.1	33.1	2,190.8	1.1	1.1	1.1
33.1	2,190.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483145	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483146	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483147	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483148	0.0	0.0	0.8	51.2	0.0	0.0	0.0
0.8	51.1	0.0	0.0	0.0	0.0	0.0	0.0
2147483149	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483150	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483151	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483152	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483153	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483154	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483155	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483156	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483157	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483158	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483159	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483161	0.1	0.1	2.5	164.7	0.1	0.1
2.5	164.6	0.0	0.0	0.0	0.1	0.2	0.2
	2147483162	0.2	0.2	5.7	376.0	0.2	0.2
5.7	375.7	0.0	0.0	0.0	0.3	0.0	0.0
	2147483163	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483164	0.2	0.2	5.1	336.3	0.2	0.2
5.1	336.0	0.0	0.0	0.0	0.3	0.0	0.0
	2147483165	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483166	0.0	0.0	0.6	42.3	0.0	0.0
0.6	42.3	0.0	0.0	0.0	0.0	0.0	0.0
	2147483168	0.0	0.0	0.6	40.6	0.0	0.0
0.6	40.6	0.0	0.0	0.0	0.0	0.0	0.0
	2147483169	0.2	0.2	5.6	369.1	0.2	0.2
5.6	369.0	0.0	0.0	0.0	0.1	0.1	0.1
	2147483170	0.1	0.1	1.9	127.2	0.1	0.1
1.9	127.2	0.0	0.0	0.0	0.0	0.0	0.0
	2147483171	0.1	0.1	2.6	170.1	0.1	0.1
2.6	170.3	0.0	0.0	0.0	-0.1	0.0	0.0
	2147483172	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483173	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483174	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483175	0.9	0.8	25.3	1,680.0	0.9	0.8
25.3	1,680.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483178	0.0	0.0	1.2	77.9	0.0	0.0
1.2	77.9	0.0	0.0	0.0	-0.1	0.0	0.0
	2147483179	0.0	0.0	0.9	57.3	0.0	0.0
0.9	57.3	0.0	0.0	0.0	-0.1	0.2	0.2
	2147483180	0.2	0.2	6.0	401.0	0.2	0.2
6.0	401.5	0.0	0.0	0.0	-0.4	0.1	0.1
	2147483181	0.1	0.1	1.6	109.6	0.1	0.1
1.6	109.6	0.0	0.0	0.0	0.0	0.1	0.1
	2147483182	0.1	0.1	3.1	203.4	0.1	0.1
3.1	203.4	0.0	0.0	0.0	0.1	0.0	0.0
	2147483183	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483184	0.1	0.1	2.0	135.3	0.1	0.1
2.0	135.0	0.0	0.0	0.0	0.2	0.1	0.1
	2147483185	0.1	0.1	1.6	106.9	0.1	0.1
1.6	106.7	0.0	0.0	0.0	0.2	0.0	0.0
	2147483186	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483187	0.1	0.1	1.8	122.1	0.1	0.1
1.8	121.9	0.0	0.0	0.0	0.2		

2147483188	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483189	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483190	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483191	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483192	0.0	0.0	0.2	13.0	0.0	0.0	0.0
0.2	13.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483193	0.0	0.0	0.3	19.4	0.0	0.0	0.0
0.3	19.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483194	0.0	0.0	0.7	48.3	0.0	0.0	0.0
0.7	48.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483195	0.0	0.0	0.1	4.4	0.0	0.0	0.0
0.1	4.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483196	0.0	0.0	0.2	12.3	0.0	0.0	0.0
0.2	12.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483197	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483198	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483199	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483201	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483202	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483206	0.2	0.2	7.4	488.9	0.2	0.2	0.2
7.4	488.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483207	0.0	0.0	0.8	50.3	0.0	0.0	0.0
0.8	50.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483208	0.0	0.0	0.8	52.8	0.0	0.0	0.0
0.8	52.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483209	0.4	0.4	12.1	798.8	0.4	0.4	0.4
12.1	798.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483210	0.1	0.1	1.7	111.9	0.1	0.1	0.1
1.7	111.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483211	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483212	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483213	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483214	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483215	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483216	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483217	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483218	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483219	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483222	0.0	0.0	0.1	4.0	0.0	0.0	0.0



2147483265	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483266	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483267	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483270	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483274	0.0	0.0	1.4	0.0	90.1	0.0	0.0
1.4	90.1	0.0	0.0	0.0	0.0	0.0	0.0
2147483275	1.0	1.0	30.4	2,018.4	1.0	1.0	1.0
30.4	2,018.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483278	0.0	0.0	0.6	36.6	0.0	0.0	0.0
0.0	0.0	0.0	0.6	36.6	0.0	0.0	0.0
2147483280	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483281	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483282	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483283	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483284	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483285	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483286	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483290	0.1	0.1	2.7	183.3	0.0	0.0	0.0
0.0	0.0	0.1	0.1	2.7	183.3	0.0	0.0
2147483297	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483300	0.0	0.0	1.3	36.8	0.0	0.0	0.0
1.3	37.8	0.0	0.0	0.0	-0.9	0.0	0.0
2147483303	0.2	0.2	4.9	327.3	0.2	0.2	0.2
4.9	327.5	0.0	0.0	0.0	-0.2	0.0	0.0
2147483304	0.0	0.0	1.4	90.6	0.0	0.0	0.0
1.4	90.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483305	0.3	0.2	7.4	496.1	0.0	0.0	0.0
0.0	0.0	0.3	0.2	7.4	496.1	0.0	0.0
2147483306	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483308	0.2	0.2	5.0	333.6	0.2	0.2	0.2
5.0	333.8	0.0	0.0	0.0	-0.2	0.0	0.0
2147483309	0.2	0.2	6.0	397.3	0.2	0.2	0.2
6.0	397.5	0.0	0.0	0.0	-0.2	0.0	0.0
2147483311	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483312	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483316	0.1	0.1	1.9	127.1	0.1	0.1	0.1
1.9	127.1	0.0	0.0	0.0	0.0	0.0	0.0
2147483319	0.0	0.0	0.0	0.0	0.0	0.0	0.0



0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483320	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483321	0.0	0.0	0.0	0.0	0.2	0.0	0.0
0.0	1.7	0.0	0.0	0.0	-1.5	0.0	0.0
2147483323	0.0	0.0	0.0	0.1	4.6	0.0	0.0
0.5	33.4	0.0	0.0	-0.4	-28.8	0.0	0.0
2147483325	0.0	0.0	0.0	0.0	1.2	0.0	0.0
0.6	40.3	0.0	0.0	-0.6	-39.2	0.0	0.0
2147483326	0.0	0.0	0.0	0.0	0.8	0.0	0.0
0.4	29.1	0.0	0.0	-0.4	-28.2	0.0	0.0
2147483327	0.2	0.2	5.4	359.0	0.0	0.0	0.0
0.0	0.0	0.2	0.2	5.4	359.0	0.0	0.0
2147483330	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483331	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483333	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483334	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483335	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483336	0.0	0.0	0.0	0.3	22.0	0.0	0.0
0.3	22.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483337	0.0	0.0	0.0	0.1	3.6	0.0	0.0
0.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483338	0.0	0.0	0.0	0.6	39.2	0.0	0.0
0.6	39.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483339	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483340	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483341	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483342	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483343	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483344	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483345	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483346	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483347	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483348	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483349	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483350	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483352	0.1	0.1	2.1	136.2	0.1	0.1	0.1
2.1	136.2	0.0	0.0	0.0	0.0	0.0	0.0
2147483355	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483356	0.0	0.0	0.4	28.4	0.0	0.0	0.0
0.4	28.5	0.0	0.0	0.0	0.0	0.0	0.0

	2147483357	0.0	0.0	0.2	10.6	0.0	0.0
0.2	10.6	0.0	0.0	0.0	0.0	0.0	0.0
	2147483358	0.0	0.0	0.0	3.0	0.0	0.0
0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483359	0.0	0.0	0.1	9.5	0.0	0.0
0.1	9.5	0.0	0.0	0.0	0.0	0.0	0.0
	2147483360	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483362	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483363	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483364	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483365	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483366	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483367	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483368	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483369	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483371	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483373	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483374	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483375	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483376	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483377	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483378	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483380	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483383	0.4	0.4	12.8	859.5	0.0	0.0
0.0	0.0	0.4	0.4	12.8	859.5	0.0	0.0
	2147483387	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483388	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.7	0.0	0.0	0.0	-0.7	0.0	0.0
	2147483389	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	-0.3	0.0	0.0
	2147483390	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483391	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.1	0.0	0.0	0.0	-0.1	0.0	0.0
	2147483392	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483393	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483394	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483395	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.7	0.0	0.0	0.0	-0.6		
	2147483396	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.8	0.0	0.0	0.0	-0.8		
	2147483397	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.8	0.0	0.0	0.0	-0.7		
	2147483398	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483400	0.0	0.0	0.0	1.4	0.0	0.0
0.0	1.4	0.0	0.0	0.0	0.0		
	2147483401	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483402	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483403	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483404	0.0	0.0	0.3	20.8	0.0	0.0
0.3	20.8	0.0	0.0	0.0	0.0		
	2147483405	0.0	0.0	0.0	0.7	0.0	0.0
0.0	0.7	0.0	0.0	0.0	0.0		
	2147483406	0.1	0.1	4.1	270.4	0.1	0.1
4.1	270.6	0.0	0.0	0.0	-0.2		
	2147483408	0.0	0.0	0.6	38.0	0.0	0.0
0.6	36.9	0.0	0.0	0.0	1.1		
	2147483409	0.0	0.0	0.0	0.9	0.0	0.0
0.1	3.6	0.0	0.0	0.0	-2.7		
	2147483410	0.0	0.0	0.0	0.2	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0		
	2147483411	0.0	0.0	0.0	1.8	0.0	0.0
0.0	2.1	0.0	0.0	0.0	-0.4		
	2147483412	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483413	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483414	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483415	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483416	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483417	0.2	0.1	4.5	299.9	0.0	0.0
0.0	0.0	0.2	0.1	4.5	299.9		
	2147483418	0.4	0.4	11.3	756.1	0.0	0.0
0.0	0.0	0.4	0.4	11.3	756.1		
	2147483419	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483420	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483421	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483423	0.7	0.7	20.3	1,361.2	0.0	0.0
0.0	0.0	0.7	0.7	20.3	1,361.2		
	2147483424	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483425	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483426	0.4	0.4	11.9	799.7	0.0	0.0
0.0	0.0	0.4	0.4	11.9	799.7		
	2147483428	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

2147483429	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483431	0.0	0.0	0.0	0.1	8.9	0.0	0.0
0.1	6.6	0.0	0.0	0.0	2.3	0.0	0.0
2147483432	0.0	0.0	0.0	0.1	7.4	0.0	0.0
0.0	0.0	0.0	0.0	0.1	7.4	0.0	0.0
2147483433	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483434	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483435	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483436	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483437	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483438	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483439	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483440	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483441	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483442	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483443	0.2	0.2	6.8	452.8	0.2	0.2	0.2
6.8	452.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483444	0.0	0.0	1.0	68.2	0.0	0.0	0.0
1.0	68.2	0.0	0.0	0.0	0.0	0.0	0.0
2147483445	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483446	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483447	0.0	0.0	0.0	0.3	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483448	0.0	0.0	0.0	0.6	0.0	0.0	0.0
0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483449	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483450	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483451	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483452	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483453	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483454	0.0	0.0	0.0	0.4	0.0	0.0	0.0
0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483455	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483456	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483457	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483458	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483459	0.0	0.0	0.3	17.2	0.0	0.0	0.0





0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483537	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483540	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483543	0.5	0.5	14.8	985.2	0.5	0.5	0.5
14.8	985.4	0.0	0.0	0.0	-0.2	0.0	0.0	0.0
	2147483544	0.3	0.3	7.8	519.8	0.3	0.3	0.3
7.8	519.9	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
	2147483545	0.2	0.2	6.9	458.6	0.2	0.2	0.2
6.9	458.8	0.0	0.0	0.0	-0.2	0.0	0.0	0.0
	2147483546	0.1	0.1	4.2	276.0	0.1	0.1	0.1
4.2	276.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
	2147483547	0.0	0.0	1.4	93.2	0.0	0.0	0.0
1.4	93.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483548	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483549	0.1	0.1	1.5	101.9	0.1	0.1	0.1
1.5	102.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
	2147483550	0.1	0.1	2.5	167.5	0.1	0.1	0.1
2.5	167.6	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
	2147483551	0.0	0.0	0.0	0.6	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
	2147483552	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483553	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483554	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483555	0.3	0.3	9.7	647.5	0.0	0.0	0.0
0.0	0.0	0.3	0.3	9.7	647.5	0.0	0.0	0.0
	2147483556	0.3	0.3	9.0	605.6	0.0	0.0	0.0
0.0	0.0	0.3	0.3	9.0	605.6	0.0	0.0	0.0
	2147483557	0.0	0.0	1.0	69.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	1.0	69.0	0.0	0.0	0.0
	2147483558	0.1	0.1	1.8	51.9	0.1	0.1	0.1
1.8	51.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483561	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483562	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483563	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483564	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483565	0.1	0.1	2.8	183.7	0.1	0.1	0.1
2.8	183.8	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
	2147483566	0.0	0.0	0.0	2.7	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0
	2147483567	0.0	0.0	0.1	5.8	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.1	5.8	0.0	0.0	0.0
	2147483568	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483569	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483572	0.3	0.3	7.6	503.6	0.3	0.3	0.3
7.6	503.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483573	0.0	0.0	0.1	4.6	0.0	0.0	0.0
0.1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	2147483575	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483576	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483577	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483578	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483579	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483580	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483581	0.2	0.2	5.8	385.5	0.2	0.2	
5.8	387.7	0.0	0.0	0.0	-2.2			
	2147483582	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483585	0.0	0.0	0.7	21.4	0.0	0.0	0.0
0.7	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483588	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483590	0.1	0.0	1.5	42.7	0.1	0.0	0.0
1.5	42.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483593	0.1	0.1	2.4	68.9	0.1	0.1	0.1
2.4	68.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483595	0.7	0.7	20.0	718.0	0.7	0.7	0.7
20.0	718.1	0.0	0.0	0.0	-0.2			
	2147483596	0.1	0.1	2.1	60.2	0.1	0.1	0.1
2.1	61.3	0.0	0.0	0.0	-1.2			
	2147483599	0.4	0.4	12.8	847.2	0.4	0.4	0.4
12.8	847.4	0.0	0.0	0.0	-0.2			
	2147483600	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483601	0.0	0.0	0.6	22.4	0.0	0.0	0.0
0.6	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483603	0.0	0.0	1.1	69.6	0.0	0.0	0.0
1.1	69.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483605	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483606	0.0	0.0	0.5	32.0	0.0	0.0	0.0
0.5	32.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483610	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483612	0.8	0.8	23.1	830.1	0.8	0.8	0.8
23.1	829.8	0.0	0.0	0.0	0.2			
	2147483615	0.1	0.1	2.6	93.9	0.1	0.1	0.1
2.6	93.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483617	0.0	0.0	0.2	14.1	0.0	0.0	0.0
0.2	14.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483618	0.1	0.1	2.9	190.7	0.1	0.1	0.1
2.9	190.9	0.0	0.0	0.0	-0.2			
	2147483619	0.1	0.1	1.9	124.5	0.1	0.1	0.1
1.9	124.2	0.0	0.0	0.0	0.3			
	2147483621	0.0	0.0	0.2	15.7	0.0	0.0	0.0
0.2	15.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0
	2147483622	0.0	0.0	0.2	15.4	0.0	0.0	0.0
0.2	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483626	0.7	0.7	20.4	730.7	0.7	0.7	0.7



20.3	728.9	0.0	0.0	0.0	1.8		
	2147483627	0.0	0.0	0.5	16.2	0.0	0.0
0.5	16.6	0.0	0.0	0.0	-0.5		
	2147483630	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483631	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1		0.0	0.0	0.0	0.0	0.0	0.0
0.3	7.4	0.0	0.0	-0.3	-7.4		
	2	0.0	0.0	0.0	0.0	0.0	0.0
0.2	15.1	0.0	0.0	-0.2	-15.1		
	3	0.0	0.0	0.0	0.0	0.1	0.1
2.6	92.2	-0.1	-0.1	-2.6	-92.2		
	4	0.0	0.0	0.0	0.0	0.1	0.1
2.8	101.7	-0.1	-0.1	-2.8	-101.7		
	5	0.0	0.0	0.0	0.0	0.0	0.0
0.3	22.8	0.0	0.0	-0.3	-22.8		
	6	0.0	0.0	0.0	0.0	0.0	0.0
0.3	19.7	0.0	0.0	-0.3	-19.7		
	7	0.0	0.0	0.0	0.0	0.0	0.0
0.3	20.3	0.0	0.0	-0.3	-20.3		
	12	0.0	0.0	0.0	0.0	0.2	0.2
5.6	199.7	-0.2	-0.2	-5.6	-199.7		
	13	0.0	0.0	0.0	0.0	0.1	0.1
2.2	78.5	-0.1	-0.1	-2.2	-78.5		
	16	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	17	0.0	0.0	0.0	0.0	0.0	0.0
0.9	61.3	0.0	0.0	-0.9	-61.3		
	20	0.0	0.0	0.0	0.0	0.0	0.0
0.1	7.6	0.0	0.0	-0.1	-7.6		
	2147483645	0.0	0.0	0.0	0.0	0.0	0.0
0.4	25.1	0.0	0.0	-0.4	-25.1		
	2147483646	0.0	0.0	0.0	0.0	0.0	0.0
0.6	36.8	0.0	0.0	-0.6	-36.8		
	2147483647	0.0	0.0	0.0	0.0	0.0	0.0
0.1	9.4	0.0	0.0	-0.1	-9.4		
	906_DS	0.0	0.0	0.0	0.0	0.2	0.2
4.9	175.1	-0.2	-0.2	-4.9	-175.1		
	2147483290_D	0.0	0.0	0.0	0.0	0.1	0.1
2.3	80.9	-0.1	-0.1	-2.3	-80.9		
	2147483297_D	0.0	0.0	0.0	0.0	0.0	0.0
0.9	31.5	0.0	0.0	-0.9	-31.5		
	2147483305_D	0.0	0.0	0.0	0.0	0.2	0.2
6.1	218.9	-0.2	-0.2	-6.1	-218.9		
	2147483306_D	0.0	0.0	0.0	0.0	0.1	0.1
2.2	80.2	-0.1	-0.1	-2.2	-80.2		
	2147483383_D	0.0	0.0	0.0	0.0	0.4	0.4
11.0	395.2	-0.4	-0.4	-11.0	-395.2		
	2147483417_D	0.0	0.0	0.0	0.0	0.1	0.1
3.7	131.7	-0.1	-0.1	-3.7	-131.7		
	2147483418_D	0.0	0.0	0.0	0.0	0.3	0.3
9.2	329.8	-0.3	-0.3	-9.2	-329.8		
	2147483423_D	0.0	0.0	0.0	0.0	0.6	0.6
17.2	617.9	-0.6	-0.6	-17.2	-617.9		
	2147483426_D	0.0	0.0	0.0	0.0	0.3	0.3
9.3	332.6	-0.3	-0.3	-9.3	-332.6		
	2147483555_D	0.0	0.0	0.0	0.0	0.3	0.3
8.0	289.0	-0.3	-0.3	-8.0	-289.0		

	2147483335DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.7	44.4	0.0	0.0	-0.7	-44.4			
	2147483577DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.8	55.4	0.0	0.0	-0.8	-55.4			
	Total	40.8	39.8	1,192.0	68,892.0	40.7	39.7	
	1,189.7	65,982.5	0.1	0.1	2.3	2,909.5		

Costs and benefits discounted to 2011 in multiples of a thousand euros.

[Section 3] Combined Link and Junction Collision Rates

Link Name	*----- Collision Rate -----*	
	* 2030	2045 *
897	0.387882	0.364630
900	0.387882	0.364630
901	0.387882	0.364630
906	0.000000	0.000000
923	0.132426	0.123735
1495	0.132426	0.123735
1497	0.132426	0.123735
1499	0.132426	0.123735
1504	0.132426	0.123735
1505	0.132426	0.123735
1506	0.132426	0.123735
1515	0.057490	0.053798
1590	0.132426	0.123735
1591	0.132426	0.123735
44747	0.000000	0.000000
45876	0.000000	0.000000
48840	0.000000	0.000000
48953	0.000000	0.000000
49089	0.387882	0.364630
49185	0.387882	0.364630
49353	0.000000	0.000000
49552	0.000000	0.000000
49560	0.000000	0.000000
49630	0.000000	0.000000
49684	0.132426	0.123735
49717	0.000000	0.000000
49842	0.000000	0.000000
50060	0.387882	0.364630
50401	0.387882	0.364630
50515	0.000000	0.000000
50542	0.000000	0.000000
50600	0.000000	0.000000
50648	0.132426	0.123735
50653	0.387882	0.364630
50686	0.387882	0.364630
554437085	0.000000	0.000000
554437089	0.000000	0.000000
554445417	0.000000	0.000000
554445421	0.000000	0.000000
554445424	0.000000	0.000000
554445434	0.000000	0.000000

554445603	0.387882	0.364630
554445605	0.387882	0.364630
554445606	0.387882	0.364630
554445611	0.387882	0.364630
554445616	0.000000	0.000000
554445660	0.387882	0.364630
554445681	0.387882	0.364630
554451601	0.000000	0.000000
554451604	0.000000	0.000000
554451606	0.000000	0.000000
554451619	0.000000	0.000000
554451621	0.000000	0.000000
554469301	0.000000	0.000000
554469376	0.000000	0.000000
554469377	0.000000	0.000000
554469379	0.387882	0.364630
554469380	0.387882	0.364630
554469383	0.387882	0.364630
554469386	0.387882	0.364630
554469390	0.132426	0.123735
554476250	0.000000	0.000000
554476251	0.000000	0.000000
554476254	0.000000	0.000000
554476255	0.000000	0.000000
554476258	0.000000	0.000000
554476263	0.000000	0.000000
554476268	0.000000	0.000000
554476273	0.000000	0.000000
554476275	0.000000	0.000000
554476276	0.000000	0.000000
554476314	0.000000	0.000000
554476317	0.000000	0.000000
554476318	0.000000	0.000000
554476321	0.000000	0.000000
554476331	0.000000	0.000000
554476332	0.000000	0.000000
554476337	0.000000	0.000000
554476339	0.000000	0.000000
554476344	0.000000	0.000000
554476347	0.000000	0.000000
554478297	0.000000	0.000000
554478964	0.000000	0.000000
554478965	0.000000	0.000000
554479189	0.132426	0.123735
554479190	0.132426	0.123735
554499930	0.000000	0.000000
554499931	0.000000	0.000000
554499943	0.000000	0.000000
559752177	0.000000	0.000000
562717850	0.000000	0.000000
578082733	0.000000	0.000000
578088741	0.000000	0.000000
587814444	0.387882	0.364630
587814449	0.387882	0.364630
587814450	0.387882	0.364630
587814454	0.000000	0.000000
587814456	0.000000	0.000000
587814797	0.000000	0.000000
587814807	0.000000	0.000000

587814808	0.000000	0.000000
587814809	0.000000	0.000000
587814811	0.000000	0.000000
587814819	0.000000	0.000000
587814822	0.000000	0.000000
587814825	0.000000	0.000000
587814826	0.000000	0.000000
587815160	0.000000	0.000000
587815163	0.000000	0.000000
587815170	0.000000	0.000000
587815171	0.000000	0.000000
587815173	0.000000	0.000000
587815174	0.000000	0.000000
587815269	0.000000	0.000000
587815271	0.000000	0.000000
587815272	0.000000	0.000000
587815273	0.000000	0.000000
587815274	0.000000	0.000000
587815275	0.000000	0.000000
587815277	0.000000	0.000000
587815278	0.000000	0.000000
587815280	0.000000	0.000000
587815285	0.000000	0.000000
587815287	0.000000	0.000000
587815295	0.387882	0.364630
587815303	0.000000	0.000000
587815773	0.387882	0.364630
587815780	0.387882	0.364630
587815785	0.000000	0.000000
587815787	0.000000	0.000000
587815790	0.000000	0.000000
587815791	0.000000	0.000000
587815792	0.000000	0.000000
587815795	0.000000	0.000000
587815802	0.000000	0.000000
587815824	0.000000	0.000000
587816038	0.000000	0.000000
587816039	0.000000	0.000000
587816041	0.000000	0.000000
587816057	0.000000	0.000000
587816058	0.000000	0.000000
587816063	0.387882	0.364630
587816177	0.000000	0.000000
587816186	0.000000	0.000000
587816709	0.387882	0.364630
587816710	0.387882	0.364630
587816711	0.000000	0.000000
587816712	0.000000	0.000000
587816713	0.387882	0.364630
587816714	0.000000	0.000000
587816718	0.000000	0.000000
587816721	0.000000	0.000000
587816722	0.000000	0.000000
587816725	0.000000	0.000000
587816971	0.000000	0.000000
587816972	0.000000	0.000000
587816973	0.000000	0.000000
587816974	0.000000	0.000000
587816975	0.000000	0.000000

587816978	0.000000	0.000000
587816980	0.000000	0.000000
587816981	0.000000	0.000000
587816984	0.000000	0.000000
587816985	0.000000	0.000000
587816986	0.000000	0.000000
587816988	0.000000	0.000000
587816989	0.000000	0.000000
587817206	0.000000	0.000000
587817207	0.000000	0.000000
587817216	0.000000	0.000000
587817217	0.000000	0.000000
587817219	0.000000	0.000000
587817221	0.000000	0.000000
587817223	0.000000	0.000000
587817225	0.000000	0.000000
587817226	0.000000	0.000000
587817227	0.000000	0.000000
587817228	0.000000	0.000000
587817230	0.000000	0.000000
587817231	0.000000	0.000000
587817234	0.000000	0.000000
587817269	0.000000	0.000000
587817271	0.000000	0.000000
587817272	0.000000	0.000000
587817274	0.000000	0.000000
587817275	0.000000	0.000000
587817314	0.000000	0.000000
587817316	0.000000	0.000000
587817318	0.000000	0.000000
587817319	0.000000	0.000000
587817447	0.000000	0.000000
587817448	0.000000	0.000000
587817453	0.000000	0.000000
589015491	0.000000	0.000000
589015493	0.000000	0.000000
589015494	0.000000	0.000000
589626976	0.000000	0.000000
590481852	0.000000	0.000000
590481853	0.000000	0.000000
590481868	0.000000	0.000000
590522243	0.387882	0.364630
590522244	0.387882	0.364630
590522245	0.000000	0.000000
1139400830	0.000000	0.000000
1148054292	0.000000	0.000000
1164076472	0.000000	0.000000
1165618763	0.000000	0.000000
1167345578	0.132426	0.123735
1176181443	0.000000	0.000000
1176242672	0.132426	0.123735
1186121768	0.000000	0.000000
2122362473	0.000000	0.000000
2147474988	0.132426	0.123735
2147475007	0.000000	0.000000
2147475798	0.132426	0.123735
2147475799	0.132426	0.123735
2147475801	0.132426	0.123735
2147475949	0.132426	0.123735

2147481733	0.132426	0.123735
2147481754	0.132426	0.123735
2147481911	0.132426	0.123735
2147481977	0.132426	0.123735
2147482906	0.000000	0.000000
2147482907	0.000000	0.000000
2147482908	0.132426	0.123735
2147482912	0.000000	0.000000
2147482916	0.387882	0.364630
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2147483533	0.000000	0.000000
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2147483537	0.000000	0.000000
2147483540	0.000000	0.000000
2147483543	0.132426	0.123735
2147483544	0.132426	0.123735
2147483545	0.132426	0.123735
2147483546	0.132426	0.123735
2147483547	0.132426	0.123735
2147483548	0.000000	0.000000
2147483549	0.132426	0.123735
2147483550	0.132426	0.123735
2147483551	0.132426	0.123735
2147483552	0.132426	0.123735
2147483553	0.132426	0.123735
2147483554	0.132426	0.123735
2147483555	0.069539	0.064975
2147483556	0.069539	0.064975
2147483557	0.132426	0.123735
2147483558	0.387882	0.364630
2147483561	0.132426	0.123735
2147483562	0.132426	0.123735
2147483563	0.132426	0.123735
2147483564	0.000000	0.000000
2147483565	0.132426	0.123735
2147483566	0.132426	0.123735
2147483567	0.132426	0.123735
2147483568	0.132426	0.123735
2147483569	0.000000	0.000000
2147483572	0.132426	0.123735
2147483573	0.132426	0.123735
2147483575	0.000000	0.000000
2147483576	0.000000	0.000000
2147483577	0.000000	0.000000
2147483578	0.000000	0.000000
2147483579	0.000000	0.000000
2147483580	0.000000	0.000000
2147483581	0.132426	0.123735
2147483582	0.000000	0.000000
2147483585	0.387882	0.364630
2147483588	0.000000	0.000000
2147483590	0.387882	0.364630
2147483593	0.387882	0.364630

2147483595	0.057490	0.053798
2147483596	0.387882	0.364630
2147483599	0.132426	0.123735
2147483600	0.000000	0.000000
2147483601	0.057490	0.053798
2147483603	0.132426	0.123735
2147483605	0.132426	0.123735
2147483606	0.132426	0.123735
2147483608	0.000000	0.000000
2147483610	0.000000	0.000000
2147483612	0.057490	0.053798
2147483615	0.057490	0.053798
2147483617	0.132426	0.123735
2147483618	0.132426	0.123735
2147483619	0.132426	0.123735
2147483621	0.132426	0.123735
2147483622	0.132426	0.123735
2147483626	0.057490	0.053798
2147483627	0.057490	0.053798
2147483630	0.000000	0.000000
2147483631	0.132426	0.123735
1	0.387882	0.364630
2	0.132426	0.123735
3	0.057490	0.053798
4	0.057490	0.053798
5	0.132426	0.123735
6	0.132426	0.123735
7	0.132426	0.123735
12	0.057490	0.053798
13	0.057490	0.053798
16	0.000000	0.000000
17	0.132426	0.123735
20	0.132426	0.123735
2147483645	0.132426	0.123735
2147483646	0.132426	0.123735
2147483647	0.132426	0.123735
906_DS	0.057490	0.053798
2147483290_D	0.057490	0.053798
2147483297_D	0.057490	0.053798
2147483305_D	0.057490	0.053798
2147483306_D	0.057490	0.053798
2147483383_D	0.057490	0.053798
2147483417_D	0.057490	0.053798
2147483418_D	0.057490	0.053798
2147483423_D	0.057490	0.053798
2147483426_D	0.057490	0.053798
2147483555_D	0.057490	0.053798
2147483335DS	0.132426	0.123735
2147483577DS	0.132426	0.123735

Collision rates are in collisions per million vehicle kilometres.

[Section 4] Input Data - Scheme File

Scheme Name  
N25 Glenmore to Waterford

Years Subsection  
 Current Year 2020  
 Base Year 2020  
 Without-Scheme  
 Year 1 2030  
 Year 2 2045  
 Year 3 2060  
 Year 4 0  
 Year 5 0  
 With-Scheme  
 Year 1 2030  
 Year 2 2045  
 Year 3 2060  
 Year 4 0  
 Year 5 0

Scheme Opening Year 2030

Link and Junction Combined Input Section

Combined Classification Subsection

Link Name	Road Type	Length (km)	Speed Limit (km/h)	Error/Warning Summary (!=Error, #=Warning)
897	3	0.06	50	
900	3	0.08	50	
901	3	0.13	50	
906	11	0.55	65	#Unusual speed limit (65) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link.
923	2	1.17	100	
1495	2	1.12	70	
1497	2	0.88	70	
1499	2	0.32	70	
1504	2	0.22	70	
1505	2	0.68	100	
1506	2	0.79	100	
1515	4	5.69	100	
1590	2	0.65	70	
1591	2	0.25	70	
44747	4	0.10	40	!Speed limit is too low for a fast dual carriageway.
45876	4	0.04	40	!Speed limit is too low for a fast dual carriageway.
48840	2	0.42	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
48953	4	0.44	50	!Speed limit is too low for a fast dual carriageway.
49089	3	0.15	60	
49185	3	0.70	50	
49353	3	0.87	80	!Speed limit is high. Care should be taken using the results of the calculation for this link.
49552	3	0.31	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
49560	3	0.50	80	!Speed limit is high. Care should be taken using the results of the calculation for this link.
49630	2	0.37	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
49684	2	0.45	80	



49717	3	0.23	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
49842	2	0.23	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50060	3	0.23	50	
50401	3	1.87	50	
50515	3	0.18	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50542	3	0.28	40	
50600	2	0.17	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50648	2	4.01	80	
50653	3	0.16	60	
50686	3	0.41	60	
554437085	3	0.05	40	
554437089	2	0.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554445417	4	0.07	40	!Speed limit is too low for a
fast dual carriageway.				
554445421	3	0.04	40	
554445424	3	0.06	40	
554445434	3	0.03	40	
554445603	3	0.24	50	
554445605	3	0.09	50	
554445606	3	0.10	50	
554445611	3	0.05	50	
554445616	3	0.11	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554445660	3	0.11	50	
554445681	3	0.03	60	
554451601	3	0.07	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451604	3	0.13	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451606	3	0.02	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451619	3	0.01	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451621	3	0.04	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554469301	3	0.08	40	
554469376	3	0.12	40	
554469377	2	0.04	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554469379	3	0.10	50	
554469380	3	0.07	50	
554469383	3	0.09	50	
554469386	3	0.06	50	
554469390	2	0.08	100	
554476250	3	0.07	40	
554476251	3	0.17	40	
554476254	3	0.05	40	
554476255	3	0.13	40	
554476258	3	0.04	40	
554476263	3	0.08	40	
554476268	3	0.01	40	
554476273	3	0.04	40	
554476275	3	0.12	40	
554476276	3	0.04	40	

554476314	3	0.08	40	
554476317	3	0.06	40	
554476318	4	0.03	40	!Speed limit is too low for a
fast dual carriageway.				
554476321	4	0.01	40	!Speed limit is too low for a
fast dual carriageway.				
554476331	4	0.04	40	!Speed limit is too low for a
fast dual carriageway.				
554476332	3	0.04	40	
554476337	3	0.07	40	
554476339	3	0.05	40	
554476344	3	0.02	40	
554476347	3	0.01	40	
554478297	3	0.08	40	
554478964	3	0.07	40	
554478965	3	0.03	40	
554479189	2	0.17	70	
554479190	2	0.04	70	
554499930	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554499931	2	0.03	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554499943	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
559752177	3	0.39	40	
562717850	3	0.23	40	
578082733	2	0.09	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
578088741	2	0.06	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814444	3	0.09	60	
587814449	3	0.10	60	
587814450	3	0.03	60	
587814454	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814456	3	0.04	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814797	3	0.19	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587814807	10	0.01	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814808	3	0.05	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587814809	3	0.04	15	#Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. #Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
587814811	4	0.04	10	!Speed limit is too low for a
fast dual carriageway.				
587814819	3	0.02	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814822	3	0.05	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
587814825	3	0.03	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				

587814826	3	0.03	10	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815160	3	0.13	15	#Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.
587815163	3	0.03	20	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815170	3	0.30	23	#Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.
587815171	3	0.15	23	#Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.
587815173	3	0.02	23	#Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.
587815174	3	0.12	23	#Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.
587815269	3	0.09	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815271	3	0.13	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815272	3	0.09	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815273	3	0.19	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815274	3	0.08	20	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815275	3	0.07	20	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815277	3	0.12	15	#Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.
587815278	3	0.04	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815280	3	0.13	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815285	3	0.05	15	#Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.
587815287	3	0.06	15	#Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.
587815295	3	0.44	50	
587815303	3	0.02	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815773	3	0.04	50	
587815780	3	0.16	50	
587815785	2	0.07	25	#Unusual speed limit (25) is not multiple of 10km/h. Care should be taken using the results of the calculation

for this link. !Speed limit is low. Care should be taken using the results of the calculation for this link.

587815787	3	0.02	20	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815790	3	0.14	40	
587815791	3	0.16	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815792	3	0.20	20	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815795	3	0.04	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815802	3	0.04	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587815824	3	0.04	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816038	3	0.20	40	
587816039	3	0.08	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816041	3	0.02	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816057	3	0.06	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816058	3	0.02	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816063	3	0.05	50	
587816177	3	0.02	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816186	3	0.08	40	
587816709	3	0.10	50	
587816710	3	0.02	50	
587816711	3	0.22	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816712	3	0.16	40	
587816713	3	0.04	50	
587816714	3	0.34	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816718	3	0.19	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816721	3	0.08	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816722	3	0.02	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816725	3	0.04	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816971	3	0.05	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816972	3	0.12	40	
587816973	3	0.10	40	
587816974	3	0.19	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587816975	4	0.07	30	!Speed limit is too low for a fast dual carriageway.
587816978	4	0.06	30	!Speed limit is too low for a fast dual carriageway.
587816980	4	0.06	30	!Speed limit is too low for a fast dual carriageway.
587816981	4	0.06	30	!Speed limit is too low for a fast dual carriageway.
587816984	10	0.04	10	#Speed limit is low. Care

should be taken using the results of the calculation for this link.  
587816985 3 0.09 40  
587816986 3 0.29 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587816988 3 0.25 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587816989 3 0.33 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817206 3 0.06 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817207 3 0.48 40  
587817216 3 0.03 40  
587817217 3 0.16 40  
587817219 3 0.04 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817221 3 0.08 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817223 3 0.08 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817225 4 0.07 30 !Speed limit is too low for a  
fast dual carriageway.  
587817226 4 0.06 30 !Speed limit is too low for a  
fast dual carriageway.  
587817227 4 0.10 30 !Speed limit is too low for a  
fast dual carriageway.  
587817228 3 0.02 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817230 3 0.06 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817231 3 0.04 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817234 4 0.02 30 !Speed limit is too low for a  
fast dual carriageway.  
587817269 3 0.09 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817271 3 0.03 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817272 3 0.07 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817274 3 0.04 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817275 3 0.09 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817314 5 0.12 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817316 3 0.07 25 #Unusual speed limit (25) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.  
587817318 3 0.01 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817319 3 0.10 30 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817447 3 0.09 20 #Speed limit is low. Care  
should be taken using the results of the calculation for this link.  
587817448 3 0.08 25 #Unusual speed limit (25) is  
not multiple of 10km/h. Care should be taken using the results of the calculation  
for this link. #Speed limit is low. Care should be taken using the results of the  
calculation for this link.

587817453	3	0.05	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015491	3	0.02	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015493	3	0.01	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589015494	3	0.00	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
589626976	2	0.13	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
590481852	3	0.05	40	
590481853	3	0.05	40	
590481868	3	0.06	40	
590522243	3	0.06	50	
590522244	3	0.02	50	
590522245	3	0.05	40	
1139400830	3	0.35	40	
1148054292	3	0.62	40	
1164076472	3	0.12	40	
1165618763	3	0.20	40	
1167345578	2	0.27	70	
1176181443	3	0.13	40	
1176242672	2	0.32	70	
1186121768	3	0.39	40	
2122362473	4	0.14	40	!Speed limit is too low for a
fast dual carriageway.				
2147474988	2	3.36	80	
2147475007	2	0.07	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147475798	2	1.12	70	
2147475799	2	0.65	70	
2147475801	2	0.61	80	
2147475949	2	0.73	70	
2147481733	2	0.88	70	
2147481754	2	0.77	70	
2147481911	2	0.89	100	
2147481977	2	3.42	70	
2147482906	3	0.06	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482907	3	0.08	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482908	2	0.86	80	
2147482912	2	0.40	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482916	3	0.07	50	
2147482917	3	0.08	50	
2147482919	2	1.01	100	
2147482922	2	1.60	80	
2147482923	2	0.20	80	
2147482924	2	0.16	80	
2147482925	2	1.59	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482926	2	1.00	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482927	2	0.07	70	
2147482928	2	0.03	80	
2147482930	2	0.43	80	
2147482931	2	1.06	80	
2147482932	2	1.24	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.	2147482933	2	1.46	30	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482937	3	0.17	40	
	2147482940	3	0.09	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482941	3	0.42	40	
	2147482942	3	0.02	40	
	2147482943	2	2.76	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482944	2	1.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482945	2	1.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482946	2	1.06	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482947	2	1.52	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482949	2	2.39	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482950	2	0.75	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482951	2	0.31	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482952	2	0.28	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482953	2	0.25	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482954	2	1.53	70	
	2147482957	2	0.05	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482958	2	2.45	70	
	2147482959	2	1.66	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482960	2	3.36	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482963	2	1.90	15	#Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. !Speed limit is low. Care should be taken using the results of the calculation for this link.
	2147482964	2	0.49	80	
	2147482966	2	1.01	25	#Unusual speed limit (25) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. !Speed limit is low. Care should be taken using the results of the calculation for this link.
	2147482967	2	0.16	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482968	2	0.73	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482969	2	0.57	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482970	2	0.81	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482973	3	0.11	60	
	2147482974	3	0.08	60	
	2147482975	2	2.53	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.	2147482976	2	2.64	100	
	2147482977	2	3.02	100	

2147482979	2	2.38	70	
2147482980	2	1.98	70	
2147482981	2	1.54	70	
2147482982	2	0.22	70	
2147482985	2	0.15	100	
2147482989	2	3.07	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482990	2	1.90	70	
2147482992	2	0.06	100	
2147482993	2	1.37	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482994	2	2.04	100	
2147482995	2	0.62	100	
2147482996	2	1.93	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482997	2	0.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482998	2	0.62	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147482999	2	0.28	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483000	2	0.42	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483001	2	0.55	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483002	2	2.37	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483003	2	1.43	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483004	2	1.66	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483005	2	0.92	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483006	2	1.84	100	
2147483007	2	0.07	100	
2147483008	2	1.29	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483009	2	0.70	80	
2147483011	2	0.27	80	
2147483012	2	1.67	80	
2147483015	2	0.11	80	
2147483016	2	0.21	80	
2147483017	2	2.23	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483019	2	9.88	80	
2147483020	2	1.23	80	
2147483021	2	1.14	100	
2147483024	2	0.28	100	
2147483025	2	0.64	100	
2147483026	2	0.21	100	
2147483027	2	0.75	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483028	2	0.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483029	2	1.00	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483030	2	1.27	70	
2147483031	2	0.51	70	



2147483032	2	0.16	70	
2147483033	2	0.30	70	
2147483034	2	2.85	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483035	2	0.89	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483037	2	0.48	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483038	2	0.72	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483039	2	0.32	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483040	2	0.52	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483041	2	0.27	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483042	2	0.31	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483043	2	2.19	70	
2147483044	2	0.72	70	
2147483045	2	0.57	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483046	2	1.00	80	
2147483047	2	0.43	80	
2147483048	2	1.51	80	
2147483049	2	2.16	80	
2147483050	2	0.05	80	
2147483051	2	1.32	70	
2147483052	2	1.11	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483054	2	0.82	80	
2147483055	2	0.76	80	
2147483058	2	0.26	80	
2147483060	2	0.14	80	
2147483061	2	3.20	80	
2147483062	2	3.79	80	
2147483063	2	0.57	100	
2147483066	2	0.21	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483067	3	0.03	40	
2147483071	2	0.04	100	
2147483073	2	0.24	100	
2147483074	2	1.50	100	
2147483075	2	1.26	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483076	2	1.66	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483077	2	1.31	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483078	2	0.90	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483079	2	0.69	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483080	2	0.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483081	2	0.70	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483083	2	0.04	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				

2147483084	2	3.65	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483085	2	0.23	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483086	2	0.08	100		
2147483088	2	0.17	100		
2147483089	2	0.32	100		
2147483090	2	0.02	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483091	2	0.33	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483092	2	0.77	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483093	2	1.54	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483094	2	0.89	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483095	2	1.40	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483096	2	0.73	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483097	2	1.03	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483098	2	0.68	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483099	2	0.19	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483101	2	0.64	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483102	2	0.45	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483103	2	0.46	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483104	2	0.61	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483105	2	0.59	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483106	2	1.24	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483107	2	1.13	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483108	2	0.55	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483109	2	0.75	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483110	2	0.14	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483111	2	0.93	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483112	2	0.28	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483113	2	0.20	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483114	2	0.52	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483115	2	0.95	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483117	2	1.74	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					

2147483118	2	1.57	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483119	2	0.10	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483121	2	1.29	70		
2147483122	2	0.93	70		
2147483123	2	0.75	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483124	2	1.14	70		
2147483125	2	0.60	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483126	2	1.41	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483127	2	1.32	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483128	2	0.26	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483129	2	1.48	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483131	2	0.34	80		
2147483132	2	0.88	80		
2147483134	2	0.72	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483135	2	0.25	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483136	2	0.54	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483137	2	0.64	70		
2147483139	2	0.20	70		
2147483141	2	1.24	70		
2147483143	2	4.98	70		
2147483145	2	1.74	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483146	2	1.51	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483147	2	1.06	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483148	2	0.21	70		
2147483149	2	0.22	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483150	2	0.36	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483151	2	0.20	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483152	2	0.02	70		
2147483153	2	0.95	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483154	2	0.82	70		
2147483155	2	0.16	70		
2147483156	2	0.58	70		
2147483157	2	2.22	70		
2147483158	2	0.05	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483159	2	0.18	70		
2147483161	2	0.53	70		
2147483162	2	1.20	70		
2147483163	2	1.38	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483164	2	1.08	70		

2147483165	2	1.16	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483166	2	0.18	70	
2147483168	2	0.17	70	
2147483169	2	1.54	70	
2147483170	2	0.46	70	
2147483171	2	1.19	70	
2147483172	2	1.29	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483173	2	1.38	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483174	2	1.73	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483175	2	8.21	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation for this link.				
2147483178	2	0.64	80	
2147483179	2	0.47	80	
2147483180	2	3.31	80	
2147483181	2	1.11	80	
2147483182	2	2.06	80	
2147483183	2	3.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483184	2	1.62	70	
2147483185	2	1.28	70	
2147483186	2	0.96	70	
2147483187	2	1.46	70	
2147483188	2	0.74	70	
2147483189	2	0.90	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483190	2	0.39	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483191	2	1.50	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483192	2	0.21	70	
2147483193	2	0.31	80	
2147483194	2	0.77	80	
2147483195	2	0.07	80	
2147483196	2	0.20	80	
2147483197	2	0.40	70	
2147483198	2	0.21	70	
2147483199	2	1.80	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation for this link.				
2147483200	2	0.52	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation for this link.				
2147483201	2	1.68	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483202	2	0.91	70	
2147483206	2	1.82	70	
2147483207	2	0.22	70	
2147483208	2	0.24	70	
2147483209	2	1.69	70	
2147483210	2	0.24	70	
2147483211	2	1.54	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483212	2	1.53	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				

2147483213	2	0.65	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483214	2	1.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483215	2	0.22	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483216	2	1.21	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483217	2	0.48	70	
2147483218	2	0.18	70	
2147483219	2	1.73	65	#Unusual speed limit (65) is
not multiple of 10km/h. Care should be taken using the results of the calculation for this link.				
!Speed limit is low. Care should be taken using the results of the calculation for this link.				
2147483222	2	0.02	70	
2147483224	2	0.04	70	
2147483226	2	1.42	70	
2147483227	2	0.24	70	
2147483229	2	1.72	70	
2147483230	2	0.41	70	
2147483231	2	1.75	70	
2147483234	2	13.41	70	
2147483236	2	1.52	70	
2147483237	2	6.67	70	
2147483238	2	0.26	70	
2147483239	2	0.26	70	
2147483240	2	0.48	70	
2147483241	2	1.03	70	
2147483242	2	1.89	70	
2147483243	2	1.78	70	
2147483244	2	1.25	70	
2147483245	2	1.01	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483246	2	0.46	70	
2147483247	2	0.43	70	
2147483248	2	1.11	70	
2147483249	2	0.29	70	
2147483250	2	1.00	70	
2147483251	2	1.14	70	
2147483252	2	1.24	70	
2147483254	2	0.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483256	2	0.55	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483258	2	1.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483260	2	0.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483264	2	0.66	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483265	2	0.34	70	
2147483266	2	1.16	70	
2147483267	2	3.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483270	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483271	2	0.69	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483272	2	0.23	50	!Speed limit is low. Care

should be taken using the results of the calculation for this link.				
2147483273	2	1.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483274	2	0.35	70	
2147483275	2	7.92	70	
2147483278	2	0.81	70	
2147483280	2	0.11	80	
2147483281	2	0.26	80	
2147483282	2	1.88	80	
2147483283	2	0.43	80	
2147483284	2	0.13	80	
2147483285	2	0.87	80	
2147483286	2	1.88	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation for this link.				
2147483290	11	0.26	100	
2147483297	11	0.15	50	
2147483300	3	0.04	50	
2147483303	2	0.72	90	
2147483304	2	0.20	100	
2147483305	11	0.69	100	
2147483306	11	0.25	60	
2147483308	2	0.73	100	
2147483309	2	0.87	100	
2147483311	2	0.56	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483312	2	0.14	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483316	2	0.56	70	
2147483319	2	2.13	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483320	2	0.08	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483321	2	0.07	80	
2147483323	2	1.44	70	
2147483325	2	0.55	70	
2147483326	2	0.39	70	
2147483327	11	0.48	100	
2147483330	2	2.37	70	
2147483331	2	0.10	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483333	2	0.18	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483334	2	0.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483335	2	0.95	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483336	2	0.57	70	
2147483337	2	0.09	70	
2147483338	2	1.01	70	
2147483339	2	2.08	70	
2147483340	2	1.31	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483341	2	1.11	80	
2147483342	2	0.19	80	
2147483343	2	0.89	80	
2147483344	2	0.59	80	
2147483345	2	0.22	80	
2147483346	2	1.92	80	

2147483347	2	1.15	80	
2147483348	2	0.32	80	
2147483349	2	0.94	80	
2147483350	2	1.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483352	2	0.60	70	
2147483355	2	1.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483356	2	0.80	70	
2147483357	2	1.31	80	
2147483358	2	0.37	80	
2147483359	2	1.17	70	
2147483360	2	0.23	70	
2147483362	2	0.20	70	
2147483363	2	1.76	70	
2147483364	2	0.77	70	
2147483365	2	0.78	70	
2147483366	2	1.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483367	2	0.92	80	
2147483368	2	0.70	80	
2147483369	2	0.61	80	
2147483371	2	0.29	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483373	2	0.75	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483374	2	0.84	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483375	2	0.40	70	
2147483376	2	0.93	70	
2147483377	2	0.45	70	
2147483378	2	0.14	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483380	2	0.18	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483383	11	1.12	100	
2147483387	2	0.51	80	
2147483388	2	0.37	70	
2147483389	2	0.16	70	
2147483390	2	0.82	70	
2147483391	2	0.06	70	
2147483392	2	0.19	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483393	2	0.50	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483394	2	0.38	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483395	2	0.34	70	
2147483396	2	0.43	70	
2147483397	2	0.39	70	
2147483398	2	0.86	70	
2147483400	2	0.05	70	
2147483401	2	1.73	70	
2147483402	2	0.34	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483403	2	0.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				

2147483404	2	0.70	80	
2147483405	2	0.02	80	
2147483406	2	0.63	100	
2147483408	2	0.54	80	
2147483409	2	1.32	80	
2147483410	2	0.29	80	
2147483411	2	2.93	80	
2147483412	2	0.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483413	2	0.05	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483414	2	1.65	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483415	2	0.55	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483416	2	0.07	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483417	11	0.42	100	
2147483418	11	1.04	100	
2147483419	2	1.07	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483420	2	0.77	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483421	2	0.36	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483423	11	1.79	100	
2147483424	2	1.77	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483425	2	1.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483426	11	1.06	100	
2147483428	2	0.34	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483429	2	2.00	70	
2147483431	2	0.48	70	
2147483432	2	0.84	80	
2147483433	2	0.61	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483434	2	0.90	70	
2147483435	2	0.67	70	
2147483436	2	0.15	70	
2147483437	2	0.66	70	
2147483438	2	1.47	70	
2147483439	2	1.22	70	
2147483440	2	0.54	70	
2147483441	2	0.05	70	
2147483442	2	1.26	70	
2147483443	2	1.98	70	
2147483444	2	0.30	70	
2147483445	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483446	2	0.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483447	2	0.95	80	
2147483448	2	2.19	70	
2147483449	2	0.22	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483450	2	0.10	70	
2147483451	2	0.25	70	



2147483452	2	0.06	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483453	2	0.10	70	
2147483454	2	1.29	70	
2147483455	2	1.25	70	
2147483456	2	2.21	70	
2147483457	2	1.67	70	
2147483458	2	1.13	70	
2147483459	2	1.07	70	
2147483460	2	0.10	70	
2147483461	2	0.49	70	
2147483464	2	1.01	70	
2147483465	2	1.25	70	
2147483466	2	0.86	70	
2147483468	2	0.56	70	
2147483469	2	0.29	70	
2147483471	2	0.71	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483472	2	0.42	70	
2147483473	2	0.11	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483474	2	0.43	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483475	2	0.30	70	
2147483476	2	0.44	70	
2147483477	2	0.14	70	
2147483478	2	0.63	70	
2147483479	2	0.27	70	
2147483480	2	0.80	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483481	2	0.34	70	
2147483482	2	0.86	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483483	2	0.22	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483484	2	0.31	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483485	2	0.48	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483486	2	0.32	30	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483487	2	1.08	70	
2147483488	2	0.26	70	
2147483489	2	1.12	70	
2147483490	2	1.58	70	
2147483491	2	2.24	70	
2147483492	2	1.36	70	
2147483493	2	0.58	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483494	2	0.17	70	
2147483495	3	0.06	60	
2147483497	3	0.12	50	
2147483498	3	0.13	50	
2147483499	2	0.40	100	
2147483501	2	0.23	100	
2147483502	2	0.36	100	
2147483504	3	0.14	50	
2147483505	3	0.32	50	
2147483506	2	0.03	50	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483507	3	0.04	40	
2147483508	3	0.02	40	
2147483510	3	0.21	40	
2147483511	3	0.05	40	
2147483512	3	0.08	40	
2147483513	3	0.29	40	
2147483517	3	0.05	30	#Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483518	3	0.02	30	#Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483519	3	0.08	30	#Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483520	3	0.02	30	#Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483521	3	0.04	30	#Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483522	3	0.04	30	#Speed limit is low. Care
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should be taken using the results of the calculation for this link.

2147483523	3	0.09	50	
2147483524	3	0.11	50	
2147483528	3	0.11	40	
2147483531	3	0.08	40	
2147483532	3	0.15	40	
2147483533	3	0.04	40	
2147483534	3	0.39	40	
2147483537	3	0.17	20	#Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483540	4	0.05	20	!Speed limit is too low for a
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fast dual carriageway.

2147483543	2	0.98	100	
2147483544	2	0.52	100	
2147483545	2	0.55	80	
2147483546	2	0.33	80	
2147483547	2	1.29	80	
2147483548	2	0.10	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483549	2	0.22	100	
2147483550	2	0.37	100	
2147483551	2	0.40	80	
2147483552	2	0.70	70	
2147483553	2	0.63	70	
2147483554	2	0.75	70	
2147483555	11	0.83	100	
2147483556	11	0.78	100	
2147483557	2	1.25	70	
2147483558	3	0.05	50	
2147483561	2	0.17	70	
2147483562	2	0.19	70	
2147483563	2	0.09	70	
2147483564	2	1.80	40	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483565	2	1.33	80	
2147483566	2	0.17	80	
2147483567	2	0.37	80	
2147483568	2	0.10	70	
2147483569	2	0.68	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.

2147483572	2	0.72	70	
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2147483573	2	0.11	70	
2147483575	3	0.04	40	
2147483576	3	0.04	40	
2147483577	2	0.78	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483578	2	0.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483579	2	0.09	30	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483580	2	0.84	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483581	2	0.95	80	
2147483582	3	0.41	40	
2147483585	3	0.04	50	
2147483588	2	0.23	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483590	3	0.05	50	
2147483593	3	0.07	50	
2147483595	4	4.93	100	
2147483596	3	0.07	50	
2147483599	2	0.84	80	
2147483600	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483601	4	0.17	100	
2147483603	2	0.33	80	
2147483605	2	3.35	70	
2147483606	2	0.13	70	
2147483608	2	0.02	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483610	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483612	4	4.51	100	
2147483615	4	0.61	100	
2147483617	2	0.26	80	
2147483618	2	0.29	80	
2147483619	2	0.20	80	
2147483621	2	0.07	80	
2147483622	2	0.22	80	
2147483626	4	3.21	100	
2147483627	4	0.14	80	
2147483630	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483631	2	0.02	70	
1	3	0.21	60	
2	2	0.16	70	
3	4	0.29	100	
4	4	0.30	100	
5	2	0.29	70	
6	2	0.21	70	
7	2	0.81	70	
12	4	0.56	100	
13	4	0.22	100	
16	2	1.76	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
17	2	1.11	70	
20	2	0.14	70	
2147483645	2	1.08	70	
2147483646	2	0.38	70	
2147483647	2	0.68	70	



49353			4,548	5,180	5,366	5,365	0	0	5,175
5,363	5,364	0	0						
49552			3,216	3,545	3,606	3,567	0	0	3,545
3,606	3,571	0	0						
49560			7,102	7,775	7,974	8,020	0	0	7,730
7,973	8,020	0	0						
49630			4,375	5,044	5,404	5,456	0	0	5,056
5,405	5,456	0	0						
49684			5,729	6,242	6,390	6,421	0	0	6,198
6,389	6,421	0	0						
49717			1,954	2,162	2,186	2,168	0	0	2,163
2,182	2,165	0	0						
49842			1,372	1,531	1,560	1,547	0	0	1,531
1,560	1,547	0	0						
50060			9,129	10,039	10,233	10,208	0	0	10,038
10,226	10,199	0	0						
50401			3,481	3,756	3,840	3,862	0	0	3,745
3,839	3,862	0	0						
50515			1,185	1,594	1,722	1,880	0	0	1,581
1,728	1,880	0	0						
50542			918	1,302	1,414	1,570	0	0	1,287
1,419	1,570	0	0						
50600			4,162	4,561	4,704	4,730	0	0	4,561
4,704	4,730	0	0						
50648			1,162	1,310	1,344	1,344	0	0	1,310
1,344	1,344	0	0						
50653			4,060	4,610	4,760	4,806	0	0	4,616
4,760	4,805	0	0						
50686			5,104	5,614	5,865	5,896	0	0	5,668
5,876	5,905	0	0						
554437085			5,960	6,627	6,754	6,754	0	0	6,644
6,758	6,757	0	0						
554437089			8,487	9,207	9,265	9,207	0	0	9,186
9,261	9,204	0	0						
554445417			3,919	4,376	4,575	4,541	0	0	4,376
4,575	4,541	0	0						
554445421			0	0	0	0	0	0	0
0	0	0	0						
554445424			1,011	1,186	1,240	1,260	0	0	1,186
1,240	1,260	0	0						
554445434			5,245	6,028	6,220	6,243	0	0	6,033
6,219	6,247	0	0						
554445603			8,498	9,054	9,100	8,980	0	0	9,044
9,093	8,980	0	0						
554445605			7,578	8,409	8,594	8,578	0	0	8,405
8,586	8,573	0	0						
554445606			4,663	5,275	5,437	5,478	0	0	5,282
5,437	5,478	0	0						
554445611			8,753	9,938	10,262	10,288	0	0	9,967
10,276	10,299	0	0						
554445616			3,349	3,572	3,660	3,646	0	0	3,587
3,665	3,648	0	0						
554445660			7,786	8,754	8,952	8,963	0	0	8,759
8,957	8,966	0	0						
554445681			4,455	5,188	5,540	5,600	0	0	5,197
5,541	5,601	0	0						
554451601			2,585	2,611	2,637	2,632	0	0	2,630
2,640	2,633	0	0						
554451604			0	0	0	0	0	0	0

0	0	0	0						
	554451606		2,585	2,611	2,637	2,632	0	0	2,630
2,640	2,633	0	0						
	554451619		3,716	3,920	3,957	3,936	0	0	3,940
3,962	3,938	0	0						
	554451621		2,585	2,611	2,637	2,632	0	0	2,630
2,640	2,633	0	0						
	554469301		8,177	9,001	9,377	9,335	0	0	9,001
9,377	9,335	0	0						
	554469376		1,402	1,554	1,582	1,571	0	0	1,554
1,582	1,571	0	0						
	554469377		7,354	8,097	8,371	8,378	0	0	8,151
8,382	8,387	0	0						
	554469379		8,753	9,938	10,262	10,288	0	0	9,967
10,276	10,299	0	0						
	554469380		8,473	9,521	9,847	9,909	0	0	9,537
9,855	9,917	0	0						
	554469383		7,104	7,933	8,096	8,109	0	0	7,939
8,102	8,113	0	0						
	554469386		8,969	9,946	10,101	10,080	0	0	9,956
10,103	10,081	0	0						
	554469390		8,505	9,238	9,302	9,241	0	0	9,217
9,299	9,238	0	0						
	554476250		0	0	0	0	0	0	0
0	0	0	0						
	554476251		0	0	0	0	0	0	0
0	0	0	0						
	554476254		0	0	0	0	0	0	0
0	0	0	0						
	554476255		0	0	0	0	0	0	0
0	0	0	0						
	554476258		0	0	0	0	0	0	0
0	0	0	0						
	554476263		0	0	0	0	0	0	0
0	0	0	0						
	554476268		0	0	0	0	0	0	0
0	0	0	0						
	554476273		0	0	0	0	0	0	0
0	0	0	0						
	554476275		0	0	0	0	0	0	0
0	0	0	0						
	554476276		0	0	0	0	0	0	0
0	0	0	0						
	554476314		8,177	9,001	9,377	9,335	0	0	9,001
9,377	9,335	0	0						
	554476317		0	0	0	0	0	0	0
0	0	0	0						
	554476318		3,919	4,376	4,575	4,541	0	0	4,376
4,575	4,541	0	0						
	554476321		3,919	4,376	4,575	4,541	0	0	4,376
4,575	4,541	0	0						
	554476331		10,004	11,099	11,498	11,535	0	0	11,099
11,498	11,535	0	0						
	554476332		4,470	4,814	4,975	4,993	0	0	4,809
4,977	4,988	0	0						
	554476337		9,714	10,842	11,195	11,235	0	0	10,842
11,195	11,235	0	0						
	554476339		9,714	10,842	11,195	11,235	0	0	10,842
11,195	11,235	0	0						

554476344			9,714	10,842	11,195	11,235	0	0	10,842
11,195	11,235	0	0						
554476347			0	0	0	0	0	0	0
0	0	0	0						
554478297			4,974	5,547	5,730	5,745	0	0	5,547
5,730	5,745	0	0						
554478964			0	0	0	0	0	0	0
0	0	0	0						
554478965			0	0	0	0	0	0	0
0	0	0	0						
554479189			2,456	2,777	2,809	2,792	0	0	2,777
2,809	2,792	0	0						
554479190			2,456	2,777	2,809	2,792	0	0	2,777
2,809	2,792	0	0						
554499930			2,794	3,045	3,161	3,198	0	0	3,045
3,161	3,198	0	0						
554499931			2,794	3,045	3,161	3,198	0	0	3,045
3,161	3,198	0	0						
554499943			118	132	131	133	0	0	132
132	133	0	0						
559752177			1,742	1,948	2,028	2,050	0	0	1,948
2,028	2,050	0	0						
562717850			11,199	12,305	12,709	12,744	0	0	12,359
12,720	12,754	0	0						
578082733			4,455	5,188	5,540	5,600	0	0	5,197
5,541	5,601	0	0						
578088741			118	132	131	133	0	0	132
132	133	0	0						
587814444			4,060	4,610	4,760	4,806	0	0	4,616
4,760	4,805	0	0						
587814449			4,663	5,275	5,437	5,478	0	0	5,282
5,437	5,478	0	0						
587814450			4,663	5,275	5,437	5,478	0	0	5,282
5,437	5,478	0	0						
587814454			3,216	3,545	3,606	3,567	0	0	3,545
3,606	3,571	0	0						
587814456			3,216	3,545	3,606	3,567	0	0	3,545
3,606	3,571	0	0						
587814797			2,603	2,907	2,978	2,974	0	0	2,915
2,985	2,989	0	0						
587814807			0	0	0	0	0	0	0
0	0	0	0						
587814808			3,238	3,804	4,112	4,124	0	0	3,814
4,121	4,138	0	0						
587814809			3,238	3,804	4,112	4,124	0	0	3,814
4,121	4,138	0	0						
587814811			0	0	0	0	0	0	0
0	0	0	0						
587814819			0	0	0	0	0	0	0
0	0	0	0						
587814822			0	0	0	0	0	0	0
0	0	0	0						
587814825			0	0	0	0	0	0	0
0	0	0	0						
587814826			0	0	0	0	0	0	0
0	0	0	0						
587815160			3,238	3,804	4,112	4,124	0	0	3,814
4,121	4,138	0	0						
587815163			2,585	2,611	2,637	2,632	0	0	2,630

2,640	2,633	0	0						
	587815170		642	859	1,075	1,091	0	0	862
1,077	1,092	0	0						
	587815171		642	859	1,075	1,091	0	0	862
1,077	1,092	0	0						
	587815173		642	859	1,075	1,091	0	0	862
1,077	1,092	0	0						
	587815174		642	859	1,075	1,091	0	0	862
1,077	1,092	0	0						
	587815269		2,391	2,809	3,023	3,054	0	0	2,802
3,024	3,053	0	0						
	587815271		2,391	2,809	3,023	3,054	0	0	2,802
3,024	3,053	0	0						
	587815272		420	742	886	898	0	0	740
891	911	0	0						
	587815273		2,380	3,079	3,433	3,481	0	0	3,070
3,438	3,493	0	0						
	587815274		2,585	2,611	2,637	2,632	0	0	2,630
2,640	2,633	0	0						
	587815275		2,585	2,611	2,637	2,632	0	0	2,630
2,640	2,633	0	0						
	587815277		0	0	0	0	0	0	0
0	0	0	0						
	587815278		420	742	886	898	0	0	740
891	911	0	0						
	587815280		2,380	3,079	3,433	3,481	0	0	3,070
3,438	3,493	0	0						
	587815285		0	0	0	0	0	0	0
0	0	0	0						
	587815287		0	0	0	0	0	0	0
0	0	0	0						
	587815295		8,428	9,273	9,463	9,443	0	0	9,271
9,455	9,434	0	0						
	587815303		0	0	0	0	0	0	0
0	0	0	0						
	587815773		5,528	6,231	6,278	6,476	0	0	6,227
6,282	6,477	0	0						
	587815780		5,248	5,869	6,008	6,105	0	0	5,865
6,011	6,104	0	0						
	587815785		2	142	284	308	0	0	143
281	304	0	0						
	587815787		5,773	6,403	6,629	6,629	0	0	6,431
6,636	6,628	0	0						
	587815790		5,354	5,907	6,067	6,080	0	0	5,911
6,072	6,079	0	0						
	587815791		5,438	5,996	6,156	6,170	0	0	6,000
6,160	6,169	0	0						
	587815792		0	0	0	0	0	0	0
0	0	0	0						
	587815795		918	1,302	1,414	1,570	0	0	1,287
1,419	1,570	0	0						
	587815802		0	0	0	0	0	0	0
0	0	0	0						
	587815824		0	0	0	0	0	0	0
0	0	0	0						
	587816038		3,554	4,038	4,257	4,251	0	0	4,010
4,258	4,254	0	0						
	587816039		4,032	4,546	4,749	4,739	0	0	4,519
4,749	4,742	0	0						



587816041	4,032	4,546	4,749	4,739	0	0	4,519
4,749 4,742	0 0						
587816057	0	0	0	0	0	0	0
0 0	0 0						
587816058	1,020	1,133	1,148	1,141	0	0	1,133
1,148 1,141	0 0						
587816063	2,636	3,048	3,249	3,253	0	0	3,020
3,249 3,256	0 0						
587816177	0	0	0	0	0	0	0
0 0	0 0						
587816186	966	1,361	1,480	1,633	0	0	1,348
1,487 1,633	0 0						
587816709	2,636	3,048	3,249	3,253	0	0	3,020
3,249 3,256	0 0						
587816710	3,108	3,577	3,789	3,787	0	0	3,549
3,789 3,790	0 0						
587816711	830	921	936	927	0	0	921
936 927	0 0						
587816712	3,247	3,685	3,889	3,888	0	0	3,657
3,891 3,892	0 0						
587816713	3,460	3,977	4,199	4,194	0	0	3,948
4,199 4,197	0 0						
587816714	228	315	333	328	0	0	314
331 328	0 0						
587816718	228	315	333	328	0	0	314
331 328	0 0						
587816721	228	315	333	328	0	0	314
331 328	0 0						
587816722	228	315	333	328	0	0	314
331 328	0 0						
587816725	228	315	333	328	0	0	314
331 328	0 0						
587816971	1,954	2,162	2,186	2,168	0	0	2,163
2,182 2,165	0 0						
587816972	1,470	1,799	1,904	1,898	0	0	1,799
1,904 1,900	0 0						
587816973	1,242	1,484	1,571	1,570	0	0	1,485
1,573 1,572	0 0						
587816974	1,242	1,484	1,571	1,570	0	0	1,485
1,573 1,572	0 0						
587816975	0	0	0	0	0	0	0
0 0	0 0						
587816978	0	0	0	0	0	0	0
0 0	0 0						
587816980	0	0	0	0	0	0	0
0 0	0 0						
587816981	0	0	0	0	0	0	0
0 0	0 0						
587816984	0	0	0	0	0	0	0
0 0	0 0						
587816985	1,470	1,799	1,904	1,898	0	0	1,799
1,904 1,900	0 0						
587816986	0	0	0	0	0	0	0
0 0	0 0						
587816988	2,203	2,425	2,471	2,456	0	0	2,426
2,467 2,453	0 0						
587816989	0	0	0	0	0	0	0
0 0	0 0						
587817206	0	0	0	0	0	0	0

0	0	0	0						
	587817207		830	921	936	927	0	0	921
936	927	0	0						
	587817216		3,807	4,071	4,135	4,152	0	0	4,095
4,139	4,147	0	0						
	587817217		2,174	2,396	2,531	2,575	0	0	2,396
2,536	2,580	0	0						
	587817219		2,320	2,698	2,869	2,912	0	0	2,719
2,877	2,920	0	0						
	587817221		2,320	2,698	2,869	2,912	0	0	2,719
2,877	2,920	0	0						
	587817223		2,387	2,742	2,821	2,809	0	0	2,738
2,818	2,809	0	0						
	587817225		0	0	0	0	0	0	0
0	0	0	0						
	587817226		0	0	0	0	0	0	0
0	0	0	0						
	587817227		0	0	0	0	0	0	0
0	0	0	0						
	587817228		2,320	2,698	2,869	2,912	0	0	2,719
2,877	2,920	0	0						
	587817230		2,585	2,611	2,637	2,632	0	0	2,630
2,640	2,633	0	0						
	587817231		2,585	2,611	2,637	2,632	0	0	2,630
2,640	2,633	0	0						
	587817234		0	0	0	0	0	0	0
0	0	0	0						
	587817269		2,320	2,698	2,869	2,912	0	0	2,719
2,877	2,920	0	0						
	587817271		2,387	2,742	2,821	2,809	0	0	2,738
2,818	2,809	0	0						
	587817272		2,283	2,601	2,684	2,678	0	0	2,597
2,681	2,678	0	0						
	587817274		938	1,114	1,157	1,145	0	0	1,109
1,155	1,144	0	0						
	587817275		256	292	301	292	0	0	290
300	291	0	0						
	587817314		967	1,183	1,310	1,325	0	0	1,209
1,320	1,333	0	0						
	587817316		1,287	1,447	1,479	1,469	0	0	1,448
1,481	1,470	0	0						
	587817318		156	163	157	148	0	0	163
157	148	0	0						
	587817319		1,254	1,386	1,415	1,443	0	0	1,384
1,414	1,442	0	0						
	587817447		0	0	0	0	0	0	0
0	0	0	0						
	587817448		1,410	1,549	1,572	1,591	0	0	1,546
1,571	1,590	0	0						
	587817453		2,596	2,850	2,941	2,925	0	0	2,852
2,940	2,925	0	0						
	589015491		3,507	3,876	3,957	3,973	0	0	3,882
3,955	3,963	0	0						
	589015493		4,531	4,918	5,058	5,059	0	0	4,945
5,063	5,056	0	0						
	589015494		4,285	4,784	4,963	4,965	0	0	4,780
4,966	4,963	0	0						
	589626976		4,162	4,561	4,704	4,730	0	0	4,561
4,704	4,730	0	0						

590481852		3,992	4,459	4,657	4,620	0	0	4,459
4,657	4,620	0	0					
590481853		3,992	4,459	4,657	4,620	0	0	4,459
4,657	4,620	0	0					
590481868		956	1,092	1,147	1,157	0	0	1,092
1,147	1,157	0	0					
590522243		8,497	9,025	9,067	8,948	0	0	9,016
9,060	8,947	0	0					
590522244		8,497	9,025	9,067	8,948	0	0	9,016
9,060	8,947	0	0					
590522245		0	0	0	0	0	0	0
0	0	0	0					
1139400830		956	1,092	1,147	1,157	0	0	1,092
1,147	1,157	0	0					
1148054292		8,425	9,282	9,661	9,612	0	0	9,282
9,661	9,612	0	0					
1164076472		8,425	9,282	9,661	9,612	0	0	9,282
9,661	9,612	0	0					
1165618763		956	1,092	1,147	1,157	0	0	1,092
1,147	1,157	0	0					
1167345578		2,456	2,777	2,809	2,792	0	0	2,777
2,809	2,792	0	0					
1176181443		9,714	10,842	11,195	11,235	0	0	10,842
11,195	11,235	0	0					
1176242672		8,425	9,282	9,661	9,612	0	0	9,282
9,661	9,612	0	0					
1186121768		846	938	958	954	0	0	938
958	954	0	0					
2122362473		5,269	5,812	6,042	6,055	0	0	5,812
6,042	6,055	0	0					
2147474988		6,000	6,684	6,947	6,964	0	0	6,684
6,947	6,964	0	0					
2147475007		8,525	9,340	9,379	9,370	0	0	9,345
9,387	9,377	0	0					
2147475798		8,460	9,322	9,704	9,657	0	0	9,322
9,704	9,657	0	0					
2147475799		8,107	8,882	9,223	9,201	0	0	8,882
9,223	9,201	0	0					
2147475801		5,729	6,242	6,390	6,421	0	0	6,198
6,389	6,421	0	0					
2147475949		4,128	4,915	5,307	5,439	0	0	4,915
5,307	5,439	0	0					
2147481733		35	41	44	45	0	0	41
44	45	0	0					
2147481754		956	1,092	1,147	1,157	0	0	1,092
1,147	1,157	0	0					
2147481911		5,431	6,343	6,722	6,842	0	0	6,343
6,722	6,842	0	0					
2147481977		2,456	2,777	2,809	2,792	0	0	2,777
2,809	2,792	0	0					
2147482906		3,481	3,756	3,840	3,862	0	0	3,745
3,839	3,862	0	0					
2147482907		3,481	3,756	3,840	3,862	0	0	3,745
3,839	3,862	0	0					
2147482908		2,459	2,889	3,012	3,008	0	0	2,884
3,007	3,005	0	0					
2147482912		486	641	678	679	0	0	641
677	678	0	0					
2147482916		3,729	4,207	4,361	4,376	0	0	4,208

4,359	4,374	0	0						
	2147482917		3,585	4,168	4,365	4,388	0	0	4,169
4,363	4,386	0	0						
	2147482919		5,171	5,718	5,905	5,958	0	0	5,718
5,905	5,958	0	0						
	2147482922		1,923	2,204	2,295	2,297	0	0	2,200
2,291	2,295	0	0						
	2147482923		1,923	2,204	2,295	2,297	0	0	2,200
2,291	2,295	0	0						
	2147482924		3,529	4,123	4,277	4,291	0	0	4,118
4,272	4,288	0	0						
	2147482925		203	211	207	205	0	0	212
207	205	0	0						
	2147482926		226	241	240	238	0	0	243
240	238	0	0						
	2147482927		22	30	33	33	0	0	30
33	33	0	0						
	2147482928		2,003	2,423	2,559	2,567	0	0	2,416
2,553	2,564	0	0						
	2147482930		1,964	2,378	2,511	2,519	0	0	2,371
2,505	2,516	0	0						
	2147482931		1,964	2,378	2,511	2,519	0	0	2,371
2,505	2,516	0	0						
	2147482932		0	0	0	0	0	0	0
0	0	0	0						
	2147482933		22	30	33	33	0	0	30
33	33	0	0						
	2147482937		1,850	2,054	2,087	2,070	0	0	2,053
2,087	2,069	0	0						
	2147482940		3,216	3,545	3,606	3,567	0	0	3,545
3,606	3,571	0	0						
	2147482941		1,997	2,228	2,268	2,252	0	0	2,228
2,268	2,251	0	0						
	2147482942		1,442	1,606	1,632	1,619	0	0	1,606
1,632	1,619	0	0						
	2147482943		14	32	38	38	0	0	31
37	38	0	0						
	2147482944		283	430	471	474	0	0	429
469	473	0	0						
	2147482945		14	32	38	38	0	0	31
37	38	0	0						
	2147482946		337	413	444	455	0	0	412
443	455	0	0						
	2147482947		283	430	471	474	0	0	429
469	473	0	0						
	2147482949		322	381	406	417	0	0	381
406	417	0	0						
	2147482950		323	384	410	421	0	0	384
410	421	0	0						
	2147482951		323	384	410	421	0	0	384
410	421	0	0						
	2147482952		0	0	0	0	0	0	0
0	0	0	0						
	2147482953		0	0	0	0	0	0	0
0	0	0	0						
	2147482954		0	0	0	0	0	0	0
0	0	0	0						
	2147482957		378	543	584	592	0	0	541
583	590	0	0						

3	2147482958	1	3	3	4	0	0	3
	4	0						
579	2147482959	378	540	581	588	0	0	539
	586	0						
114	2147482960	96	113	114	118	0	0	112
	117	0						
1	2147482963	0	1	1	4	0	0	1
	2	0						
9,387	2147482964	8,525	9,340	9,379	9,370	0	0	9,345
	9,377	0						
281	2147482966	2	142	284	308	0	0	143
	304	0						
367	2147482967	317	359	367	366	0	0	359
	366	0						
186	2147482968	169	185	186	184	0	0	185
	184	0						
181	2147482969	147	174	181	182	0	0	174
	181	0						
181	2147482970	147	174	181	182	0	0	174
	181	0						
10,054	2147482973	8,577	9,636	10,054	10,185	0	0	9,636
	10,185	0						
9,974	2147482974	8,521	9,566	9,974	10,101	0	0	9,566
	10,101	0						
1	2147482975	0	0	1	1	0	0	0
	1	0						
9,119	2147482976	7,738	8,709	9,119	9,261	0	0	8,709
	9,261	0						
8,710	2147482977	7,415	8,326	8,709	8,841	0	0	8,326
	8,841	0						
409	2147482979	323	383	409	420	0	0	383
	420	0						
409	2147482980	323	383	409	420	0	0	383
	420	0						
0	2147482981	0	0	0	0	0	0	0
	0	0						
0	2147482982	0	0	0	0	0	0	0
	0	0						
6,441	2147482985	5,644	6,242	6,441	6,497	0	0	6,242
	6,497	0						
0	2147482989	0	0	0	0	0	0	0
	0	0						
0	2147482990	0	0	0	0	0	0	0
	0	0						
6,441	2147482992	5,644	6,242	6,441	6,497	0	0	6,242
	6,497	0						
0	2147482993	0	0	0	0	0	0	0
	0	0						
6,441	2147482994	5,644	6,242	6,441	6,497	0	0	6,242
	6,497	0						
6,441	2147482995	5,644	6,242	6,441	6,497	0	0	6,242
	6,497	0						
0	2147482996	0	0	0	0	0	0	0
	0	0						
0	2147482997	0	0	0	0	0	0	0
	0	0						
0	2147482998	0	0	0	0	0	0	0
	0	0						
0	2147482999	0	0	0	0	0	0	0
	0	0						

0	0	0	0	0	0	0	0	0	0	0
	2147483000	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483001	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483002	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483003	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483004	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483005	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483006	5,644	5,644	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483007	5,644	5,644	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483008	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483009	2,157	2,157	2,369	2,437	2,441	0	0	0	2,370
2,438	2,442	0	0							
	2147483011	2,089	2,089	2,290	2,354	2,357	0	0	0	2,292
2,356	2,359	0	0							
	2147483012	2,089	2,089	2,290	2,354	2,357	0	0	0	2,292
2,356	2,359	0	0							
	2147483015	2,455	2,455	2,881	2,959	2,970	0	0	0	2,880
2,958	2,969	0	0							
	2147483016	2,258	2,258	2,559	2,621	2,628	0	0	0	2,559
2,621	2,628	0	0							
	2147483017	723	723	802	803	808	0	0	0	801
803	808	0	0							
	2147483019	1,335	1,335	1,481	1,494	1,501	0	0	0	1,481
1,494	1,501	0	0							
	2147483020	723	723	802	803	808	0	0	0	801
803	808	0	0							
	2147483021	5,171	5,171	5,718	5,905	5,958	0	0	0	5,718
5,905	5,958	0	0							
	2147483024	5,644	5,644	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483025	5,644	5,644	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483026	5,644	5,644	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483027	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
	2147483028	29	29	34	36	36	0	0	0	34
36	36	0	0							
	2147483029	29	29	34	36	36	0	0	0	34
36	36	0	0							
	2147483030	39	39	45	47	48	0	0	0	45
47	48	0	0							
	2147483031	39	39	45	47	48	0	0	0	45
47	48	0	0							
	2147483032	68	68	79	83	83	0	0	0	79
83	83	0	0							
	2147483033	68	68	78	82	83	0	0	0	78
82	83	0	0							
	2147483034	0	0	1	1	0	0	0	0	1
1	0	0	0							

2147483035	1,023		1,284	1,335	1,345	0	0	1,282
1,334 1,343	0 0							
2147483037	1,023		1,283	1,335	1,344	0	0	1,281
1,333 1,343	0 0							
2147483038	1,023		1,283	1,335	1,344	0	0	1,281
1,333 1,343	0 0							
2147483039	1,023		1,283	1,335	1,344	0	0	1,281
1,333 1,343	0 0							
2147483040	1,023		1,283	1,335	1,344	0	0	1,281
1,333 1,343	0 0							
2147483041	0		0	0	0	0	0	0
0 0	0 0							
2147483042	0		0	0	0	0	0	0
0 0	0 0							
2147483043	0		0	0	0	0	0	0
0 0	0 0							
2147483044	0		0	0	0	0	0	0
0 0	0 0							
2147483045	1,635		1,962	2,026	2,037	0	0	1,961
2,025 2,036	0 0							
2147483046	612		679	691	693	0	0	679
691 693	0 0							
2147483047	612		679	691	693	0	0	679
691 693	0 0							
2147483048	1,085		1,203	1,227	1,232	0	0	1,204
1,227 1,232	0 0							
2147483049	473		524	536	539	0	0	524
536 539	0 0							
2147483050	1,496		1,808	1,871	1,884	0	0	1,806
1,870 1,883	0 0							
2147483051	473		524	536	539	0	0	524
536 539	0 0							
2147483052	0		0	0	0	0	0	0
0 0	0 0							
2147483054	5,729		6,242	6,390	6,421	0	0	6,198
6,389 6,421	0 0							
2147483055	3,739		4,185	4,463	4,532	0	0	4,181
4,471 4,537	0 0							
2147483058	2,299		2,541	2,666	2,682	0	0	2,539
2,667 2,682	0 0							
2147483060	2,299		2,541	2,666	2,682	0	0	2,539
2,667 2,682	0 0							
2147483061	2,727		3,019	3,154	3,156	0	0	3,017
3,154 3,156	0 0							
2147483062	4,308		4,894	5,096	5,101	0	0	4,894
5,096 5,101	0 0							
2147483063	8,505		9,238	9,302	9,241	0	0	9,217
9,299 9,238	0 0							
2147483066	9,103		10,002	10,153	10,027	0	0	10,010
10,146 10,019	0 0							
2147483067	6,857		7,646	7,866	7,786	0	0	7,656
7,858 7,780	0 0							
2147483071	10,234		11,471	11,918	12,028	0	0	11,471
11,918 12,029	0 0							
2147483073	10,234		11,471	11,918	12,028	0	0	11,471
11,918 12,029	0 0							
2147483074	8,521		9,566	9,973	10,100	0	0	9,566
9,974 10,101	0 0							
2147483075	55		70	80	84	0	0	70

80	84	0	0						
	2147483076		55	70	80	84	0	0	70
80	84	0	0						
	2147483077		55	70	80	84	0	0	70
80	84	0	0						
	2147483078		55	70	80	84	0	0	70
80	84	0	0						
	2147483079		262	321	341	347	0	0	320
340	346	0	0						
	2147483080		1,543	1,809	1,880	1,884	0	0	1,811
1,880	1,884	0	0						
	2147483081		1,543	1,809	1,880	1,884	0	0	1,811
1,880	1,884	0	0						
	2147483083		0	0	0	0	0	0	0
0	0	0	0						
	2147483084		0	0	0	0	0	0	0
0	0	0	0						
	2147483085		0	0	0	0	0	0	0
0	0	0	0						
	2147483086		9,732	10,792	11,196	11,301	0	0	10,794
11,199	11,304	0	0						
	2147483088		9,857	10,930	11,337	11,441	0	0	10,932
11,339	11,443	0	0						
	2147483089		9,857	10,930	11,337	11,441	0	0	10,932
11,339	11,443	0	0						
	2147483090		125	138	141	139	0	0	138
141	139	0	0						
	2147483091		0	0	0	0	0	0	0
0	0	0	0						
	2147483092		207	251	261	263	0	0	251
260	262	0	0						
	2147483093		207	251	261	263	0	0	251
260	262	0	0						
	2147483094		125	138	141	139	0	0	138
141	139	0	0						
	2147483095		125	138	141	139	0	0	138
141	139	0	0						
	2147483096		207	251	261	263	0	0	251
260	262	0	0						
	2147483097		0	0	0	0	0	0	0
0	0	0	0						
	2147483098		1,281	1,488	1,540	1,538	0	0	1,491
1,540	1,538	0	0						
	2147483099		1,281	1,488	1,540	1,538	0	0	1,491
1,540	1,538	0	0						
	2147483101		1,370	1,721	1,917	1,936	0	0	1,712
1,910	1,931	0	0						
	2147483102		1,370	1,721	1,917	1,936	0	0	1,712
1,910	1,931	0	0						
	2147483103		758	1,042	1,228	1,253	0	0	1,032
1,221	1,249	0	0						
	2147483104		428	479	488	474	0	0	478
487	474	0	0						
	2147483105		428	479	488	474	0	0	478
487	474	0	0						
	2147483106		0	0	0	0	0	0	0
0	0	0	0						
	2147483107		428	479	488	474	0	0	478
487	474	0	0						



	2147483108	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483109	331		563	740	779	0	0	554
734	775	0	0						
	2147483110	331		563	740	779	0	0	554
734	775	0	0						
	2147483111	331		563	740	779	0	0	554
734	775	0	0						
	2147483112	50		56	58	58	0	0	56
58	58	0	0						
	2147483113	50		56	58	58	0	0	56
58	58	0	0						
	2147483114	50		56	58	58	0	0	56
58	58	0	0						
	2147483115	50		56	58	58	0	0	56
58	58	0	0						
	2147483117	0		0	0	0	0	0	0
0	0	0	0						
	2147483118	0		0	0	0	0	0	0
0	0	0	0						
	2147483119	8,003		8,907	9,089	9,113	0	0	8,913
9,094	9,114	0	0						
	2147483121	82		113	120	123	0	0	112
120	123	0	0						
	2147483122	82		113	120	123	0	0	112
120	123	0	0						
	2147483123	0		0	0	0	0	0	0
0	0	0	0						
	2147483124	82		113	120	123	0	0	112
120	123	0	0						
	2147483125	0		0	0	0	0	0	0
0	0	0	0						
	2147483126	0		0	0	0	0	0	0
0	0	0	0						
	2147483127	0		0	0	0	0	0	0
0	0	0	0						
	2147483128	1,281		1,488	1,540	1,538	0	0	1,491
1,540	1,538	0	0						
	2147483129	1,281		1,488	1,540	1,538	0	0	1,491
1,540	1,538	0	0						
	2147483131	5,778		6,295	6,445	6,476	0	0	6,251
6,444	6,475	0	0						
	2147483132	3,408		3,623	3,723	3,753	0	0	3,627
3,737	3,762	0	0						
	2147483134	0		0	0	0	0	0	0
0	0	0	0						
	2147483135	0		0	0	0	0	0	0
0	0	0	0						
	2147483136	0		0	0	0	0	0	0
0	0	0	0						
	2147483137	1,837		2,111	2,319	2,387	0	0	2,109
2,326	2,391	0	0						
	2147483139	1,837		2,111	2,319	2,387	0	0	2,109
2,326	2,391	0	0						
	2147483141	1,837		2,111	2,319	2,387	0	0	2,109
2,326	2,391	0	0						
	2147483143	3,949		4,655	4,916	5,003	0	0	4,655
4,916	5,003	0	0						
	2147483145	523		621	645	650	0	0	621

645	649	0	0						
	2147483146		523	621	645	650	0	0	621
645	649	0	0						
	2147483147		523	621	645	650	0	0	621
645	649	0	0						
	2147483148		2,236	2,574	2,650	2,675	0	0	2,574
2,649	2,673	0	0						
	2147483149		2,236	2,574	2,650	2,675	0	0	2,574
2,649	2,673	0	0						
	2147483150		2,236	2,574	2,650	2,675	0	0	2,574
2,649	2,673	0	0						
	2147483151		0	0	0	0	0	0	0
0	0	0	0						
	2147483152		0	0	0	0	0	0	0
0	0	0	0						
	2147483153		0	0	0	0	0	0	0
0	0	0	0						
	2147483154		0	0	0	0	0	0	0
0	0	0	0						
	2147483155		0	0	0	0	0	0	0
0	0	0	0						
	2147483156		0	0	0	0	0	0	0
0	0	0	0						
	2147483157		0	0	0	0	0	0	0
0	0	0	0						
	2147483158		0	0	0	0	0	0	0
0	0	0	0						
	2147483159		0	0	0	0	0	0	0
0	0	0	0						
	2147483161		2,767	3,271	3,503	3,585	0	0	3,274
3,496	3,581	0	0						
	2147483162		2,767	3,271	3,503	3,585	0	0	3,274
3,496	3,581	0	0						
	2147483163		0	0	0	0	0	0	0
0	0	0	0						
	2147483164		2,767	3,271	3,503	3,585	0	0	3,274
3,496	3,581	0	0						
	2147483165		531	697	853	910	0	0	700
847	907	0	0						
	2147483166		2,236	2,574	2,650	2,675	0	0	2,574
2,649	2,673	0	0						
	2147483168		2,236	2,574	2,650	2,675	0	0	2,574
2,649	2,673	0	0						
	2147483169		2,236	2,574	2,650	2,675	0	0	2,574
2,649	2,673	0	0						
	2147483170		2,368	2,809	3,172	3,297	0	0	2,809
3,174	3,298	0	0						
	2147483171		1,191	1,461	1,620	1,679	0	0	1,461
1,622	1,680	0	0						
	2147483172		0	0	0	0	0	0	0
0	0	0	0						
	2147483173		0	0	0	0	0	0	0
0	0	0	0						
	2147483174		0	0	0	0	0	0	0
0	0	0	0						
	2147483175		1,860	2,173	2,285	2,305	0	0	2,173
2,285	2,305	0	0						
	2147483178		1,198	1,295	1,349	1,354	0	0	1,297
1,350	1,355	0	0						

2147483179	1,198		1,295	1,349	1,354	0	0	1,297
1,350 1,355	0 0							
2147483180	1,198		1,295	1,349	1,354	0	0	1,297
1,350 1,355	0 0							
2147483181	959		1,074	1,088	1,086	0	0	1,073
1,088 1,086	0 0							
2147483182	959		1,074	1,088	1,086	0	0	1,073
1,088 1,086	0 0							
2147483183	0		0	0	0	0	0	0
0 0	0 0							
2147483184	662		877	937	951	0	0	876
935 950	0 0							
2147483185	662		877	937	951	0	0	876
935 950	0 0							
2147483186	0		0	0	0	0	0	0
0 0	0 0							
2147483187	662		877	937	951	0	0	876
935 950	0 0							
2147483188	0		0	0	0	0	0	0
0 0	0 0							
2147483189	0		0	0	0	0	0	0
0 0	0 0							
2147483190	612		679	691	693	0	0	679
691 693	0 0							
2147483191	612		679	691	693	0	0	679
691 693	0 0							
2147483192	612		679	691	693	0	0	679
691 693	0 0							
2147483193	612		679	691	693	0	0	679
691 693	0 0							
2147483194	612		679	691	693	0	0	679
691 693	0 0							
2147483195	612		679	691	693	0	0	679
691 693	0 0							
2147483196	612		679	691	693	0	0	679
691 693	0 0							
2147483197	0		0	0	0	0	0	0
0 0	0 0							
2147483198	0		0	0	0	0	0	0
0 0	0 0							
2147483199	0		0	0	0	0	0	0
0 0	0 0							
2147483200	0		0	0	0	0	0	0
0 0	0 0							
2147483201	0		0	0	0	0	0	0
0 0	0 0							
2147483202	0		0	0	0	0	0	0
0 0	0 0							
2147483206	2,348		2,785	3,024	3,097	0	0	2,785
3,024 3,097	0 0							
2147483207	1,958		2,338	2,527	2,582	0	0	2,338
2,527 2,582	0 0							
2147483208	1,958		2,338	2,527	2,582	0	0	2,338
2,527 2,582	0 0							
2147483209	4,128		4,915	5,307	5,439	0	0	4,915
5,307 5,439	0 0							
2147483210	4,128		4,915	5,307	5,439	0	0	4,915
5,307 5,439	0 0							
2147483211	0		0	0	0	0	0	0



2147483249	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483250	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483251	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483252	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483254	2,794	3,045	3,161	3,198	0	0	0	3,045	
3,161 3,198	0	0	0	0	0	0	0	0	
2147483256	2,794	3,045	3,161	3,198	0	0	0	3,045	
3,161 3,198	0	0	0	0	0	0	0	0	
2147483258	3,112	3,408	3,547	3,593	0	0	0	3,408	
3,547 3,593	0	0	0	0	0	0	0	0	
2147483260	3,112	3,408	3,547	3,593	0	0	0	3,408	
3,547 3,593	0	0	0	0	0	0	0	0	
2147483264	2,254	2,447	2,534	2,562	0	0	0	2,447	
2,534 2,562	0	0	0	0	0	0	0	0	
2147483265	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483266	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483267	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483270	118	132	131	133	0	0	0	132	
132 133	0	0	0	0	0	0	0	0	
2147483271	318	363	387	395	0	0	0	363	
387 395	0	0	0	0	0	0	0	0	
2147483272	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483273	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483274	2,521	2,732	2,827	2,857	0	0	0	2,732	
2,827 2,857	0	0	0	0	0	0	0	0	
2147483275	2,521	2,733	2,827	2,858	0	0	0	2,733	
2,827 2,858	0	0	0	0	0	0	0	0	
2147483278	439	489	498	507	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483280	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483281	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483282	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483283	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483284	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483285	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483286	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483290	12,894	14,322	15,038	15,162	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483297	8,394	9,201	9,657	9,740	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483300	6,860	7,623	8,018	8,111	0	0	0	7,815	
8,217 8,313	0	0	0	0	0	0	0	0	
2147483303	4,397	4,813	5,048	5,069	0	0	0	4,846	

5,036	5,054	0	0							
	2147483304		4,424	4,845	5,082	5,103	0	0		4,878
5,069	5,087	0	0							
	2147483305		12,843	14,309	15,042	15,170	0	0		0
0	0	0	0							
	2147483306		12,751	14,204	14,936	15,064	0	0		0
0	0	0	0							
	2147483308		4,424	4,845	5,082	5,103	0	0		4,878
5,069	5,087	0	0							
	2147483309		4,424	4,845	5,082	5,103	0	0		4,878
5,069	5,087	0	0							
	2147483311		3,112	3,408	3,547	3,593	0	0		3,408
3,547	3,593	0	0							
	2147483312		2,405	2,617	2,713	2,744	0	0		2,617
2,713	2,744	0	0							
	2147483316		2,254	2,447	2,534	2,562	0	0		2,447
2,534	2,562	0	0							
	2147483319		0	0	0	0	0	0		0
0	0	0	0							
	2147483320		16	21	42	44	0	0		244
259	264	0	0							
	2147483321		16	21	42	44	0	0		244
259	264	0	0							
	2147483323		16	21	42	44	0	0		244
259	264	0	0							
	2147483325		16	19	22	37	0	0		758
833	856	0	0							
	2147483326		16	19	22	37	0	0		758
833	856	0	0							
	2147483327		13,437	14,998	15,790	15,922	0	0		0
0	0	0	0							
	2147483330		0	0	0	0	0	0		0
0	0	0	0							
	2147483331		478	630	716	729	0	0		758
833	856	0	0							
	2147483333		395	515	578	597	0	0		473
527	547	0	0							
	2147483334		395	515	578	597	0	0		473
527	547	0	0							
	2147483335		447	527	574	590	0	0		0
0	0	0	0							
	2147483336		369	418	430	431	0	0		419
430	431	0	0							
	2147483337		369	418	430	431	0	0		419
430	431	0	0							
	2147483338		369	418	430	431	0	0		419
430	431	0	0							
	2147483339		0	0	0	0	0	0		0
0	0	0	0							
	2147483340		0	0	0	0	0	0		0
0	0	0	0							
	2147483341		0	0	0	0	0	0		0
0	0	0	0							
	2147483342		0	0	0	0	0	0		0
0	0	0	0							
	2147483343		0	0	0	0	0	0		0
0	0	0	0							
	2147483344		0	0	0	0	0	0		0
0	0	0	0							

	2147483345	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483346	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483347	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483348	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483349	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483350	0	0	0	0	0	0	0	0
0	0	0	0						
	2147483352	2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0						
	2147483355	334		378	394	400	0	0	378
394	401	0	0						
	2147483356	334		378	394	400	0	0	378
394	401	0	0						
	2147483357	82		91	88	88	0	0	91
88	88	0	0						
	2147483358	82		91	88	88	0	0	91
88	88	0	0						
	2147483359	82		91	88	88	0	0	91
88	88	0	0						
	2147483360	0		0	0	0	0	0	0
0	0	0	0						
	2147483362	0		0	0	0	0	0	0
0	0	0	0						
	2147483363	0		0	0	0	0	0	0
0	0	0	0						
	2147483364	0		0	0	0	0	0	0
0	0	0	0						
	2147483365	0		0	0	0	0	0	0
0	0	0	0						
	2147483366	0		0	0	0	0	0	0
0	0	0	0						
	2147483367	0		0	0	0	0	0	0
0	0	0	0						
	2147483368	0		0	0	0	0	0	0
0	0	0	0						
	2147483369	0		0	0	0	0	0	0
0	0	0	0						
	2147483371	261		253	256	260	0	0	0
0	0	0	0						
	2147483373	0		0	0	0	0	0	0
0	0	0	0						
	2147483374	0		0	0	0	0	0	0
0	0	0	0						
	2147483375	0		0	0	0	0	0	0
0	0	0	0						
	2147483376	0		0	0	0	0	0	0
0	0	0	0						
	2147483377	0		0	0	0	0	0	0
0	0	0	0						
	2147483378	475		558	608	623	0	0	1,093
1,159	1,176	0	0						
	2147483380	475		558	608	623	0	0	857
920	939	0	0						
	2147483383	13,719		15,294	16,083	16,231	0	0	0

0	0	0	0	0	0	0	0	0	0	0
0	2147483387	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	2147483388	0	1	0	1	1	1	0	0	19
22	23	0	0	0	1	1	1	0	0	19
22	2147483389	0	1	0	1	1	1	0	0	19
22	23	0	0	0	0	0	0	0	0	0
0	2147483390	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	2147483391	0	1	0	1	1	1	0	0	19
22	23	0	0	0	1	1	1	0	0	19
22	2147483392	0	28	0	33	34	34	0	0	312
321	321	0	0	0	33	34	34	0	0	51
2147483393	28	0	0	0	33	34	34	0	0	51
55	57	0	0	0	33	34	34	0	0	51
2147483394	28	0	0	0	33	34	34	0	0	51
55	57	0	0	0	1	1	1	0	0	19
2147483395	1	0	0	0	1	1	1	0	0	19
22	23	0	0	0	1	1	1	0	0	19
22	2147483396	0	1	0	1	1	1	0	0	19
22	23	0	0	0	1	1	1	0	0	19
22	2147483397	0	1	0	1	1	1	0	0	19
22	23	0	0	0	0	0	0	0	0	0
2147483398	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	2147483400	0	273	0	311	332	339	0	0	311
332	339	0	0	0	311	332	339	0	0	311
2147483401	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	2147483402	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	2147483403	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	2147483404	0	273	0	311	332	339	0	0	311
332	339	0	0	0	311	332	339	0	0	311
2147483405	273	0	0	0	311	332	339	0	0	311
332	339	0	0	0	311	332	339	0	0	311
2147483406	4,172	0	0	0	4,558	4,776	4,791	0	0	4,591
4,764	4,775	0	0	0	4,558	4,776	4,791	0	0	4,591
2147483408	662	0	0	0	743	784	799	0	0	723
762	775	0	0	0	743	784	799	0	0	723
2147483409	6	0	0	0	7	8	8	0	0	28
31	32	0	0	0	7	8	8	0	0	28
2147483410	5	0	0	0	6	7	7	0	0	8
8	8	0	0	0	6	7	7	0	0	8
2147483411	5	0	0	0	6	7	7	0	0	8
8	8	0	0	0	6	7	7	0	0	8
2147483412	153	0	0	0	178	183	183	0	0	120
124	125	0	0	0	178	183	183	0	0	120
2147483413	153	0	0	0	177	182	182	0	0	0
0	0	0	0	0	177	182	182	0	0	0
2147483414	9	0	0	0	13	15	15	0	0	120
124	125	0	0	0	13	15	15	0	0	120
2147483415	9	0	0	0	13	15	15	0	0	120
124	125	0	0	0	13	15	15	0	0	120
2147483416	35	0	0	0	71	94	96	0	0	69
73	74	0	0	0	71	94	96	0	0	69
2147483417	12,977	0	0	0	14,391	15,100	15,234	0	0	0
0	0	0	0	0	14,391	15,100	15,234	0	0	0



	2147483418		13,062		14,495	15,209	15,343	0	0	0
0	0	0	0							
	2147483419		35		71	94	96	0	0	69
73	74	0	0							
	2147483420		35		71	94	96	0	0	69
73	74	0	0							
	2147483421		35		71	94	96	0	0	69
73	74	0	0							
	2147483423		13,623		15,195	15,980	16,126	0	0	0
0	0	0	0							
	2147483424		256		308	343	350	0	0	0
0	0	0	0							
	2147483425		96		99	103	105	0	0	0
0	0	0	0							
	2147483426		13,550		15,104	15,862	16,005	0	0	0
0	0	0	0							
	2147483428		463		611	695	692	0	0	0
0	0	0	0							
	2147483429		0		0	0	0	0	0	0
0	0	0	0							
	2147483431		199		213	202	200	0	0	150
154	155	0	0							
	2147483432		114		108	92	89	0	0	0
0	0	0	0							
	2147483433		85		105	110	110	0	0	0
0	0	0	0							
	2147483434		0		0	0	0	0	0	0
0	0	0	0							
	2147483435		0		0	0	0	0	0	0
0	0	0	0							
	2147483436		0		0	0	0	0	0	0
0	0	0	0							
	2147483437		0		0	0	0	0	0	0
0	0	0	0							
	2147483438		0		0	0	0	0	0	0
0	0	0	0							
	2147483439		0		0	0	0	0	0	0
0	0	0	0							
	2147483440		0		0	0	0	0	0	0
0	0	0	0							
	2147483441		0		0	0	0	0	0	0
0	0	0	0							
	2147483442		0		0	0	0	0	0	0
0	0	0	0							
	2147483443		2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0							
	2147483444		2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0							
	2147483445		3		3	3	3	0	0	3
3	3	0	0							
	2147483446		3		3	3	3	0	0	3
3	3	0	0							
	2147483447		3		3	3	3	0	0	3
3	3	0	0							
	2147483448		3		3	3	3	0	0	3
3	3	0	0							
	2147483449		3		3	3	3	0	0	3
3	3	0	0							
	2147483450		0		0	0	0	0	0	0

0	0	0	0							
	2147483451	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483452	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483453	3	3	3	3	3	0	0	3	3
3	3	0	0							
	2147483454	3	3	3	3	3	0	0	3	3
3	3	0	0							
	2147483455	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483456	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483457	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483458	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483459	152	152	170	179	182	0	0	170	170
179	182	0	0							
	2147483460	152	152	170	179	182	0	0	170	170
179	182	0	0							
	2147483461	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483464	152	152	170	179	182	0	0	170	170
179	182	0	0							
	2147483465	152	152	170	179	182	0	0	170	170
179	182	0	0							
	2147483466	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483468	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483469	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483471	2,254	2,254	2,447	2,534	2,562	0	0	2,447	2,447
2,534	2,562	0	0							
	2147483472	2,254	2,254	2,447	2,534	2,562	0	0	2,447	2,447
2,534	2,562	0	0							
	2147483473	2,254	2,254	2,447	2,534	2,562	0	0	2,447	2,447
2,534	2,562	0	0							
	2147483474	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483475	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483476	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483477	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483478	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483479	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483480	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483481	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483482	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483483	0	0	0	0	0	0	0	0	0
0	0	0	0							

2147483484	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483485	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483486	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483487	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483488	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483489	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483490	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483491	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483492	152	170	179	182	0	0	0	170	170
179 182	0	0	0	0	0	0	0	0	0
2147483493	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483494	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483495	663	737	745	740	0	0	0	737	737
745 740	0	0	0	0	0	0	0	0	0
2147483497	2,636	3,048	3,249	3,253	0	0	0	3,020	3,020
3,249 3,256	0	0	0	0	0	0	0	0	0
2147483498	2,636	3,048	3,249	3,253	0	0	0	3,020	3,020
3,249 3,256	0	0	0	0	0	0	0	0	0
2147483499	8,714	9,579	9,677	9,638	0	0	0	9,576	9,576
9,667 9,628	0	0	0	0	0	0	0	0	0
2147483501	8,475	9,303	9,424	9,366	0	0	0	9,300	9,300
9,415 9,356	0	0	0	0	0	0	0	0	0
2147483502	8,714	9,579	9,677	9,638	0	0	0	9,576	9,576
9,667 9,628	0	0	0	0	0	0	0	0	0
2147483504	8,430	8,917	8,919	8,808	0	0	0	8,917	8,917
8,913 8,808	0	0	0	0	0	0	0	0	0
2147483505	8,497	9,025	9,067	8,948	0	0	0	9,016	9,016
9,060 8,947	0	0	0	0	0	0	0	0	0
2147483506	8,497	9,025	9,067	8,948	0	0	0	9,016	9,016
9,060 8,947	0	0	0	0	0	0	0	0	0
2147483507	966	1,361	1,480	1,633	0	0	0	1,348	1,348
1,487 1,633	0	0	0	0	0	0	0	0	0
2147483508	966	1,361	1,480	1,633	0	0	0	1,348	1,348
1,487 1,633	0	0	0	0	0	0	0	0	0
2147483510	966	1,361	1,480	1,633	0	0	0	1,348	1,348
1,487 1,633	0	0	0	0	0	0	0	0	0
2147483511	1,337	1,785	1,885	2,040	0	0	0	1,776	1,776
1,893 2,042	0	0	0	0	0	0	0	0	0
2147483512	1,337	1,785	1,885	2,040	0	0	0	1,776	1,776
1,893 2,042	0	0	0	0	0	0	0	0	0
2147483513	1,935	2,144	2,189	2,174	0	0	0	2,144	2,144
2,189 2,174	0	0	0	0	0	0	0	0	0
2147483517	1,935	2,144	2,189	2,174	0	0	0	2,144	2,144
2,189 2,174	0	0	0	0	0	0	0	0	0
2147483518	1,935	2,144	2,189	2,174	0	0	0	2,144	2,144
2,189 2,174	0	0	0	0	0	0	0	0	0
2147483519	1,935	2,144	2,189	2,174	0	0	0	2,144	2,144
2,189 2,174	0	0	0	0	0	0	0	0	0
2147483520	1,935	2,144	2,189	2,174	0	0	0	2,144	2,144

2,189	2,174	0	0						
	2147483521		1,935	2,144	2,189	2,174	0	0	2,144
2,189	2,174	0	0						
	2147483522		1,935	2,144	2,189	2,174	0	0	2,144
2,189	2,174	0	0						
	2147483523		2,814	3,241	3,406	3,411	0	0	3,213
3,406	3,415	0	0						
	2147483524		2,814	3,241	3,406	3,411	0	0	3,213
3,406	3,415	0	0						
	2147483528		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,068	0	0						
	2147483531		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,068	0	0						
	2147483532		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,068	0	0						
	2147483533		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,068	0	0						
	2147483534		0	0	0	0	0	0	0
0	0	0	0						
	2147483537		2,533	2,798	2,850	2,829	0	0	2,798
2,851	2,830	0	0						
	2147483540		1,067	1,313	1,454	1,469	0	0	1,336
1,463	1,477	0	0						
	2147483543		9,732	10,792	11,196	11,301	0	0	10,794
11,199	11,304	0	0						
	2147483544		9,732	10,792	11,196	11,301	0	0	10,794
11,199	11,304	0	0						
	2147483545		8,125	9,043	9,224	9,243	0	0	9,049
9,228	9,247	0	0						
	2147483546		8,125	9,043	9,224	9,243	0	0	9,049
9,228	9,247	0	0						
	2147483547		710	789	803	796	0	0	789
803	796	0	0						
	2147483548		27	32	34	34	0	0	33
35	35	0	0						
	2147483549		4,424	4,845	5,082	5,103	0	0	4,878
5,069	5,087	0	0						
	2147483550		4,424	4,845	5,082	5,103	0	0	4,878
5,069	5,087	0	0						
	2147483551		1	2	20	34	0	0	0
0	0	0	0						
	2147483552		0	0	0	0	0	0	0
0	0	0	0						
	2147483553		0	0	0	0	0	0	0
0	0	0	0						
	2147483554		0	0	0	0	0	0	0
0	0	0	0						
	2147483555		14,012	15,649	16,479	16,635	0	0	0
0	0	0	0						
	2147483556		13,878	15,503	16,322	16,476	0	0	0
0	0	0	0						
	2147483557		518	584	617	628	0	0	0
0	0	0	0						
	2147483558		7,596	8,561	9,065	9,158	0	0	8,561
9,065	9,158	0	0						
	2147483561		0	0	0	0	0	0	0
0	0	0	0						
	2147483562		0	0	0	0	0	0	0
0	0	0	0						

2147483563	0	0	0	0	0	0	0	0
0 0	0 0							
2147483564	1,281	1,488	1,540	1,538	0	0	1,491	
1,540 1,538	0 0							
2147483565	1,281	1,488	1,540	1,538	0	0	1,491	
1,540 1,538	0 0							
2147483566	167	173	171	181	0	0	0	
0 0	0 0							
2147483567	167	173	171	181	0	0	0	
0 0	0 0							
2147483568	0	0	0	0	0	0	0	
0 0	0 0							
2147483569	4,231	4,868	5,206	5,259	0	0	4,879	
5,209 5,261	0 0							
2147483572	6,645	7,481	7,862	7,938	0	0	7,479	
7,863 7,938	0 0							
2147483573	416	462	468	465	0	0	462	
468 465	0 0							
2147483575	3,841	4,408	4,658	4,697	0	0	4,408	
4,660 4,698	0 0							
2147483576	3,822	4,387	4,636	4,677	0	0	4,386	
4,638 4,677	0 0							
2147483577	448	595	679	691	0	0	0	
0 0	0 0							
2147483578	448	595	679	691	0	0	726	
799 821	0 0							
2147483579	0	0	0	0	0	0	0	
0 0	0 0							
2147483580	5,104	5,614	5,865	5,896	0	0	5,668	
5,876 5,905	0 0							
2147483581	3,982	4,333	4,534	4,542	0	0	4,386	
4,545 4,551	0 0							
2147483582	1,863	2,170	2,307	2,361	0	0	2,170	
2,307 2,361	0 0							
2147483585	3,560	4,130	4,328	4,354	0	0	4,132	
4,326 4,352	0 0							
2147483588	8,041	8,969	9,158	9,185	0	0	8,975	
9,162 9,185	0 0							
2147483590	5,935	6,739	6,977	7,006	0	0	6,745	
6,979 7,005	0 0							
2147483593	7,543	8,265	8,508	8,615	0	0	8,263	
8,509 8,613	0 0							
2147483595	5,900	6,642	6,858	6,920	0	0	6,645	
6,859 6,920	0 0							
2147483596	6,403	7,010	7,382	7,463	0	0	7,178	
7,508 7,586	0 0							
2147483599	9,732	10,792	11,196	11,301	0	0	10,794	
11,199 11,304	0 0							
2147483600	7,758	8,571	8,834	8,904	0	0	8,573	
8,837 8,906	0 0							
2147483601	5,232	6,020	6,378	6,488	0	0	6,018	
6,376 6,484	0 0							
2147483603	1,974	2,221	2,362	2,398	0	0	2,221	
2,362 2,398	0 0							
2147483605	0	0	0	0	0	0	0	
0 0	0 0							
2147483606	2,293	2,514	2,670	2,720	0	0	2,514	
2,671 2,721	0 0							
2147483608	811	944	1,022	1,054	0	0	943	

1,023	1,054	0	0						
	2147483610		323	380	399	405	0	0	380
399	405	0	0						
	2147483612		7,206	8,241	8,740	8,886	0	0	8,239
8,738	8,882	0	0						
	2147483615		6,126	6,955	7,327	7,420	0	0	6,953
7,325	7,417	0	0						
	2147483617		488	563	623	648	0	0	563
624	648	0	0						
	2147483618		6,175	6,894	7,225	7,337	0	0	6,901
7,233	7,342	0	0						
	2147483619		6,005	6,719	6,990	7,074	0	0	6,674
6,987	7,073	0	0						
	2147483621		2,055	2,457	2,624	2,664	0	0	2,404
2,613	2,657	0	0						
	2147483622		593	723	790	817	0	0	723
789	817	0	0						
	2147483626		9,041	10,227	10,798	10,927	0	0	10,173
10,787	10,917	0	0						
	2147483627		4,685	5,224	5,519	5,602	0	0	5,368
5,673	5,760	0	0						
	2147483630		1,651	1,775	1,884	1,911	0	0	1,774
1,885	1,912	0	0						
	2147483631		0	0	0	0	0	0	0
0	0	0	0						
	1		0	0	0	0	0	0	298
309	310	0	0						
	2		0	0	0	0	0	0	957
1,041	1,067	0	0						
	3		0	0	0	0	0	0	14,257
14,980	15,104	0	0						
	4		0	0	0	0	0	0	15,092
15,874	16,016	0	0						
	5		0	0	0	0	0	0	835
894	912	0	0						
	6		0	0	0	0	0	0	987
1,057	1,079	0	0						
	7		0	0	0	0	0	0	266
281	286	0	0						
	12		0	0	0	0	0	0	15,926
16,771	16,933	0	0						
	13		0	0	0	0	0	0	15,926
16,771	16,933	0	0						
	16		0	0	0	0	0	0	117
124	127	0	0						
	17		0	0	0	0	0	0	584
617	628	0	0						
	20		0	0	0	0	0	0	584
617	628	0	0						
	2147483645		0	0	0	0	0	0	245
259	264	0	0						
	2147483646		0	0	0	0	0	0	1,028
1,100	1,123	0	0						
	2147483647		0	0	0	0	0	0	150
154	155	0	0						
	906_DS		0	0	0	0	0	0	15,649
16,479	16,635	0	0						
	2147483290_DS		0	0	0	0	0	0	14,257
14,980	15,104	0	0						

2147483297_DS	0	0	0	0	0	0	9,451
9,865 9,946 0	0	0	0	0	0	0	14,257
2147483305_DS	0	0	0	0	0	0	14,257
14,980 15,104 0	0	0	0	0	0	0	16,054
2147483306_DS	0	0	0	0	0	0	14,257
14,980 15,104 0	0	0	0	0	0	0	14,257
2147483383_DS	0	0	0	0	0	0	14,257
16,906 17,071 0	0	0	0	0	0	0	14,257
2147483417_DS	0	0	0	0	0	0	14,257
14,980 15,104 0	0	0	0	0	0	0	14,257
2147483418_DS	0	0	0	0	0	0	15,809
14,980 15,104 0	0	0	0	0	0	0	15,809
2147483423_DS	0	0	0	0	0	0	15,926
16,647 16,807 0	0	0	0	0	0	0	15,926
2147483426_DS	0	0	0	0	0	0	15,862
16,771 16,933 0	0	0	0	0	0	0	15,862
2147483555_DS	0	0	0	0	0	0	473
16,702 16,863 0	0	0	0	0	0	0	473
2147483335DS	0	0	0	0	0	0	726
527 547 0	0	0	0	0	0	0	726
2147483577DS	0	0	0	0	0	0	
799 821 0	0	0	0	0	0	0	

Combined Local Collision Rate Subsection  
Link Observed First Observed Local Severity Split  
Name Collisions Collision Year Ratio Year

[Section 5] Input Data - Parameter File

COBALT Parameter File  
Version 2,019.10

Cost Base Year  
2011

Appraisal Period  
30

Discount Rate  
Years from Discount  
Current Year Rate (%)  
30 4.00  
60 3.50  
100 3.00

Cost per Casualty  
Severity Cost  
Fatal 2,310,500  
Serious 331,400  
Slight 31,100

Cost per Collision  
Severity Insurance Administration Damage to Property  
Urban Rural Motorway  
Fatal 375 13,952 13,952 13,952  
Serious 233 6,225 6,225 6,225  
Slight 142 3,713 3,713 3,713  
Damage 67 2,346 2,346 2,346

	Gardai Cost		
	Urban	Rural	Motorway
Fatal	21,521	21,521	21,521
Serious	2,519	2,519	2,519
Slight	653	653	653
Damage	42	42	42

#### Compound Annual Rates of Growth of Collision Values

Range of Years	Rate of Growth (%p.a.)
2011-2015	1.040
2015-2020	1.036
2020-2025	1.022
2025-2111	1.023

#### Number of Damage Only Collisions per PIA

	Urban	Rural	Motorway
Damage	0.0	0.0	0.0

#### Link and Junction Combined Collision Proportions

Base Year

2011

Road Type	Speed Limit (km/h)	Collision Proportions		
		Fatal	Serious	Slight
1	70	0.013	0.027	0.960
1	80	0.013	0.027	0.960
1	90	0.013	0.027	0.960
1	100	0.013	0.027	0.960
1	110	0.013	0.027	0.960
1	120	0.013	0.027	0.960
1	130	0.013	0.027	0.960
2	70	0.023	0.053	0.925
2	80	0.023	0.053	0.925
2	90	0.023	0.053	0.925
2	100	0.023	0.053	0.925
2	110	0.023	0.053	0.925
2	120	0.023	0.053	0.925
2	130	0.023	0.053	0.925
3	50	0.005	0.032	0.963
3	60	0.005	0.032	0.963
4	70	0.012	0.026	0.962
4	80	0.012	0.026	0.962
4	90	0.012	0.026	0.962
4	100	0.012	0.026	0.962
4	110	0.012	0.026	0.962
4	120	0.012	0.026	0.962
4	130	0.012	0.026	0.962
5	50	0.008	0.028	0.963
5	60	0.008	0.028	0.963
6	70	0.023	0.053	0.925
6	80	0.023	0.053	0.925
6	90	0.023	0.053	0.925
6	100	0.023	0.053	0.925
6	110	0.023	0.053	0.925
6	120	0.023	0.053	0.925
6	130	0.023	0.053	0.925
7	50	0.005	0.032	0.963
7	60	0.005	0.032	0.963
8	70	0.012	0.026	0.962
8	80	0.012	0.026	0.962



8	90	0.012	0.026	0.962
8	100	0.012	0.026	0.962
8	110	0.012	0.026	0.962
8	120	0.012	0.026	0.962
8	130	0.012	0.026	0.962
9	50	0.008	0.028	0.963
9	60	0.008	0.028	0.963
10	30	0.005	0.032	0.963
10	40	0.005	0.032	0.963
10	50	0.005	0.032	0.963
10	60	0.005	0.032	0.963
11	70	0.123	0.140	0.737
11	80	0.123	0.140	0.737
11	90	0.123	0.140	0.737
11	100	0.123	0.140	0.737
11	110	0.123	0.140	0.737
11	120	0.123	0.140	0.737
11	130	0.123	0.140	0.737

Link and Junction Combined Collision Rates and Change Factors

Base Year

2011

Road Type	Speed Limit (km/h)	Collision Rate	Beta Factor
1	70	0.057	0.956
1	80	0.057	0.956
1	90	0.057	0.956
1	100	0.057	0.956
1	110	0.057	0.956
1	120	0.057	0.956
1	130	0.057	0.956
2	70	0.219	0.955
2	80	0.219	0.955
2	90	0.219	0.955
2	100	0.219	0.955
2	110	0.219	0.955
2	120	0.219	0.955
2	130	0.219	0.955
3	50	0.613	0.959
3	60	0.613	0.959
4	70	0.094	0.956
4	80	0.094	0.956
4	90	0.094	0.956
4	100	0.094	0.956
4	110	0.094	0.956
4	120	0.094	0.956
4	130	0.094	0.956
5	50	0.402	0.967
5	60	0.402	0.967
6	70	0.219	0.955
6	80	0.219	0.955
6	90	0.219	0.955
6	100	0.219	0.955
6	110	0.219	0.955
6	120	0.219	0.955
6	130	0.219	0.955
7	50	0.613	0.959
7	60	0.613	0.959
8	70	0.094	0.955

8	80	0.094	0.955
8	90	0.094	0.955
8	100	0.094	0.955
8	110	0.094	0.955
8	120	0.094	0.955
8	130	0.094	0.955
9	50	0.402	0.959
9	60	0.402	0.959
10	30	0.449	0.959
10	40	0.449	0.959
10	50	0.449	0.959
10	60	0.449	0.959
11	70	0.115	0.955
11	80	0.115	0.955
11	90	0.115	0.955
11	100	0.115	0.955
11	110	0.115	0.955
11	120	0.115	0.955
11	130	0.115	0.955

Link and Junction Combined Collision Beta Factor Changes over Time

Range of Years Change to Beta Factor

2011-2016	1.000
2017-2026	0.500
2027-2036	0.250
2037-2160	0.000

Link and Junction Combined Casualty Rates

Base Year

2011

Road Type	Speed Limit (km/h)	Casualties per P.I.A.		
		Fatal	Serious	Slight
1	70	0.025	0.033	1.393
1	80	0.025	0.033	1.393
1	90	0.025	0.033	1.393
1	100	0.025	0.033	1.393
1	110	0.025	0.033	1.393
1	120	0.025	0.033	1.393
1	130	0.025	0.033	1.393
2	70	0.050	0.106	1.451
2	80	0.050	0.106	1.451
2	90	0.050	0.106	1.451
2	100	0.050	0.106	1.451
2	110	0.050	0.106	1.451
2	120	0.050	0.106	1.451
2	130	0.050	0.106	1.451
3	50	0.007	0.051	1.325
3	60	0.007	0.051	1.325
4	70	0.018	0.043	1.342
4	80	0.018	0.043	1.342
4	90	0.018	0.043	1.342
4	100	0.018	0.043	1.342
4	110	0.018	0.043	1.342
4	120	0.018	0.043	1.342
4	130	0.018	0.043	1.342
5	50	0.008	0.045	1.233
5	60	0.008	0.045	1.233
6	70	0.050	0.106	1.451
6	80	0.050	0.106	1.451

6	90	0.050	0.106	1.451
6	100	0.050	0.106	1.451
6	110	0.050	0.106	1.451
6	120	0.050	0.106	1.451
6	130	0.050	0.106	1.451
7	50	0.007	0.051	1.325
7	60	0.007	0.051	1.325
8	70	0.018	0.043	1.342
8	80	0.018	0.043	1.342
8	90	0.018	0.043	1.342
8	100	0.018	0.043	1.342
8	110	0.018	0.043	1.342
8	120	0.018	0.043	1.342
8	130	0.018	0.043	1.342
9	50	0.008	0.045	1.233
9	60	0.008	0.045	1.233
10	30	0.007	0.051	1.325
10	40	0.007	0.051	1.325
10	50	0.007	0.051	1.325
10	60	0.007	0.051	1.325
11	70	0.050	0.106	1.451
11	80	0.050	0.106	1.451
11	90	0.050	0.106	1.451
11	100	0.050	0.106	1.451
11	110	0.050	0.106	1.451
11	120	0.050	0.106	1.451
11	130	0.050	0.106	1.451

Link and Junction Combined Casualty Change Factors

Base Year

2011

Road Type	Speed Limit (km/h)	Beta Factor		
		Fatal	Serious	Slight
1	70	0.978	0.979	1.002
1	80	0.978	0.979	1.002
1	90	0.978	0.979	1.002
1	100	0.978	0.979	1.002
1	110	0.978	0.979	1.002
1	120	0.978	0.979	1.002
1	130	0.978	0.979	1.002
2	70	0.979	0.983	1.002
2	80	0.979	0.983	1.002
2	90	0.979	0.983	1.002
2	100	0.979	0.983	1.002
2	110	0.979	0.983	1.002
2	120	0.979	0.983	1.002
2	130	0.979	0.983	1.002
3	50	0.971	0.995	1.001
3	60	0.971	0.995	1.001
4	70	0.984	0.985	0.998
4	80	0.984	0.985	0.998
4	90	0.984	0.985	0.998
4	100	0.984	0.985	0.998
4	110	0.984	0.985	0.998
4	120	0.984	0.985	0.998
4	130	0.984	0.985	0.998
5	50	0.998	0.990	1.002
5	60	0.998	0.990	1.002
6	70	0.979	0.983	1.002

6	80	0.979	0.983	1.002
6	90	0.979	0.983	1.002
6	100	0.979	0.983	1.002
6	110	0.979	0.983	1.002
6	120	0.979	0.983	1.002
6	130	0.979	0.983	1.002
7	50	0.971	0.995	1.001
7	60	0.971	0.995	1.001
8	70	0.979	0.983	1.002
8	80	0.979	0.983	1.002
8	90	0.979	0.983	1.002
8	100	0.979	0.983	1.002
8	110	0.979	0.983	1.002
8	120	0.979	0.983	1.002
8	130	0.979	0.983	1.002
9	50	0.971	0.995	1.001
9	60	0.971	0.995	1.001
10	30	0.971	0.995	1.001
10	40	0.971	0.995	1.001
10	50	0.971	0.995	1.001
10	60	0.971	0.995	1.001
11	70	0.979	0.983	1.002
11	80	0.979	0.983	1.002
11	90	0.979	0.983	1.002
11	100	0.979	0.983	1.002
11	110	0.979	0.983	1.002
11	120	0.979	0.983	1.002
11	130	0.979	0.983	1.002


Link and Junction Combined Casualty Beta Factor Changes over Time

Range of Years	Change to Beta Factor
2011-2016	1.000
2017-2026	0.500
2027-2036	0.250
2037-2160	0.000

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*
*      CCC      000      BBBB      AAA      L      TTTTT      *
*      C  C     0  0     B  B     A  A     L      T      *
*      C      0  0     B  B     A  A     L      T      *
*      C      0  0     BBBB     AAAAA  ----  L      T      *
*      C      0  0     B  B     A  A     L      T      *
*      C  C     0  0     B  B     A  A     L      T      *
*      CCC      000      BBBB     A  A     LLLLL  T      *
*
*
*      IIIII     RRRR     EEEEE     L      AAA     N  N     DDDD      *
*      I      R  R     E      L      A  A     N  N     D  D      *
*      I      R  R     E      L      A  A     NN  N     D  D      *
*      I      RRRR     EEEEE     L      AAAAA  N  N  N     D  D      *
*      I      R  R     E      L      A  A     N  NN     D  D      *
*      I      R  R     E      L      A  A     N  N     D  D      *
*      IIIII     R      R     EEEEE     LLLLL  A  A     N  N     DDDD      *
*
*****
*
*                                     Version TII 2015.01      *
*
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*                                     Parkgate Business Centre,      *
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*                                     Dublin 8,      *
*                                     Ireland      *
*
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Originally developed by  UK Department for Transport, 2013  
 Written by Roger Himlin  
 Ireland version 2015

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[Section 1] Summary Statistics

[Section 1.1] Economic Summary

Total Without-Scheme Collision Costs =	68,891.8
Total With-Scheme Collision Costs =	67,814.1
Total Collision Benefits Saved by Scheme =	1,077.7

Costs and benefits discounted to 2011 in multiples of a thousand euros.

[Section 1.2] Collision Summary

Total Without-Scheme Collisions =	1,192.0
Total With-Scheme Collisions =	1,195.9
Total Collisions Saved by Scheme =	-3.9

This analysis includes 228 serious error(s).  
These results should not be considered usable.

This analysis includes 117 warning(s).  
These results should be considered carefully before using.

[Section 1.3] Casualty Summary

Total Without-Scheme Casualties (Fatal) =	37.1
(Serious) =	90.0
(Slight) =	1,726.8
Total With-Scheme Casualties (Fatal) =	36.2
(Serious) =	88.1
(Slight) =	1,724.7
Total Casualties Saved by Scheme (Fatal) =	0.9
(Serious) =	1.9
(Slight) =	2.1

This analysis includes 228 serious error(s).  
These results should not be considered usable.

This analysis includes 117 warning(s).  
These results should be considered carefully before using.

[Section 2] Combined Link and Junction Collision Statistics

Scheme	*----- Without-Scheme -----*			*----- With-			
	*----- Benefits -----*			*-----			
Collisions -*	Total*	*-- Number of Collisions -*	Total*	*-- Number of	Total*		
Link Name	*	2030	2045	Total*	Cost* *	2030	2045

Total*	Cost* *	2030	2045	Total*	Benefit*		
897		0.1	0.1	1.7	50.4	0.1	0.1
1.7	50.4	0.0	0.0	0.0	0.0		
900		0.1	0.1	2.0	57.9	0.1	0.1
2.0	57.9	0.0	0.0	0.0	0.0		
901		0.2	0.2	5.1	146.9	0.0	0.0
0.0	0.0	0.2	0.2	5.1	146.9		
906		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
923		0.2	0.2	6.2	407.4	0.2	0.2
6.2	407.4	0.0	0.0	0.0	0.0		
1495		0.1	0.1	1.8	120.0	0.1	0.1
1.8	120.0	0.0	0.0	0.0	0.0		
1497		0.0	0.0	1.4	93.6	0.0	0.0
1.4	93.6	0.0	0.0	0.0	0.0		
1499		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1504		0.1	0.1	2.8	186.3	0.1	0.1
2.8	186.3	0.0	0.0	0.0	0.0		
1505		0.4	0.4	11.0	730.1	0.4	0.4
11.0	730.1	0.0	0.0	0.0	0.0		
1506		0.1	0.1	4.2	275.5	0.1	0.1
4.2	275.5	0.0	0.0	0.0	0.0		
1515		1.1	1.1	33.9	1,217.0	1.1	1.1
33.9	1,217.0	0.0	0.0	0.0	0.0		
1590		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
1591		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
44747		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
45876		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48840		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
48953		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49089		0.1	0.1	3.4	97.4	0.1	0.1
3.4	97.8	0.0	0.0	0.0	-0.4		
49185		0.8	0.7	22.0	638.3	0.8	0.7
22.2	641.8	0.0	0.0	-0.1	-3.5		
49353		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49552		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49560		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49630		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49684		0.1	0.1	3.9	257.4	0.1	0.1
3.8	254.0	0.0	0.0	0.0	3.4		
49717		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
49842		0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
50060		0.3	0.3	9.4	272.7	0.3	0.3
9.4	272.0	0.0	0.0	0.0	0.7		
50401		1.0	1.0	28.7	831.7	1.0	0.9
28.4	823.1	0.0	0.0	0.3	8.7		

50515		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50542		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50600		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50648		0.3	0.2	7.3	486.2	0.3	0.2	
7.3	486.2	0.0	0.0	0.0	0.0			
50653		0.1	0.1	3.1	89.1	0.1	0.1	
3.1	89.8	0.0	0.0	0.0	-0.7			
50686		0.3	0.3	9.5	275.3	0.3	0.3	
9.7	280.9	0.0	0.0	-0.2	-5.6			
554437085		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554437089		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445417		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445421		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445424		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445434		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445603		0.3	0.3	8.9	258.0	0.3	0.3	
8.9	257.5	0.0	0.0	0.0	0.5			
554445605		0.1	0.1	3.2	91.5	0.1	0.1	
3.1	91.1	0.0	0.0	0.0	0.4			
554445606		0.1	0.1	2.1	59.7	0.1	0.1	
2.1	60.1	0.0	0.0	0.0	-0.4			
554445611		0.1	0.1	2.0	58.0	0.1	0.1	
2.0	58.8	0.0	0.0	0.0	-0.7			
554445616		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554445660		0.1	0.1	3.8	110.9	0.1	0.1	
3.9	111.6	0.0	0.0	0.0	-0.6			
554445681		0.0	0.0	0.7	19.6	0.0	0.0	
0.7	19.7	0.0	0.0	0.0	-0.1			
554451601		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451604		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451606		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451619		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554451621		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469301		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469376		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469377		0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
554469379		0.1	0.1	4.0	114.9	0.1	0.1	
4.0	116.3	0.0	0.0	-0.1	-1.4			
554469380		0.1	0.1	2.8	81.8	0.1	0.1	
2.9	82.6	0.0	0.0	0.0	-0.8			
554469383		0.1	0.1	2.9	83.5	0.1	0.1	





554499943	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
559752177	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
562717850	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578082733	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
578088741	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814444	0.1	0.1	1.7	47.9	0.1	0.1	
1.7	48.2	0.0	0.0	0.0	-0.4		
587814449	0.1	0.1	2.2	62.9	0.1	0.1	
2.2	63.3	0.0	0.0	0.0	-0.4		
587814450	0.0	0.0	0.6	18.2	0.0	0.0	
0.6	18.4	0.0	0.0	0.0	-0.1		
587814454	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814456	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814797	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814807	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814808	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814809	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814811	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814819	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814822	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814825	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587814826	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815160	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815163	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815170	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815171	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815173	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815174	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815269	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
587815274	0.0	0.0	0.0	0.0	0.0	0.0	0.0





0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817228	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817230	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817231	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817234	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817269	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817271	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817272	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817274	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817275	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817314	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817316	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817318	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817319	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817447	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817448	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	587817453	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015491	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015493	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589015494	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	589626976	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481852	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481853	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	590481868	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2.1	590522243	0.1	0.1	2.1	60.1	0.1	0.1
0.9	59.9	0.0	0.0	0.0	0.1		
0.0	590522244	0.0	0.0	0.9	25.3	0.0	0.0
0.0	25.2	0.0	0.0	0.0	0.1		
0.0	590522245	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1139400830	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1148054292	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
0.0	1164076472	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

	1165618763	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1167345578	0.0	0.0	1.0	69.2	0.0	0.0	0.0
1.0	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1176181443	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1176242672	0.1	0.1	4.2	280.6	0.1	0.1	0.1
4.2	280.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1186121768	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2122362473	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147474988	1.1	1.1	31.6	2,096.4	1.1	1.1	1.1
31.6	2,096.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475007	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475798	0.5	0.5	14.7	973.5	0.5	0.5	0.5
14.7	973.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475799	0.3	0.3	8.1	539.8	0.3	0.3	0.3
8.1	539.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147475801	0.2	0.2	5.3	354.4	0.2	0.2	0.2
5.3	349.7	0.0	0.0	0.1	4.6	0.0	0.0	0.0
	2147475949	0.2	0.2	5.2	342.9	0.2	0.2	0.2
5.2	342.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481733	0.0	0.0	0.1	3.5	0.0	0.0	0.0
0.1	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481754	0.0	0.0	1.2	79.0	0.0	0.0	0.0
1.2	79.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481911	0.3	0.3	8.1	535.8	0.3	0.3	0.3
8.1	535.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147481977	0.5	0.4	13.1	869.9	0.5	0.4	0.4
13.1	869.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482906	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482907	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482908	0.1	0.1	3.5	231.7	0.1	0.1	0.1
3.4	228.9	0.0	0.0	0.0	2.8	0.0	0.0	0.0
	2147482912	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482916	0.0	0.0	1.2	34.7	0.0	0.0	0.0
1.2	34.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482917	0.0	0.0	1.3	38.6	0.0	0.0	0.0
1.3	38.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482919	0.3	0.3	8.1	538.5	0.3	0.3	0.3
8.1	538.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482922	0.2	0.2	5.0	329.9	0.2	0.2	0.2
4.9	325.0	0.0	0.0	0.1	4.9	0.0	0.0	0.0
	2147482923	0.0	0.0	0.6	41.2	0.0	0.0	0.0
0.6	40.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0
	2147482924	0.0	0.0	0.9	62.7	0.0	0.0	0.0
0.9	62.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0
	2147482925	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482926	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482927	0.0	0.0	0.0	0.2	0.0	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147482928	0.0	0.0	0.1	6.6	0.0	0.0	0.0



2147482970	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482973	0.2	0.2	4.6	132.1	0.2	0.2	0.2
4.6	132.1	0.0	0.0	0.0	0.0	0.0	0.0
2147482974	0.1	0.1	3.0	86.2	0.1	0.1	0.1
3.0	86.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482975	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482976	1.1	1.1	32.5	2,157.5	1.1	1.1	1.1
32.5	2,157.5	0.0	0.0	0.0	0.0	0.0	0.0
2147482977	1.2	1.2	35.6	2,360.6	1.2	1.2	1.2
35.6	2,360.8	0.0	0.0	0.0	-0.2	0.0	0.0
2147482979	0.0	0.0	1.3	86.9	0.0	0.0	0.0
1.3	86.8	0.0	0.0	0.0	0.1	0.0	0.0
2147482980	0.0	0.0	1.1	72.3	0.0	0.0	0.0
1.1	72.2	0.0	0.0	0.0	0.1	0.0	0.0
2147482981	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482982	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482985	0.0	0.0	1.3	85.3	0.0	0.0	0.0
1.3	85.3	0.0	0.0	0.0	0.0	0.0	0.0
2147482989	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482990	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482992	0.0	0.0	0.6	37.7	0.0	0.0	0.0
0.6	37.7	0.0	0.0	0.0	0.0	0.0	0.0
2147482993	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482994	0.6	0.6	17.9	1,187.2	0.6	0.6	0.6
17.9	1,187.2	0.0	0.0	0.0	0.0	0.0	0.0
2147482995	0.2	0.2	5.4	357.6	0.2	0.2	0.2
5.4	357.6	0.0	0.0	0.0	0.0	0.0	0.0
2147482996	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482997	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482998	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147482999	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483004	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483005	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483006	0.6	0.5	16.1	1,067.0	0.6	0.5	0.5
16.1	1,067.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483007	0.0	0.0	0.6	40.6	0.0	0.0	0.0
0.6	40.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483008	0.0	0.0	0.0	0.0	0.0	0.0	0.0





2147483045	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483046	0.0	0.0	0.0	0.9	62.6	0.0	0.0
0.9	62.7	0.0	0.0	0.0	-0.2	0.0	0.0
2147483047	0.0	0.0	0.0	0.4	26.6	0.0	0.0
0.4	26.7	0.0	0.0	0.0	-0.1	0.0	0.0
2147483048	0.1	0.1	2.5	167.8	0.1	0.1	
2.5	168.0	0.0	0.0	0.0	-0.2		
2147483049	0.1	0.1	1.6	104.6	0.1	0.1	
1.6	104.6	0.0	0.0	0.0	0.0		
2147483050	0.0	0.0	0.1	8.3	0.0	0.0	
0.1	8.2	0.0	0.0	0.0	0.0		
2147483051	0.0	0.0	1.0	64.2	0.0	0.0	
1.0	64.2	0.0	0.0	0.0	0.0		
2147483052	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483054	0.2	0.2	7.2	476.1	0.2	0.2	
7.1	469.9	0.0	0.0	0.1	6.2		
2147483055	0.2	0.2	4.6	301.5	0.2	0.2	
4.5	300.8	0.0	0.0	0.0	0.7		
2147483058	0.0	0.0	0.9	61.1	0.0	0.0	
0.9	61.0	0.0	0.0	0.0	0.1		
2147483060	0.0	0.0	0.5	33.2	0.0	0.0	
0.5	33.1	0.0	0.0	0.0	0.1		
2147483061	0.5	0.5	13.6	904.6	0.5	0.5	
13.6	903.2	0.0	0.0	0.0	1.4		
2147483062	0.9	0.9	26.1	1,733.1	0.9	0.9	
26.1	1,733.1	0.0	0.0	0.0	0.0		
2147483063	0.3	0.2	7.2	479.9	0.3	0.2	
7.2	478.2	0.0	0.0	0.0	1.7		
2147483066	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483067	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483071	0.0	0.0	0.7	45.0	0.0	0.0	
0.7	45.0	0.0	0.0	0.0	0.0		
2147483073	0.1	0.1	3.8	252.9	0.1	0.1	
3.8	252.9	0.0	0.0	0.0	0.0		
2147483074	0.7	0.7	20.2	1,340.0	0.7	0.7	
20.2	1,340.2	0.0	0.0	0.0	-0.2		
2147483075	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483076	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483077	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483078	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483079	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483080	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483081	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483083	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483084	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
2147483085	0.0	0.0	0.0	0.0	0.0	0.0	0.0



2147483118	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483119	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483121	0.0	0.0	0.0	0.2	13.9	0.0	0.0
0.2	13.7	0.0	0.0	0.0	0.2	0.0	0.0
2147483122	0.0	0.0	0.0	0.2	10.0	0.0	0.0
0.1	9.9	0.0	0.0	0.0	0.1	0.0	0.0
2147483123	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483124	0.0	0.0	0.0	0.2	12.3	0.0	0.0
0.2	12.2	0.0	0.0	0.0	0.1	0.0	0.0
2147483125	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483126	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483127	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483128	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483129	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483131	0.1	0.1	3.0	200.2	0.1	0.1	0.1
3.0	197.6	0.0	0.0	0.0	2.6	0.0	0.0
2147483132	0.2	0.1	4.5	296.0	0.2	0.1	0.1
4.5	297.5	0.0	0.0	0.0	-1.4	0.0	0.0
2147483134	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483135	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483136	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483137	0.1	0.1	2.0	132.5	0.1	0.1	0.1
2.0	132.2	0.0	0.0	0.0	0.3	0.0	0.0
2147483139	0.0	0.0	0.6	41.5	0.0	0.0	0.0
0.6	41.4	0.0	0.0	0.0	0.1	0.0	0.0
2147483141	0.1	0.1	3.8	253.9	0.1	0.1	0.1
3.8	253.3	0.0	0.0	0.0	0.6	0.0	0.0
2147483143	1.1	1.1	33.1	2,190.8	1.1	1.1	1.1
33.1	2,190.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483145	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483146	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483147	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483148	0.0	0.0	0.8	51.2	0.0	0.0	0.0
0.8	51.4	0.0	0.0	0.0	-0.2	0.0	0.0
2147483149	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483150	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483151	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483152	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483153	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483154	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483155	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483156	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483157	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483158	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483159	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483161	0.1	0.1	2.5	164.7	0.1	0.1	
2.5	165.0	0.0	0.0	0.0	-0.3			
	2147483162	0.2	0.2	5.7	376.0	0.2	0.2	
5.7	376.6	0.0	0.0	0.0	-0.6			
	2147483163	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483164	0.2	0.2	5.1	336.3	0.2	0.2	
5.1	336.9	0.0	0.0	0.0	-0.5			
	2147483165	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483166	0.0	0.0	0.6	42.3	0.0	0.0	
0.6	42.5	0.0	0.0	0.0	-0.2			
	2147483168	0.0	0.0	0.6	40.6	0.0	0.0	
0.6	40.8	0.0	0.0	0.0	-0.2			
	2147483169	0.2	0.2	5.6	369.1	0.2	0.2	
5.6	370.8	0.0	0.0	0.0	-1.7			
	2147483170	0.1	0.1	1.9	127.2	0.1	0.1	
1.9	126.7	0.0	0.0	0.0	0.5			
	2147483171	0.1	0.1	2.6	170.1	0.1	0.1	
2.6	168.9	0.0	0.0	0.0	1.3			
	2147483172	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483173	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483174	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483175	0.9	0.8	25.3	1,680.0	0.9	0.8	
25.3	1,680.0	0.0	0.0	0.0	0.0			
	2147483178	0.0	0.0	1.2	77.9	0.0	0.0	
1.2	78.0	0.0	0.0	0.0	-0.2			
	2147483179	0.0	0.0	0.9	57.3	0.0	0.0	
0.9	57.4	0.0	0.0	0.0	-0.1			
	2147483180	0.2	0.2	6.0	401.0	0.2	0.2	
6.1	401.9	0.0	0.0	0.0	-0.8			
	2147483181	0.1	0.1	1.6	109.6	0.1	0.1	
1.6	109.3	0.0	0.0	0.0	0.3			
	2147483182	0.1	0.1	3.1	203.4	0.1	0.1	
3.0	202.8	0.0	0.0	0.0	0.6			
	2147483183	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483184	0.1	0.1	2.0	135.3	0.1	0.1	
2.0	134.8	0.0	0.0	0.0	0.4			
	2147483185	0.1	0.1	1.6	106.9	0.1	0.1	
1.6	106.5	0.0	0.0	0.0	0.3			
	2147483186	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0			
	2147483187	0.1	0.1	1.8	122.1	0.1	0.1	
1.8	121.7	0.0	0.0	0.0	0.4			

2147483188	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483189	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483190	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483191	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483192	0.0	0.0	0.2	0.0	13.0	0.0	0.0
0.2	13.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483193	0.0	0.0	0.3	0.0	19.4	0.0	0.0
0.3	19.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483194	0.0	0.0	0.7	0.0	48.3	0.0	0.0
0.7	48.4	0.0	0.0	0.0	-0.1	0.0	0.0
2147483195	0.0	0.0	0.1	0.0	4.4	0.0	0.0
0.1	4.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483196	0.0	0.0	0.2	0.0	12.3	0.0	0.0
0.2	12.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483197	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483198	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483199	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483200	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483201	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483202	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483206	0.2	0.2	7.4	0.0	488.9	0.2	0.2
7.4	488.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483207	0.0	0.0	0.8	0.0	50.3	0.0	0.0
0.8	50.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483208	0.0	0.0	0.8	0.0	52.8	0.0	0.0
0.8	52.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483209	0.4	0.4	12.1	0.0	798.8	0.4	0.4
12.1	798.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483210	0.1	0.1	1.7	0.0	111.9	0.1	0.1
1.7	111.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483211	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483212	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483213	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483214	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483215	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483216	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483217	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483218	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483219	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483222	0.0	0.0	0.1	0.0	4.0	0.0	0.0



2147483265	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483266	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483267	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483270	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483271	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483272	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483273	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483274	0.0	0.0	1.4	90.1	0.0	0.0	0.0
1.4	90.1	0.0	0.0	0.0	0.0	0.0	0.0
2147483275	1.0	1.0	30.4	2,018.4	1.0	1.0	1.0
30.4	2,018.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483278	0.0	0.0	0.6	36.6	0.0	0.0	0.0
0.6	36.8	0.0	0.0	0.0	-0.2	0.0	0.0
2147483280	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483281	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483282	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483283	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483284	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483285	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483286	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483290DN	0.1	0.1	2.7	183.3	0.0	0.0	0.0
0.0	0.0	0.1	0.1	2.7	183.3	0.0	0.0
2147483290DS	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1.5	98.8	-0.1	0.0	-1.5	-98.8	0.0	0.0
2147483297DN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483297DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.4	29.6	0.0	0.0	-0.4	-29.6	0.0	0.0
2147483300	0.0	0.0	1.3	36.8	0.0	0.0	0.0
0.8	24.0	0.0	0.0	0.4	12.8	0.0	0.0
2147483303	0.2	0.2	4.9	327.3	0.2	0.2	0.2
5.1	336.0	0.0	0.0	-0.1	-8.7	0.0	0.0
2147483304	0.0	0.0	1.4	90.6	0.0	0.0	0.0
1.4	92.9	0.0	0.0	0.0	-2.3	0.0	0.0
2147483305DN	0.3	0.2	7.4	496.1	0.0	0.0	0.0
0.0	0.0	0.3	0.2	7.4	496.1	0.0	0.0
2147483305DS	0.0	0.0	0.0	0.0	0.0	0.1	0.1
4.0	272.2	-0.1	-0.1	-4.0	-272.2	0.0	0.0
2147483306DN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483306DS	0.0	0.0	0.0	0.0	0.0	0.1	0.0
1.5	99.7	-0.1	0.0	-1.5	-99.7	0.0	0.0
2147483308	0.2	0.2	5.0	333.6	0.2	0.2	0.2
5.2	342.1	0.0	0.0	-0.1	-8.5	0.0	0.0
2147483309	0.2	0.2	6.0	397.3	0.2	0.2	0.2





2147483349	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483350	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483352	0.1	0.1	2.1	136.2	0.1	0.1	0.1
2.1	136.2	0.0	0.0	0.0	0.0	0.0	0.0
2147483355	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483356	0.0	0.0	0.4	28.4	0.0	0.0	0.0
0.4	28.5	0.0	0.0	0.0	0.0	0.0	0.0
2147483357	0.0	0.0	0.2	10.6	0.0	0.0	0.0
0.2	10.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483358	0.0	0.0	0.0	3.0	0.0	0.0	0.0
0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483359	0.0	0.0	0.1	9.5	0.0	0.0	0.0
0.1	9.4	0.0	0.0	0.0	0.0	0.0	0.0
2147483360	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483362	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483363	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483364	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483365	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483366	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483367	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483368	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483369	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483371	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483373	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483374	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483375	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483376	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483377	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483378	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483380	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483383DN	0.4	0.4	12.8	859.5	0.0	0.0	0.0
0.0	0.0	0.4	0.4	12.8	859.5	0.0	0.0
2147483383DS	0.0	0.0	0.0	0.0	0.0	0.3	0.2
7.2	487.4	-0.3	-0.2	-7.2	-487.4	0.0	0.0
2147483387	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483388	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483389	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0		
	2147483390	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483391	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483392	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483393	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483394	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483395	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483396	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483397	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483398	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483400	0.0	0.0	0.0	1.4	0.0	0.0
0.0	1.4	0.0	0.0	0.0	0.0		
	2147483401	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483402	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483403	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483404	0.0	0.0	0.3	20.8	0.0	0.0
0.3	20.8	0.0	0.0	0.0	0.0		
	2147483405	0.0	0.0	0.0	0.7	0.0	0.0
0.0	0.7	0.0	0.0	0.0	0.0		
	2147483406	0.1	0.1	4.1	270.4	0.1	0.1
4.2	277.7	0.0	0.0	-0.1	-7.3		
	2147483408	0.0	0.0	0.6	38.0	0.0	0.0
0.6	38.1	0.0	0.0	0.0	-0.1		
	2147483409	0.0	0.0	0.0	0.9	0.0	0.0
0.0	0.7	0.0	0.0	0.0	0.2		
	2147483410	0.0	0.0	0.0	0.2	0.0	0.0
0.0	0.2	0.0	0.0	0.0	0.0		
	2147483411	0.0	0.0	0.0	1.8	0.0	0.0
0.0	1.5	0.0	0.0	0.0	0.3		
	2147483412	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483413	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483414	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483415	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483416	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483417DN	0.2	0.1	4.5	299.9	0.0	0.0
0.0	0.0	0.2	0.1	4.5	299.9		
	2147483417DS	0.0	0.0	0.0	0.0	0.1	0.1
2.4	159.3	-0.1	-0.1	-2.4	-159.3		
	2147483418DN	0.4	0.4	11.3	756.1	0.0	0.0
0.0	0.0	0.4	0.4	11.3	756.1		
	2147483418DS	0.0	0.0	0.0	0.0	0.2	0.2
6.0	403.7	-0.2	-0.2	-6.0	-403.7		

2147483419	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483420	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483421	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483423DN	0.7	0.7	20.3	1,361.2	0.0	0.0	0.0
0.0	0.7	0.7	20.3	1,361.2	0.0	0.0	0.0
2147483423DS	0.0	0.0	0.0	0.0	0.4	0.4	0.4
11.5	775.4	-0.4	-0.4	-11.5	-775.4	0.0	0.0
2147483424	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483425	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483426DN	0.4	0.4	11.9	799.7	0.0	0.0	0.0
0.0	0.4	0.4	11.9	799.7	0.0	0.0	0.0
2147483426DS	0.0	0.0	0.0	0.0	0.2	0.2	0.2
6.7	448.9	-0.2	-0.2	-6.7	-448.9	0.0	0.0
2147483428	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483429	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483431	0.0	0.0	0.1	8.9	0.0	0.0	0.0
0.1	6.7	0.0	0.0	0.0	2.2	0.0	0.0
2147483432	0.0	0.0	0.1	7.4	0.0	0.0	0.0
0.1	4.4	0.0	0.0	0.0	3.0	0.0	0.0
2147483433	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483434	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483435	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483436	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483437	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483438	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483439	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483440	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483441	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483442	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483443	0.2	0.2	6.8	452.8	0.2	0.2	0.2
6.8	452.8	0.0	0.0	0.0	0.0	0.0	0.0
2147483444	0.0	0.0	1.0	68.2	0.0	0.0	0.0
1.0	68.2	0.0	0.0	0.0	0.0	0.0	0.0
2147483445	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483446	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483447	0.0	0.0	0.0	0.3	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483448	0.0	0.0	0.0	0.6	0.0	0.0	0.0
0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
2147483449	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0		
	2147483450	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483451	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483452	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483453	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483454	0.0	0.0	0.0	0.0	0.4	0.0
0.0	0.4	0.0	0.0	0.0	0.0		
	2147483455	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483456	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483457	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483458	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483459	0.0	0.0	0.3	17.2	0.0	0.0
0.3	17.2	0.0	0.0	0.0	0.0		
	2147483460	0.0	0.0	0.0	1.6	0.0	0.0
0.0	1.6	0.0	0.0	0.0	0.0		
	2147483461	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483464	0.0	0.0	0.2	16.2	0.0	0.0
0.2	16.2	0.0	0.0	0.0	0.0		
	2147483465	0.0	0.0	0.3	20.1	0.0	0.0
0.3	20.1	0.0	0.0	0.0	0.0		
	2147483466	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483468	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483469	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483471	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483472	0.0	0.0	1.4	95.4	0.0	0.0
1.4	95.4	0.0	0.0	0.0	0.0		
	2147483473	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483474	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483475	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483476	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483477	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483478	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483479	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483480	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483481	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483482	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		

2147483483	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483484	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483485	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483486	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483487	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483488	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483489	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483490	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483491	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483492	0.0	0.0	0.3	0.0	21.9	0.0	0.0
0.3	21.9	0.0	0.0	0.0	0.0	0.0	0.0
2147483493	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483494	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483495	0.0	0.0	0.2	0.0	5.3	0.0	0.0
0.2	5.3	0.0	0.0	0.0	0.0	0.0	0.0
2147483497	0.1	0.1	1.6	0.0	45.6	0.1	0.1
1.6	45.2	0.0	0.0	0.0	0.4	0.0	0.0
2147483498	0.1	0.1	1.7	0.0	48.2	0.1	0.1
1.7	47.8	0.0	0.0	0.0	0.4	0.0	0.0
2147483499	0.2	0.2	5.3	0.0	353.3	0.2	0.2
5.3	352.4	0.0	0.0	0.0	0.9	0.0	0.0
2147483501	0.1	0.1	3.0	0.0	198.7	0.1	0.1
3.0	198.0	0.0	0.0	0.0	0.7	0.0	0.0
2147483502	0.2	0.2	4.8	0.0	320.0	0.2	0.2
4.8	319.2	0.0	0.0	0.0	0.8	0.0	0.0
2147483504	0.2	0.2	5.0	0.0	145.4	0.2	0.2
5.0	145.0	0.0	0.0	0.0	0.3	0.0	0.0
2147483505	0.4	0.4	11.7	0.0	339.3	0.4	0.4
11.7	338.6	0.0	0.0	0.0	0.7	0.0	0.0
2147483506	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483507	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483508	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483510	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483511	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483512	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483513	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483517	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483518	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483519	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483520	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483521	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483522	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483523	0.0	0.0	1.3	36.7	0.0	0.0	0.0
1.3	36.4	0.0	0.0	0.0	0.3	0.0	0.0
2147483524	0.1	0.1	1.5	43.4	0.1	0.1	0.1
1.5	43.0	0.0	0.0	0.0	0.4	0.0	0.0
2147483528	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483531	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483532	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483533	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483534	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483537	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483540	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483543	0.5	0.5	14.8	985.2	0.5	0.5	0.5
14.8	985.6	0.0	0.0	0.0	-0.4	0.0	0.0
2147483544	0.3	0.3	7.8	519.8	0.3	0.3	0.3
7.8	520.0	0.0	0.0	0.0	-0.2	0.0	0.0
2147483545	0.2	0.2	6.9	458.6	0.2	0.2	0.2
6.9	459.7	0.0	0.0	0.0	-1.2	0.0	0.0
2147483546	0.1	0.1	4.2	276.0	0.1	0.1	0.1
4.2	276.7	0.0	0.0	0.0	-0.7	0.0	0.0
2147483547	0.0	0.0	1.4	93.2	0.0	0.0	0.0
1.4	93.2	0.0	0.0	0.0	0.0	0.0	0.0
2147483548	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483549	0.1	0.1	1.5	101.9	0.1	0.1	0.1
1.6	104.5	0.0	0.0	0.0	-2.6	0.0	0.0
2147483550	0.1	0.1	2.5	167.5	0.1	0.1	0.1
2.6	171.7	0.0	0.0	-0.1	-4.3	0.0	0.0
2147483551	0.0	0.0	0.0	0.0	0.6	0.0	0.0
0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
2147483552	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483553	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483554	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2147483555DN	0.3	0.3	9.7	647.5	0.0	0.0	0.0
0.0	0.0	0.3	0.3	9.7	647.5	0.0	0.0
2147483555DS	0.0	0.0	0.0	0.0	0.0	0.2	0.2
5.6	378.7	-0.2	-0.2	-5.6	-378.7	0.0	0.0
2147483556DN	0.3	0.3	9.0	605.6	0.0	0.0	0.0
0.0	0.0	0.3	0.3	9.0	605.6	0.0	0.0
2147483556DS	0.0	0.0	0.0	0.0	0.0	0.2	0.2
5.2	351.8	-0.2	-0.2	-5.2	-351.8	0.0	0.0
2147483557	0.0	0.0	1.0	69.0	0.0	0.0	0.0
1.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0

	2147483558	0.1	0.1	1.8	51.9	0.1	0.1
1.8	51.9	0.0	0.0	0.0	0.0		
	2147483561	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483562	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483563	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483564	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483565	0.1	0.1	2.8	183.7	0.1	0.1
2.8	184.5	0.0	0.0	0.0	-0.8		
	2147483566	0.0	0.0	0.0	2.7	0.0	0.0
0.0	0.2	0.0	0.0	0.0	2.5		
	2147483567	0.0	0.0	0.1	5.8	0.0	0.0
0.0	0.5	0.0	0.0	0.1	5.3		
	2147483568	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483569	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483572	0.3	0.3	7.6	503.6	0.3	0.3
7.6	501.8	0.0	0.0	0.0	1.8		
	2147483573	0.0	0.0	0.1	4.6	0.0	0.0
0.1	4.6	0.0	0.0	0.0	0.0		
	2147483575	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483576	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483577	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483578	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483579	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483580	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483581	0.2	0.2	5.8	385.5	0.2	0.2
6.0	395.6	0.0	0.0	-0.1	-10.1		
	2147483582	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483585	0.0	0.0	0.7	21.4	0.0	0.0
0.7	21.4	0.0	0.0	0.0	0.0		
	2147483588	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483590	0.1	0.0	1.5	42.7	0.1	0.0
1.5	42.9	0.0	0.0	0.0	-0.2		
	2147483593	0.1	0.1	2.4	68.9	0.1	0.1
2.4	69.0	0.0	0.0	0.0	0.0		
	2147483595	0.7	0.7	20.0	718.0	0.7	0.7
20.0	721.3	0.0	0.0	-0.1	-3.3		
	2147483596	0.1	0.1	2.1	60.2	0.1	0.1
2.1	61.1	0.0	0.0	0.0	-1.0		
	2147483599	0.4	0.4	12.8	847.2	0.4	0.4
12.8	847.5	0.0	0.0	0.0	-0.3		
	2147483600	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483601	0.0	0.0	0.6	22.4	0.0	0.0
0.6	22.4	0.0	0.0	0.0	0.0		
	2147483603	0.0	0.0	1.1	69.6	0.0	0.0



1.1	69.6	0.0	0.0	0.0	0.0		
	2147483605	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483606	0.0	0.0	0.5	32.0	0.0	0.0
0.5	31.9	0.0	0.0	0.0	0.1	0.0	0.0
	2147483608	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483610	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2147483612	0.8	0.8	23.1	830.1	0.8	0.8
23.1	829.1	0.0	0.0	0.0	0.9		
	2147483615	0.1	0.1	2.6	93.9	0.1	0.1
2.6	93.8	0.0	0.0	0.0	0.1		
	2147483617	0.0	0.0	0.2	14.1	0.0	0.0
0.2	14.0	0.0	0.0	0.0	0.0		
	2147483618	0.1	0.1	2.9	190.7	0.1	0.1
2.9	191.3	0.0	0.0	0.0	-0.6		
	2147483619	0.1	0.1	1.9	124.5	0.1	0.1
1.9	123.1	0.0	0.0	0.0	1.4		
	2147483621	0.0	0.0	0.2	15.7	0.0	0.0
0.2	15.0	0.0	0.0	0.0	0.6		
	2147483622	0.0	0.0	0.2	15.4	0.0	0.0
0.2	15.3	0.0	0.0	0.0	0.0		
	2147483626	0.7	0.7	20.4	730.7	0.7	0.7
20.1	722.6	0.0	0.0	0.2	8.1		
	2147483627	0.0	0.0	0.5	16.2	0.0	0.0
0.5	19.2	0.0	0.0	-0.1	-3.0		
	2147483630	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483631	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0		
	2147483632	0.0	0.0	0.0	0.0	1.5	1.6
46.8	1,668.6	-1.5	-1.6	-46.8	-1,668.6		
	2147483633	0.0	0.0	0.0	0.0	0.0	0.0
0.6	16.2	0.0	0.0	-0.6	-16.2		
	2147483637	0.0	0.0	0.0	0.0	0.1	0.1
1.9	53.8	-0.1	-0.1	-1.9	-53.8		
	Total	40.8	39.8	1,192.0	68,892.0	40.9	39.9
1,195.9	67,814.4	-0.1	-0.1	-3.9	1,077.6		

Costs and benefits discounted to 2011 in multiples of a thousand euros.

[Section 3] Combined Link and Junction Collision Rates

Link Name	*----- Collision Rate -----*	
	* 2030	2045 *
897	0.387882	0.364630
900	0.387882	0.364630
901	0.387882	0.364630
906	0.000000	0.000000
923	0.132426	0.123735
1495	0.132426	0.123735
1497	0.132426	0.123735
1499	0.132426	0.123735

1504	0.132426	0.123735
1505	0.132426	0.123735
1506	0.132426	0.123735
1515	0.057490	0.053798
1590	0.132426	0.123735
1591	0.132426	0.123735
44747	0.000000	0.000000
45876	0.000000	0.000000
48840	0.000000	0.000000
48953	0.000000	0.000000
49089	0.387882	0.364630
49185	0.387882	0.364630
49353	0.000000	0.000000
49552	0.000000	0.000000
49560	0.000000	0.000000
49630	0.000000	0.000000
49684	0.132426	0.123735
49717	0.000000	0.000000
49842	0.000000	0.000000
50060	0.387882	0.364630
50401	0.387882	0.364630
50515	0.000000	0.000000
50542	0.000000	0.000000
50600	0.000000	0.000000
50648	0.132426	0.123735
50653	0.387882	0.364630
50686	0.387882	0.364630
554437085	0.000000	0.000000
554437089	0.000000	0.000000
554445417	0.000000	0.000000
554445421	0.000000	0.000000
554445424	0.000000	0.000000
554445434	0.000000	0.000000
554445603	0.387882	0.364630
554445605	0.387882	0.364630
554445606	0.387882	0.364630
554445611	0.387882	0.364630
554445616	0.000000	0.000000
554445660	0.387882	0.364630
554445681	0.387882	0.364630
554451601	0.000000	0.000000
554451604	0.000000	0.000000
554451606	0.000000	0.000000
554451619	0.000000	0.000000
554451621	0.000000	0.000000
554469301	0.000000	0.000000
554469376	0.000000	0.000000
554469377	0.000000	0.000000
554469379	0.387882	0.364630
554469380	0.387882	0.364630
554469383	0.387882	0.364630
554469386	0.387882	0.364630
554469390	0.132426	0.123735
554476250	0.000000	0.000000
554476251	0.000000	0.000000
554476254	0.000000	0.000000
554476255	0.000000	0.000000
554476258	0.000000	0.000000
554476263	0.000000	0.000000

554476268	0.000000	0.000000
554476273	0.000000	0.000000
554476275	0.000000	0.000000
554476276	0.000000	0.000000
554476314	0.000000	0.000000
554476317	0.000000	0.000000
554476318	0.000000	0.000000
554476321	0.000000	0.000000
554476331	0.000000	0.000000
554476332	0.000000	0.000000
554476337	0.000000	0.000000
554476339	0.000000	0.000000
554476344	0.000000	0.000000
554476347	0.000000	0.000000
554478297	0.000000	0.000000
554478964	0.000000	0.000000
554478965	0.000000	0.000000
554479189	0.132426	0.123735
554479190	0.132426	0.123735
554499930	0.000000	0.000000
554499931	0.000000	0.000000
554499943	0.000000	0.000000
559752177	0.000000	0.000000
562717850	0.000000	0.000000
578082733	0.000000	0.000000
578088741	0.000000	0.000000
587814444	0.387882	0.364630
587814449	0.387882	0.364630
587814450	0.387882	0.364630
587814454	0.000000	0.000000
587814456	0.000000	0.000000
587814797	0.000000	0.000000
587814807	0.000000	0.000000
587814808	0.000000	0.000000
587814809	0.000000	0.000000
587814811	0.000000	0.000000
587814819	0.000000	0.000000
587814822	0.000000	0.000000
587814825	0.000000	0.000000
587814826	0.000000	0.000000
587815160	0.000000	0.000000
587815163	0.000000	0.000000
587815170	0.000000	0.000000
587815171	0.000000	0.000000
587815173	0.000000	0.000000
587815174	0.000000	0.000000
587815269	0.000000	0.000000
587815271	0.000000	0.000000
587815272	0.000000	0.000000
587815273	0.000000	0.000000
587815274	0.000000	0.000000
587815275	0.000000	0.000000
587815277	0.000000	0.000000
587815278	0.000000	0.000000
587815280	0.000000	0.000000
587815285	0.000000	0.000000
587815287	0.000000	0.000000
587815295	0.387882	0.364630
587815303	0.000000	0.000000

587815773	0.387882	0.364630
587815780	0.387882	0.364630
587815785	0.000000	0.000000
587815787	0.000000	0.000000
587815790	0.000000	0.000000
587815791	0.000000	0.000000
587815792	0.000000	0.000000
587815795	0.000000	0.000000
587815802	0.000000	0.000000
587815824	0.000000	0.000000
587816038	0.000000	0.000000
587816039	0.000000	0.000000
587816041	0.000000	0.000000
587816057	0.000000	0.000000
587816058	0.000000	0.000000
587816063	0.387882	0.364630
587816177	0.000000	0.000000
587816186	0.000000	0.000000
587816709	0.387882	0.364630
587816710	0.387882	0.364630
587816711	0.000000	0.000000
587816712	0.000000	0.000000
587816713	0.387882	0.364630
587816714	0.000000	0.000000
587816718	0.000000	0.000000
587816721	0.000000	0.000000
587816722	0.000000	0.000000
587816725	0.000000	0.000000
587816971	0.000000	0.000000
587816972	0.000000	0.000000
587816973	0.000000	0.000000
587816974	0.000000	0.000000
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587816985	0.000000	0.000000
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587816988	0.000000	0.000000
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587817217	0.000000	0.000000
587817219	0.000000	0.000000
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587817225	0.000000	0.000000
587817226	0.000000	0.000000
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587817230	0.000000	0.000000
587817231	0.000000	0.000000
587817234	0.000000	0.000000
587817269	0.000000	0.000000
587817271	0.000000	0.000000
587817272	0.000000	0.000000
587817274	0.000000	0.000000

587817275	0.000000	0.000000
587817314	0.000000	0.000000
587817316	0.000000	0.000000
587817318	0.000000	0.000000
587817319	0.000000	0.000000
587817447	0.000000	0.000000
587817448	0.000000	0.000000
587817453	0.000000	0.000000
589015491	0.000000	0.000000
589015493	0.000000	0.000000
589015494	0.000000	0.000000
589626976	0.000000	0.000000
590481852	0.000000	0.000000
590481853	0.000000	0.000000
590481868	0.000000	0.000000
590522243	0.387882	0.364630
590522244	0.387882	0.364630
590522245	0.000000	0.000000
1139400830	0.000000	0.000000
1148054292	0.000000	0.000000
1164076472	0.000000	0.000000
1165618763	0.000000	0.000000
1167345578	0.132426	0.123735
1176181443	0.000000	0.000000
1176242672	0.132426	0.123735
1186121768	0.000000	0.000000
2122362473	0.000000	0.000000
2147474988	0.132426	0.123735
2147475007	0.000000	0.000000
2147475798	0.132426	0.123735
2147475799	0.132426	0.123735
2147475801	0.132426	0.123735
2147475949	0.132426	0.123735
2147481733	0.132426	0.123735
2147481754	0.132426	0.123735
2147481911	0.132426	0.123735
2147481977	0.132426	0.123735
2147482906	0.000000	0.000000
2147482907	0.000000	0.000000
2147482908	0.132426	0.123735
2147482912	0.000000	0.000000
2147482916	0.387882	0.364630
2147482917	0.387882	0.364630
2147482919	0.132426	0.123735
2147482922	0.132426	0.123735
2147482923	0.132426	0.123735
2147482924	0.132426	0.123735
2147482925	0.000000	0.000000
2147482926	0.000000	0.000000
2147482927	0.132426	0.123735
2147482928	0.132426	0.123735
2147482930	0.132426	0.123735
2147482931	0.132426	0.123735
2147482932	0.000000	0.000000
2147482933	0.000000	0.000000
2147482937	0.000000	0.000000
2147482940	0.000000	0.000000
2147482941	0.000000	0.000000
2147482942	0.000000	0.000000

2147482943	0.000000	0.000000
2147482944	0.000000	0.000000
2147482945	0.000000	0.000000
2147482946	0.000000	0.000000
2147482947	0.000000	0.000000
2147482949	0.000000	0.000000
2147482950	0.000000	0.000000
2147482951	0.000000	0.000000
2147482952	0.000000	0.000000
2147482953	0.000000	0.000000
2147482954	0.132426	0.123735
2147482957	0.000000	0.000000
2147482958	0.132426	0.123735
2147482959	0.000000	0.000000
2147482960	0.000000	0.000000
2147482963	0.000000	0.000000
2147482964	0.132426	0.123735
2147482966	0.000000	0.000000
2147482967	0.000000	0.000000
2147482968	0.000000	0.000000
2147482969	0.000000	0.000000
2147482970	0.000000	0.000000
2147482973	0.387882	0.364630
2147482974	0.387882	0.364630
2147482975	0.000000	0.000000
2147482976	0.132426	0.123735
2147482977	0.132426	0.123735
2147482979	0.132426	0.123735
2147482980	0.132426	0.123735
2147482981	0.132426	0.123735
2147482982	0.132426	0.123735
2147482985	0.132426	0.123735
2147482989	0.000000	0.000000
2147482990	0.132426	0.123735
2147482992	0.132426	0.123735
2147482993	0.000000	0.000000
2147482994	0.132426	0.123735
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2147483581	0.132426	0.123735
2147483582	0.000000	0.000000
2147483585	0.387882	0.364630
2147483588	0.000000	0.000000
2147483590	0.387882	0.364630
2147483593	0.387882	0.364630
2147483595	0.057490	0.053798
2147483596	0.387882	0.364630
2147483599	0.132426	0.123735
2147483600	0.000000	0.000000
2147483601	0.057490	0.053798
2147483603	0.132426	0.123735
2147483605	0.132426	0.123735
2147483606	0.132426	0.123735
2147483608	0.000000	0.000000
2147483610	0.000000	0.000000
2147483612	0.057490	0.053798
2147483615	0.057490	0.053798
2147483617	0.132426	0.123735
2147483618	0.132426	0.123735

2147483619	0.132426	0.123735
2147483621	0.132426	0.123735
2147483622	0.132426	0.123735
2147483626	0.057490	0.053798
2147483627	0.057490	0.053798
2147483630	0.000000	0.000000
2147483631	0.132426	0.123735
2147483632	0.057490	0.053798
2147483633	0.387882	0.364630
2147483637	0.387882	0.364630

Collision rates are in collisions per million vehicle kilometres.

[Section 4] Input Data - Scheme File

Scheme Name  
N25 Glenmore to Waterford

Years Subsection

Current Year 2020  
Base Year 2020

Without-Scheme

Year 1 2030  
Year 2 2045  
Year 3 2060  
Year 4 0  
Year 5 0

With-Scheme

Year 1 2030  
Year 2 2045  
Year 3 2060  
Year 4 0  
Year 5 0

Scheme Opening Year 2030

Link and Junction Combined Input Section

Combined Classification Subsection

Link Name	Road Type	Length (km)	Speed Limit (km/h)	Error/Warning Summary (!=Error, #=Warning)
897	3	0.06	50	
900	3	0.08	50	
901	3	0.13	50	
906	11	0.55	65	#Unusual speed limit (65) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link.
923	2	1.17	100	
1495	2	1.12	70	
1497	2	0.88	70	
1499	2	0.32	70	
1504	2	0.22	70	
1505	2	0.68	100	
1506	2	0.79	100	
1515	4	5.69	100	
1590	2	0.65	70	

1591	2	0.25	70	
44747	4	0.10	40	!Speed limit is too low for a
fast dual carriageway.				
45876	4	0.04	40	!Speed limit is too low for a
fast dual carriageway.				
48840	2	0.42	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
48953	4	0.44	50	!Speed limit is too low for a
fast dual carriageway.				
49089	3	0.15	60	
49185	3	0.70	50	
49353	3	0.87	80	!Speed limit is high. Care
should be taken using the results of the calculation for this link.				
49552	3	0.31	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
49560	3	0.50	80	!Speed limit is high. Care
should be taken using the results of the calculation for this link.				
49630	2	0.37	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
49684	2	0.45	80	
49717	3	0.23	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
49842	2	0.23	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50060	3	0.23	50	
50401	3	1.87	50	
50515	3	0.18	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50542	3	0.28	40	
50600	2	0.17	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
50648	2	4.01	80	
50653	3	0.16	60	
50686	3	0.41	60	
554437085	3	0.05	40	
554437089	2	0.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554445417	4	0.07	40	!Speed limit is too low for a
fast dual carriageway.				
554445421	3	0.04	40	
554445424	3	0.06	40	
554445434	3	0.03	40	
554445603	3	0.24	50	
554445605	3	0.09	50	
554445606	3	0.10	50	
554445611	3	0.05	50	
554445616	3	0.11	30	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554445660	3	0.11	50	
554445681	3	0.03	60	
554451601	3	0.07	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451604	3	0.13	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451606	3	0.02	20	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451619	3	0.01	10	#Speed limit is low. Care
should be taken using the results of the calculation for this link.				
554451621	3	0.04	20	#Speed limit is low. Care



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should be taken using the results of the calculation for this link.
554469301      3      0.08      40
554469376      3      0.12      40
554469377      2      0.04      50      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
554469379      3      0.10      50
554469380      3      0.07      50
554469383      3      0.09      50
554469386      3      0.06      50
554469390      2      0.08     100
554476250      3      0.07      40
554476251      3      0.17      40
554476254      3      0.05      40
554476255      3      0.13      40
554476258      3      0.04      40
554476263      3      0.08      40
554476268      3      0.01      40
554476273      3      0.04      40
554476275      3      0.12      40
554476276      3      0.04      40
554476314      3      0.08      40
554476317      3      0.06      40
554476318      4      0.03      40      !Speed limit is too low for a
fast dual carriageway.
554476321      4      0.01      40      !Speed limit is too low for a
fast dual carriageway.
554476331      4      0.04      40      !Speed limit is too low for a
fast dual carriageway.
554476332      3      0.04      40
554476337      3      0.07      40
554476339      3      0.05      40
554476344      3      0.02      40
554476347      3      0.01      40
554478297      3      0.08      40
554478964      3      0.07      40
554478965      3      0.03      40
554479189      2      0.17      70
554479190      2      0.04      70
554499930      2      0.10      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
554499931      2      0.03      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
554499943      2      0.10      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
559752177      3      0.39      40
562717850      3      0.23      40
578082733      2      0.09      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
578088741      2      0.06      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
587814444      3      0.09      60
587814449      3      0.10      60
587814450      3      0.03      60
587814454      3      0.09      30      #Speed limit is low. Care
should be taken using the results of the calculation for this link.
587814456      3      0.04      30      #Speed limit is low. Care
should be taken using the results of the calculation for this link.
587814797      3      0.19      15      #Unusual speed limit (15) is
not multiple of 10km/h. Care should be taken using the results of the calculation

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for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587814807 10 0.01 10 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587814808 3 0.05 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587814809 3 0.04 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587814811 4 0.04 10 !Speed limit is too low for a fast dual carriageway.

587814819 3 0.02 10 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587814822 3 0.05 10 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587814825 3 0.03 10 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587814826 3 0.03 10 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815160 3 0.13 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815163 3 0.03 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815170 3 0.30 23 #Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815171 3 0.15 23 #Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815173 3 0.02 23 #Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815174 3 0.12 23 #Unusual speed limit (23) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815269 3 0.09 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815271 3 0.13 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815272 3 0.09 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815273 3 0.19 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815274 3 0.08 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815275 3 0.07 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815277 3 0.12 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the

calculation for this link.

587815278 3 0.04 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815280 3 0.13 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815285 3 0.05 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815287 3 0.06 15 #Unusual speed limit (15) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815295 3 0.44 50

587815303 3 0.02 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815773 3 0.04 50

587815780 3 0.16 50

587815785 2 0.07 25 #Unusual speed limit (25) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815787 3 0.02 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815790 3 0.14 40

587815791 3 0.16 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815792 3 0.20 20 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815795 3 0.04 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815802 3 0.04 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587815824 3 0.04 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587816038 3 0.20 40

587816039 3 0.08 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587816041 3 0.02 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587816057 3 0.06 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587816058 3 0.02 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587816063 3 0.05 50

587816177 3 0.02 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587816186 3 0.08 40

587816709 3 0.10 50

587816710 3 0.02 50

587816711 3 0.22 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587816712 3 0.16 40

587816713 3 0.04 50

587816714 3 0.34 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587816718 3 0.19 30 #Speed limit is low. Care should be taken using the results of the calculation for this link.

587816721 3 0.08 30

#Speed limit is low. Care

should be taken using the results of the calculation for this link.  
 587816722 3 0.02 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816725 3 0.04 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816971 3 0.05 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816972 3 0.12 40  
 587816973 3 0.10 40  
 587816974 3 0.19 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816975 4 0.07 30 !Speed limit is too low for a  
 fast dual carriageway.  
 587816978 4 0.06 30 !Speed limit is too low for a  
 fast dual carriageway.  
 587816980 4 0.06 30 !Speed limit is too low for a  
 fast dual carriageway.  
 587816981 4 0.06 30 !Speed limit is too low for a  
 fast dual carriageway.  
 587816984 10 0.04 10 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816985 3 0.09 40  
 587816986 3 0.29 20 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816988 3 0.25 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587816989 3 0.33 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587817206 3 0.06 20 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587817207 3 0.48 40  
 587817216 3 0.03 40  
 587817217 3 0.16 40  
 587817219 3 0.04 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587817221 3 0.08 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587817223 3 0.08 20 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587817225 4 0.07 30 !Speed limit is too low for a  
 fast dual carriageway.  
 587817226 4 0.06 30 !Speed limit is too low for a  
 fast dual carriageway.  
 587817227 4 0.10 30 !Speed limit is too low for a  
 fast dual carriageway.  
 587817228 3 0.02 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587817230 3 0.06 20 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587817231 3 0.04 20 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587817234 4 0.02 30 !Speed limit is too low for a  
 fast dual carriageway.  
 587817269 3 0.09 30 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587817271 3 0.03 20 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.  
 587817272 3 0.07 20 #Speed limit is low. Care  
 should be taken using the results of the calculation for this link.

587817274	3	0.04	20	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587817275	3	0.09	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587817314	5	0.12	20	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587817316	3	0.07	25	#Unusual speed limit (25) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.
587817318	3	0.01	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587817319	3	0.10	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587817447	3	0.09	20	#Speed limit is low. Care should be taken using the results of the calculation for this link.
587817448	3	0.08	25	#Unusual speed limit (25) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. #Speed limit is low. Care should be taken using the results of the calculation for this link.
587817453	3	0.05	20	#Speed limit is low. Care should be taken using the results of the calculation for this link.
589015491	3	0.02	10	#Speed limit is low. Care should be taken using the results of the calculation for this link.
589015493	3	0.01	20	#Speed limit is low. Care should be taken using the results of the calculation for this link.
589015494	3	0.00	10	#Speed limit is low. Care should be taken using the results of the calculation for this link.
589626976	2	0.13	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
590481852	3	0.05	40	
590481853	3	0.05	40	
590481868	3	0.06	40	
590522243	3	0.06	50	
590522244	3	0.02	50	
590522245	3	0.05	40	
1139400830	3	0.35	40	
1148054292	3	0.62	40	
1164076472	3	0.12	40	
1165618763	3	0.20	40	
1167345578	2	0.27	70	
1176181443	3	0.13	40	
1176242672	2	0.32	70	
1186121768	3	0.39	40	
2122362473	4	0.14	40	!Speed limit is too low for a fast dual carriageway.
2147474988	2	3.36	80	
2147475007	2	0.07	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
2147475798	2	1.12	70	
2147475799	2	0.65	70	
2147475801	2	0.61	80	
2147475949	2	0.73	70	
2147481733	2	0.88	70	
2147481754	2	0.77	70	
2147481911	2	0.89	100	
2147481977	2	3.42	70	
2147482906	3	0.06	30	#Speed limit is low. Care should be taken using the results of the calculation for this link.

2147482907	3	0.08	30	#Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482908	2	0.86	80			
2147482912	2	0.40	40	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482916	3	0.07	50			
2147482917	3	0.08	50			
2147482919	2	1.01	100			
2147482922	2	1.60	80			
2147482923	2	0.20	80			
2147482924	2	0.16	80			
2147482925	2	1.59	40	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482926	2	1.00	40	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482927	2	0.07	70			
2147482928	2	0.03	80			
2147482930	2	0.43	80			
2147482931	2	1.06	80			
2147482932	2	1.24	60	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482933	2	1.46	30	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482937	3	0.17	40			
2147482940	3	0.09	30	#Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482941	3	0.42	40			
2147482942	3	0.02	40			
2147482943	2	2.76	50	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482944	2	1.26	40	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482945	2	1.32	50	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482946	2	1.06	50	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482947	2	1.52	40	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482949	2	2.39	50	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482950	2	0.75	50	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482951	2	0.31	40	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482952	2	0.28	40	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482953	2	0.25	40	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482954	2	1.53	70			
2147482957	2	0.05	40	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482958	2	2.45	70			
2147482959	2	1.66	40	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482960	2	3.36	40	!Speed limit is	low.	Care
should be taken	using	the results	of the calculation	for this link.		
2147482963	2	1.90	15	#Unusual speed limit (15) is		
not multiple of 10km/h.	Care	should be taken	using the results	of the calculation	for this link.	!Speed limit is low.
Care	should be taken	using the results	of the calculation	for this link.		

calculation for this link.

2147482964	2	0.49	80	
2147482966	2	1.01	25	#Unusual speed limit (25) is not multiple of 10km/h. Care should be taken using the results of the calculation for this link. !Speed limit is low. Care should be taken using the results of the calculation for this link.

2147482967	2	0.16	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147482968	2	0.73	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147482969	2	0.57	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147482970	2	0.81	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147482973	3	0.11	60	
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2147482974	3	0.08	60	
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2147482975	2	2.53	40	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147482976	2	2.64	100	
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2147482977	2	3.02	100	
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2147482979	2	2.38	70	
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2147482980	2	1.98	70	
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2147482981	2	1.54	70	
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2147482982	2	0.22	70	
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2147482985	2	0.15	100	
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2147482989	2	3.07	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147482990	2	1.90	70	
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2147482992	2	0.06	100	
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2147482993	2	1.37	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147482994	2	2.04	100	
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2147482995	2	0.62	100	
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2147482996	2	1.93	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147482997	2	0.26	40	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147482998	2	0.62	40	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147482999	2	0.28	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147483000	2	0.42	50	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147483001	2	0.55	40	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147483002	2	2.37	40	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147483003	2	1.43	40	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147483004	2	1.66	60	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147483005	2	0.92	40	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147483006	2	1.84	100	
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2147483007	2	0.07	100	
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2147483008	2	1.29	40	!Speed limit is low. Care should be taken using the results of the calculation for this link.
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2147483009	2	0.70	80	
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2147483011	2	0.27	80	
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2147483012	2	1.67	80	
2147483015	2	0.11	80	
2147483016	2	0.21	80	
2147483017	2	2.23	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483019	2	9.88	80	
2147483020	2	1.23	80	
2147483021	2	1.14	100	
2147483024	2	0.28	100	
2147483025	2	0.64	100	
2147483026	2	0.21	100	
2147483027	2	0.75	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483028	2	0.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483029	2	1.00	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483030	2	1.27	70	
2147483031	2	0.51	70	
2147483032	2	0.16	70	
2147483033	2	0.30	70	
2147483034	2	2.85	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483035	2	0.89	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483037	2	0.48	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483038	2	0.72	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483039	2	0.32	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483040	2	0.52	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483041	2	0.27	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483042	2	0.31	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483043	2	2.19	70	
2147483044	2	0.72	70	
2147483045	2	0.57	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483046	2	1.00	80	
2147483047	2	0.43	80	
2147483048	2	1.51	80	
2147483049	2	2.16	80	
2147483050	2	0.05	80	
2147483051	2	1.32	70	
2147483052	2	1.11	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483054	2	0.82	80	
2147483055	2	0.76	80	
2147483058	2	0.26	80	
2147483060	2	0.14	80	
2147483061	2	3.20	80	
2147483062	2	3.79	80	
2147483063	2	0.57	100	
2147483066	2	0.21	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				



2147483067	3	0.03	40		
2147483071	2	0.04	100		
2147483073	2	0.24	100		
2147483074	2	1.50	100		
2147483075	2	1.26	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483076	2	1.66	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483077	2	1.31	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483078	2	0.90	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483079	2	0.69	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483080	2	0.32	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483081	2	0.70	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483083	2	0.04	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483084	2	3.65	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483085	2	0.23	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483086	2	0.08	100		
2147483088	2	0.17	100		
2147483089	2	0.32	100		
2147483090	2	0.02	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483091	2	0.33	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483092	2	0.77	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483093	2	1.54	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483094	2	0.89	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483095	2	1.40	50	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483096	2	0.73	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483097	2	1.03	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483098	2	0.68	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483099	2	0.19	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483101	2	0.64	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483102	2	0.45	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483103	2	0.46	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483104	2	0.61	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483105	2	0.59	40	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					
2147483106	2	1.24	60	!Speed limit is	low. Care
should be taken using the results of the calculation for this link.					

2147483107	2	1.13	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483108	2	0.55	50	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483109	2	0.75	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483110	2	0.14	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483111	2	0.93	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483112	2	0.28	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483113	2	0.20	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483114	2	0.52	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483115	2	0.95	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483117	2	1.74	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483118	2	1.57	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483119	2	0.10	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483121	2	1.29	70		
2147483122	2	0.93	70		
2147483123	2	0.75	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483124	2	1.14	70		
2147483125	2	0.60	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483126	2	1.41	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483127	2	1.32	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483128	2	0.26	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483129	2	1.48	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483131	2	0.34	80		
2147483132	2	0.88	80		
2147483134	2	0.72	60	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483135	2	0.25	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483136	2	0.54	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483137	2	0.64	70		
2147483139	2	0.20	70		
2147483141	2	1.24	70		
2147483143	2	4.98	70		
2147483145	2	1.74	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483146	2	1.51	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483147	2	1.06	40	!Speed limit is	low. Care
should be taken	using	the results	of the calculation	for this link.	
2147483148	2	0.21	70		
2147483149	2	0.22	50	!Speed limit is	low. Care

should be taken using the results of the calculation for this link.				
2147483150	2	0.36	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483151	2	0.20	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483152	2	0.02	70	
2147483153	2	0.95	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483154	2	0.82	70	
2147483155	2	0.16	70	
2147483156	2	0.58	70	
2147483157	2	2.22	70	
2147483158	2	0.05	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483159	2	0.18	70	
2147483161	2	0.53	70	
2147483162	2	1.20	70	
2147483163	2	1.38	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483164	2	1.08	70	
2147483165	2	1.16	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483166	2	0.18	70	
2147483168	2	0.17	70	
2147483169	2	1.54	70	
2147483170	2	0.46	70	
2147483171	2	1.19	70	
2147483172	2	1.29	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483173	2	1.38	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483174	2	1.73	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483175	2	8.21	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483178	2	0.64	80	
2147483179	2	0.47	80	
2147483180	2	3.31	80	
2147483181	2	1.11	80	
2147483182	2	2.06	80	
2147483183	2	3.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483184	2	1.62	70	
2147483185	2	1.28	70	
2147483186	2	0.96	70	
2147483187	2	1.46	70	
2147483188	2	0.74	70	
2147483189	2	0.90	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483190	2	0.39	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483191	2	1.50	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483192	2	0.21	70	
2147483193	2	0.31	80	
2147483194	2	0.77	80	
2147483195	2	0.07	80	
2147483196	2	0.20	80	

2147483197	2	0.40	70	
2147483198	2	0.21	70	
2147483199	2	1.80	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483200	2	0.52	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483201	2	1.68	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483202	2	0.91	70	
2147483206	2	1.82	70	
2147483207	2	0.22	70	
2147483208	2	0.24	70	
2147483209	2	1.69	70	
2147483210	2	0.24	70	
2147483211	2	1.54	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483212	2	1.53	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483213	2	0.65	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483214	2	1.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483215	2	0.22	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483216	2	1.21	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483217	2	0.48	70	
2147483218	2	0.18	70	
2147483219	2	1.73	65	#Unusual speed limit (65) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link. !Speed limit is low. Care should be taken using the results of the				
calculation for this link.				
2147483222	2	0.02	70	
2147483224	2	0.04	70	
2147483226	2	1.42	70	
2147483227	2	0.24	70	
2147483229	2	1.72	70	
2147483230	2	0.41	70	
2147483231	2	1.75	70	
2147483234	2	13.41	70	
2147483236	2	1.52	70	
2147483237	2	6.67	70	
2147483238	2	0.26	70	
2147483239	2	0.26	70	
2147483240	2	0.48	70	
2147483241	2	1.03	70	
2147483242	2	1.89	70	
2147483243	2	1.78	70	
2147483244	2	1.25	70	
2147483245	2	1.01	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483246	2	0.46	70	
2147483247	2	0.43	70	
2147483248	2	1.11	70	
2147483249	2	0.29	70	
2147483250	2	1.00	70	
2147483251	2	1.14	70	

2147483252	2	1.24	70	
2147483254	2	0.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483256	2	0.55	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483258	2	1.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483260	2	0.28	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483264	2	0.66	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483265	2	0.34	70	
2147483266	2	1.16	70	
2147483267	2	3.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483270	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483271	2	0.69	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483272	2	0.23	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483273	2	1.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483274	2	0.35	70	
2147483275	2	7.92	70	
2147483278	2	0.81	70	
2147483280	2	0.11	80	
2147483281	2	0.26	80	
2147483282	2	1.88	80	
2147483283	2	0.43	80	
2147483284	2	0.13	80	
2147483285	2	0.87	80	
2147483286	2	1.88	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483290DN	11	0.26	100	
2147483290DS	11	0.26	80	
2147483297DN	11	0.15	50	
2147483297DS	11	0.15	80	
2147483300	3	0.04	50	
2147483303	2	0.72	90	
2147483304	2	0.20	100	
2147483305DN	11	0.69	100	
2147483305DS	11	0.69	80	
2147483306DN	11	0.25	60	
2147483306DS	11	0.25	80	
2147483308	2	0.73	100	
2147483309	2	0.87	100	
2147483311	2	0.56	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483312	2	0.14	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483316	2	0.56	70	
2147483319	2	2.13	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483320	2	0.08	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483321	2	0.07	80	
2147483323	2	1.44	70	

2147483325	2	0.55	70	
2147483326	2	0.39	70	
2147483327DN	11	0.48	100	
2147483327DS	11	0.48	80	
2147483330	2	2.37	70	
2147483331	2	0.10	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483333	2	0.18	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483334	2	0.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483335	2	0.95	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483336	2	0.57	70	
2147483337	2	0.09	70	
2147483338	2	1.01	70	
2147483339	2	2.08	70	
2147483340	2	1.31	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483341	2	1.11	80	
2147483342	2	0.19	80	
2147483343	2	0.89	80	
2147483344	2	0.59	80	
2147483345	2	0.22	80	
2147483346	2	1.92	80	
2147483347	2	1.15	80	
2147483348	2	0.32	80	
2147483349	2	0.94	80	
2147483350	2	1.30	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483352	2	0.60	70	
2147483355	2	1.25	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483356	2	0.80	70	
2147483357	2	1.31	80	
2147483358	2	0.37	80	
2147483359	2	1.17	70	
2147483360	2	0.23	70	
2147483362	2	0.20	70	
2147483363	2	1.76	70	
2147483364	2	0.77	70	
2147483365	2	0.78	70	
2147483366	2	1.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483367	2	0.92	80	
2147483368	2	0.70	80	
2147483369	2	0.61	80	
2147483371	2	0.29	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483373	2	0.75	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483374	2	0.84	75	#Unusual speed limit (75) is
not multiple of 10km/h. Care should be taken using the results of the calculation				
for this link.				
2147483375	2	0.40	70	
2147483376	2	0.93	70	
2147483377	2	0.45	70	
2147483378	2	0.14	60	!Speed limit is low. Care

should be taken using the results of the calculation for this link.				
2147483380	2	0.18	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483383DN	11	1.12	100	
2147483383DS	11	1.12	80	
2147483387	2	0.51	80	
2147483388	2	0.37	70	
2147483389	2	0.16	70	
2147483390	2	0.82	70	
2147483391	2	0.06	70	
2147483392	2	0.19	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483393	2	0.50	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483394	2	0.38	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483395	2	0.34	70	
2147483396	2	0.43	70	
2147483397	2	0.39	70	
2147483398	2	0.86	70	
2147483400	2	0.05	70	
2147483401	2	1.73	70	
2147483402	2	0.34	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483403	2	0.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483404	2	0.70	80	
2147483405	2	0.02	80	
2147483406	2	0.63	100	
2147483408	2	0.54	80	
2147483409	2	1.32	80	
2147483410	2	0.29	80	
2147483411	2	2.93	80	
2147483412	2	0.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483413	2	0.05	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483414	2	1.65	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483415	2	0.55	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483416	2	0.07	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483417DN	11	0.42	100	
2147483417DS	11	0.42	80	
2147483418DN	11	1.04	100	
2147483418DS	11	1.04	80	
2147483419	2	1.07	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483420	2	0.77	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483421	2	0.36	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483423DN	11	1.79	100	
2147483423DS	11	1.79	80	
2147483424	2	1.77	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483425	2	1.08	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				

2147483426DN	11	1.06	100	
2147483426DS	11	1.06	80	
2147483428	2	0.34	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483429	2	2.00	70	
2147483431	2	0.48	70	
2147483432	2	0.84	80	
2147483433	2	0.61	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483434	2	0.90	70	
2147483435	2	0.67	70	
2147483436	2	0.15	70	
2147483437	2	0.66	70	
2147483438	2	1.47	70	
2147483439	2	1.22	70	
2147483440	2	0.54	70	
2147483441	2	0.05	70	
2147483442	2	1.26	70	
2147483443	2	1.98	70	
2147483444	2	0.30	70	
2147483445	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483446	2	0.32	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483447	2	0.95	80	
2147483448	2	2.19	70	
2147483449	2	0.22	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483450	2	0.10	70	
2147483451	2	0.25	70	
2147483452	2	0.06	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483453	2	0.10	70	
2147483454	2	1.29	70	
2147483455	2	1.25	70	
2147483456	2	2.21	70	
2147483457	2	1.67	70	
2147483458	2	1.13	70	
2147483459	2	1.07	70	
2147483460	2	0.10	70	
2147483461	2	0.49	70	
2147483464	2	1.01	70	
2147483465	2	1.25	70	
2147483466	2	0.86	70	
2147483468	2	0.56	70	
2147483469	2	0.29	70	
2147483471	2	0.71	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483472	2	0.42	70	
2147483473	2	0.11	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483474	2	0.43	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483475	2	0.30	70	
2147483476	2	0.44	70	
2147483477	2	0.14	70	
2147483478	2	0.63	70	
2147483479	2	0.27	70	
2147483480	2	0.80	60	!Speed limit is low. Care



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should be taken using the results of the calculation for this link.
2147483481      2      0.34      70
2147483482      2      0.86      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483483      2      0.22      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483484      2      0.31      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483485      2      0.48      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483486      2      0.32      30      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483487      2      1.08      70
2147483488      2      0.26      70
2147483489      2      1.12      70
2147483490      2      1.58      70
2147483491      2      2.24      70
2147483492      2      1.36      70
2147483493      2      0.58      60      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483494      2      0.17      70
2147483495      3      0.06      60
2147483497      3      0.12      50
2147483498      3      0.13      50
2147483499      2      0.40     100
2147483501      2      0.23     100
2147483502      2      0.36     100
2147483504      3      0.14      50
2147483505      3      0.32      50
2147483506      2      0.03      50      !Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483507      3      0.04      40
2147483508      3      0.02      40
2147483510      3      0.21      40
2147483511      3      0.05      40
2147483512      3      0.08      40
2147483513      3      0.29      40
2147483517      3      0.05      30      #Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483518      3      0.02      30      #Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483519      3      0.08      30      #Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483520      3      0.02      30      #Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483521      3      0.04      30      #Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483522      3      0.04      30      #Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483523      3      0.09      50
2147483524      3      0.11      50
2147483528      3      0.11      40
2147483531      3      0.08      40
2147483532      3      0.15      40
2147483533      3      0.04      40
2147483534      3      0.39      40
2147483537      3      0.17      20      #Speed limit is low. Care
should be taken using the results of the calculation for this link.
2147483540      4      0.05      20      !Speed limit is too low for a

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fast dual carriageway.

2147483543	2	0.98	100	
2147483544	2	0.52	100	
2147483545	2	0.55	80	
2147483546	2	0.33	80	
2147483547	2	1.29	80	
2147483548	2	0.10	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483549	2	0.22	100	
2147483550	2	0.37	100	
2147483551	2	0.40	80	
2147483552	2	0.70	70	
2147483553	2	0.63	70	
2147483554	2	0.75	70	
2147483555DN	11	0.83	100	
2147483555DS	11	0.83	80	
2147483556DN	11	0.78	100	
2147483556DS	11	0.78	80	
2147483557	2	1.25	70	
2147483558	3	0.05	50	
2147483561	2	0.17	70	
2147483562	2	0.19	70	
2147483563	2	0.09	70	
2147483564	2	1.80	40	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483565	2	1.33	80	
2147483566	2	0.17	80	
2147483567	2	0.37	80	
2147483568	2	0.10	70	
2147483569	2	0.68	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483572	2	0.72	70	
2147483573	2	0.11	70	
2147483575	3	0.04	40	
2147483576	3	0.04	40	
2147483577	2	0.78	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483578	2	0.24	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483579	2	0.09	30	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483580	2	0.84	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483581	2	0.95	80	
2147483582	3	0.41	40	
2147483585	3	0.04	50	
2147483588	2	0.23	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483590	3	0.05	50	
2147483593	3	0.07	50	
2147483595	4	4.93	100	
2147483596	3	0.07	50	
2147483599	2	0.84	80	
2147483600	2	0.15	60	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483601	4	0.17	100	
2147483603	2	0.33	80	
2147483605	2	3.35	70	
2147483606	2	0.13	70	

2147483608	2	0.02	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483610	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483612	4	4.51	100	
2147483615	4	0.61	100	
2147483617	2	0.26	80	
2147483618	2	0.29	80	
2147483619	2	0.20	80	
2147483621	2	0.07	80	
2147483622	2	0.22	80	
2147483626	4	3.21	100	
2147483627	4	0.14	80	
2147483630	2	0.03	50	!Speed limit is low. Care
should be taken using the results of the calculation for this link.				
2147483631	2	0.02	70	
2147483632	4	11.57	100	
2147483633	3	0.03	50	
2147483637	3	0.05	50	

Combined Flow Subsection		Link		Without-Scheme Flows						With-
Scheme Flows		Base Year								
Name		Flows		Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	
Year 2	Year 3	Year 4	Year 5							
897		6,307		7,056	7,438	7,520	0	0	7,056	
7,438	7,520	0	0							
900		5,177		5,838	6,163	6,196	0	0	5,838	
6,163	6,196	0	0							
901		8,277		9,238	9,771	9,917	0	0	0	
0	0	0	0							
906		14,012		15,649	16,479	16,635	0	0	9,532	
9,451	9,473	0	0							
923		2,975		3,566	3,912	4,049	0	0	3,566	
3,912	4,049	0	0							
1495		990		1,133	1,190	1,202	0	0	1,133	
1,190	1,202	0	0							
1497		990		1,133	1,190	1,202	0	0	1,133	
1,190	1,202	0	0							
1499		0		0	0	0	0	0	0	
0	0	0	0							
1504		8,107		8,882	9,223	9,201	0	0	8,882	
9,223	9,201	0	0							
1505		10,172		11,426	12,108	12,220	0	0	11,426	
12,108	12,220	0	0							
1506		2,975		3,566	3,912	4,049	0	0	3,566	
3,912	4,049	0	0							
1515		8,447		9,537	10,165	10,388	0	0	9,537	
10,165	10,388	0	0							
1590		0		0	0	0	0	0	0	
0	0	0	0							
1591		0		0	0	0	0	0	0	
0	0	0	0							
44747		5,177		5,852	6,113	6,101	0	0	5,852	
6,113	6,101	0	0							
45876		4,258		4,625	4,802	4,795	0	0	4,625	
4,802	4,795	0	0							
48840		6,240		6,868	7,129	7,149	0	0	7,004	
7,239	7,252	0	0							

48953	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
49089	4,701	5,469	5,835	5,897	0	0	5,485	
5,863	5,918	0	0	0	0	0	0	
49185	6,950	7,732	7,878	7,878	0	0	7,751	
7,925	7,955	0	0	0	0	0	0	
49353	4,548	5,180	5,366	5,365	0	0	5,141	
5,327	5,345	0	0	0	0	0	0	
49552	3,216	3,545	3,606	3,567	0	0	3,545	
3,607	3,570	0	0	0	0	0	0	
49560	7,102	7,775	7,974	8,020	0	0	7,663	
7,908	7,946	0	0	0	0	0	0	
49630	4,375	5,044	5,404	5,456	0	0	5,058	
5,424	5,468	0	0	0	0	0	0	
49684	5,729	6,242	6,390	6,421	0	0	6,131	
6,324	6,347	0	0	0	0	0	0	
49717	1,954	2,162	2,186	2,168	0	0	2,166	
2,171	2,154	0	0	0	0	0	0	
49842	1,372	1,531	1,560	1,547	0	0	1,530	
1,559	1,546	0	0	0	0	0	0	
50060	9,129	10,039	10,233	10,208	0	0	10,002	
10,208	10,200	0	0	0	0	0	0	
50401	3,481	3,756	3,840	3,862	0	0	3,706	
3,803	3,835	0	0	0	0	0	0	
50515	1,185	1,594	1,722	1,880	0	0	1,574	
1,679	1,692	0	0	0	0	0	0	
50542	918	1,302	1,414	1,570	0	0	1,272	
1,369	1,381	0	0	0	0	0	0	
50600	4,162	4,561	4,704	4,730	0	0	4,561	
4,703	4,730	0	0	0	0	0	0	
50648	1,162	1,310	1,344	1,344	0	0	1,310	
1,344	1,344	0	0	0	0	0	0	
50653	4,060	4,610	4,760	4,806	0	0	4,636	
4,806	4,847	0	0	0	0	0	0	
50686	5,104	5,614	5,865	5,896	0	0	5,751	
5,974	5,999	0	0	0	0	0	0	
554437085	5,960	6,627	6,754	6,754	0	0	6,667	
6,797	6,813	0	0	0	0	0	0	
554437089	8,487	9,207	9,265	9,207	0	0	9,155	
9,236	9,204	0	0	0	0	0	0	
554445417	3,919	4,376	4,575	4,541	0	0	4,376	
4,575	4,541	0	0	0	0	0	0	
554445421	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
554445424	1,011	1,186	1,240	1,260	0	0	1,186	
1,240	1,260	0	0	0	0	0	0	
554445434	5,245	6,028	6,220	6,243	0	0	6,032	
6,215	6,249	0	0	0	0	0	0	
554445603	8,498	9,054	9,100	8,980	0	0	9,007	
9,073	9,042	0	0	0	0	0	0	
554445605	7,578	8,409	8,594	8,578	0	0	8,357	
8,563	8,561	0	0	0	0	0	0	
554445606	4,663	5,275	5,437	5,478	0	0	5,301	
5,483	5,519	0	0	0	0	0	0	
554445611	8,753	9,938	10,262	10,288	0	0	10,044	
10,396	10,436	0	0	0	0	0	0	
554445616	3,349	3,572	3,660	3,646	0	0	3,603	
3,681	3,680	0	0	0	0	0	0	
554445660	7,786	8,754	8,952	8,963	0	0	8,789	

9,005	9,042	0	0						
	554445681		4,455	5,188	5,540	5,600	0	0	5,204
5,565	5,619	0	0						
	554451601		2,585	2,611	2,637	2,632	0	0	2,647
2,653	2,640	0	0						
	554451604		0	0	0	0	0	0	0
0	0	0	0						
	554451606		2,585	2,611	2,637	2,632	0	0	2,647
2,653	2,640	0	0						
	554451619		3,716	3,920	3,957	3,936	0	0	3,950
3,978	3,958	0	0						
	554451621		2,585	2,611	2,637	2,632	0	0	2,647
2,653	2,640	0	0						
	554469301		8,177	9,001	9,377	9,335	0	0	9,001
9,377	9,335	0	0						
	554469376		1,402	1,554	1,582	1,571	0	0	1,554
1,582	1,571	0	0						
	554469377		7,354	8,097	8,371	8,378	0	0	8,234
8,479	8,481	0	0						
	554469379		8,753	9,938	10,262	10,288	0	0	10,044
10,396	10,436	0	0						
	554469380		8,473	9,521	9,847	9,909	0	0	9,609
9,945	9,991	0	0						
	554469383		7,104	7,933	8,096	8,109	0	0	7,966
8,154	8,193	0	0						
	554469386		8,969	9,946	10,101	10,080	0	0	9,973
10,133	10,145	0	0						
	554469390		8,505	9,238	9,302	9,241	0	0	9,186
9,274	9,237	0	0						
	554476250		0	0	0	0	0	0	0
0	0	0	0						
	554476251		0	0	0	0	0	0	0
0	0	0	0						
	554476254		0	0	0	0	0	0	0
0	0	0	0						
	554476255		0	0	0	0	0	0	0
0	0	0	0						
	554476258		0	0	0	0	0	0	0
0	0	0	0						
	554476263		0	0	0	0	0	0	0
0	0	0	0						
	554476268		0	0	0	0	0	0	0
0	0	0	0						
	554476273		0	0	0	0	0	0	0
0	0	0	0						
	554476275		0	0	0	0	0	0	0
0	0	0	0						
	554476276		0	0	0	0	0	0	0
0	0	0	0						
	554476314		8,177	9,001	9,377	9,335	0	0	9,001
9,377	9,335	0	0						
	554476317		0	0	0	0	0	0	0
0	0	0	0						
	554476318		3,919	4,376	4,575	4,541	0	0	4,376
4,575	4,541	0	0						
	554476321		3,919	4,376	4,575	4,541	0	0	4,376
4,575	4,541	0	0						
	554476331		10,004	11,099	11,498	11,535	0	0	11,099
11,498	11,535	0	0						

554476332	4,470	4,814	4,975	4,993	0	0	4,810
4,980 4,986	0 0						
554476337	9,714	10,842	11,195	11,235	0	0	10,842
11,195 11,235	0 0						
554476339	9,714	10,842	11,195	11,235	0	0	10,842
11,195 11,235	0 0						
554476344	9,714	10,842	11,195	11,235	0	0	10,842
11,195 11,235	0 0						
554476347	0	0	0	0	0	0	0
0 0	0 0						
554478297	4,974	5,547	5,730	5,745	0	0	5,547
5,730 5,745	0 0						
554478964	0	0	0	0	0	0	0
0 0	0 0						
554478965	0	0	0	0	0	0	0
0 0	0 0						
554479189	2,456	2,777	2,809	2,792	0	0	2,777
2,809 2,792	0 0						
554479190	2,456	2,777	2,809	2,792	0	0	2,777
2,809 2,792	0 0						
554499930	2,794	3,045	3,161	3,198	0	0	3,045
3,160 3,198	0 0						
554499931	2,794	3,045	3,161	3,198	0	0	3,045
3,160 3,198	0 0						
554499943	118	132	131	133	0	0	132
133 133	0 0						
559752177	1,742	1,948	2,028	2,050	0	0	1,948
2,028 2,050	0 0						
562717850	11,199	12,305	12,709	12,744	0	0	12,442
12,818 12,848	0 0						
578082733	4,455	5,188	5,540	5,600	0	0	5,204
5,565 5,619	0 0						
578088741	118	132	131	133	0	0	132
133 133	0 0						
587814444	4,060	4,610	4,760	4,806	0	0	4,636
4,806 4,847	0 0						
587814449	4,663	5,275	5,437	5,478	0	0	5,301
5,483 5,519	0 0						
587814450	4,663	5,275	5,437	5,478	0	0	5,301
5,483 5,519	0 0						
587814454	3,216	3,545	3,606	3,567	0	0	3,545
3,607 3,570	0 0						
587814456	3,216	3,545	3,606	3,567	0	0	3,545
3,607 3,570	0 0						
587814797	2,603	2,907	2,978	2,974	0	0	2,979
3,065 3,036	0 0						
587814807	0	0	0	0	0	0	0
0 0	0 0						
587814808	3,238	3,804	4,112	4,124	0	0	3,864
4,166 4,155	0 0						
587814809	3,238	3,804	4,112	4,124	0	0	3,864
4,166 4,155	0 0						
587814811	0	0	0	0	0	0	0
0 0	0 0						
587814819	0	0	0	0	0	0	0
0 0	0 0						
587814822	0	0	0	0	0	0	0
0 0	0 0						
587814825	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0
587814826		0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
587815160		3,238		3,804	4,112	4,124	0	0	3,864
4,166	4,155	0	0						
587815163		2,585		2,611	2,637	2,632	0	0	2,647
2,653	2,640	0	0						
587815170		642		859	1,075	1,091	0	0	849
1,057	1,072	0	0						
587815171		642		859	1,075	1,091	0	0	849
1,057	1,072	0	0						
587815173		642		859	1,075	1,091	0	0	849
1,057	1,072	0	0						
587815174		642		859	1,075	1,091	0	0	849
1,057	1,072	0	0						
587815269		2,391		2,809	3,023	3,054	0	0	2,804
2,994	3,002	0	0						
587815271		2,391		2,809	3,023	3,054	0	0	2,804
2,994	3,002	0	0						
587815272		420		742	886	898	0	0	775
938	945	0	0						
587815273		2,380		3,079	3,433	3,481	0	0	3,108
3,456	3,475	0	0						
587815274		2,585		2,611	2,637	2,632	0	0	2,647
2,653	2,640	0	0						
587815275		2,585		2,611	2,637	2,632	0	0	2,647
2,653	2,640	0	0						
587815277		0		0	0	0	0	0	0
0	0	0	0						
587815278		420		742	886	898	0	0	775
938	945	0	0						
587815280		2,380		3,079	3,433	3,481	0	0	3,108
3,456	3,475	0	0						
587815285		0		0	0	0	0	0	0
0	0	0	0						
587815287		0		0	0	0	0	0	0
0	0	0	0						
587815295		8,428		9,273	9,463	9,443	0	0	9,235
9,436	9,434	0	0						
587815303		0		0	0	0	0	0	0
0	0	0	0						
587815773		5,528		6,231	6,278	6,476	0	0	6,137
6,276	6,276	0	0						
587815780		5,248		5,869	6,008	6,105	0	0	5,860
6,002	6,008	0	0						
587815785		2		142	284	308	0	0	137
279	311	0	0						
587815787		5,773		6,403	6,629	6,629	0	0	6,453
6,667	6,649	0	0						
587815790		5,354		5,907	6,067	6,080	0	0	5,927
6,075	6,055	0	0						
587815791		5,438		5,996	6,156	6,170	0	0	6,016
6,164	6,144	0	0						
587815792		0		0	0	0	0	0	0
0	0	0	0						
587815795		918		1,302	1,414	1,570	0	0	1,272
1,369	1,381	0	0						
587815802		0		0	0	0	0	0	0
0	0	0	0						





0	0	0	0						
587816988			2,203	2,425	2,471	2,456	0	0	2,427
2,457	2,439	0	0						
587816989			0	0	0	0	0	0	0
0	0	0	0						
587817206			0	0	0	0	0	0	0
0	0	0	0						
587817207			830	921	936	927	0	0	921
936	927	0	0						
587817216			3,807	4,071	4,135	4,152	0	0	4,112
4,161	4,130	0	0						
587817217			2,174	2,396	2,531	2,575	0	0	2,391
2,517	2,516	0	0						
587817219			2,320	2,698	2,869	2,912	0	0	2,772
2,943	2,936	0	0						
587817221			2,320	2,698	2,869	2,912	0	0	2,772
2,943	2,936	0	0						
587817223			2,387	2,742	2,821	2,809	0	0	2,758
2,828	2,821	0	0						
587817225			0	0	0	0	0	0	0
0	0	0	0						
587817226			0	0	0	0	0	0	0
0	0	0	0						
587817227			0	0	0	0	0	0	0
0	0	0	0						
587817228			2,320	2,698	2,869	2,912	0	0	2,772
2,943	2,936	0	0						
587817230			2,585	2,611	2,637	2,632	0	0	2,647
2,653	2,640	0	0						
587817231			2,585	2,611	2,637	2,632	0	0	2,647
2,653	2,640	0	0						
587817234			0	0	0	0	0	0	0
0	0	0	0						
587817269			2,320	2,698	2,869	2,912	0	0	2,772
2,943	2,936	0	0						
587817271			2,387	2,742	2,821	2,809	0	0	2,758
2,828	2,821	0	0						
587817272			2,283	2,601	2,684	2,678	0	0	2,603
2,680	2,664	0	0						
587817274			938	1,114	1,157	1,145	0	0	1,114
1,151	1,149	0	0						
587817275			256	292	301	292	0	0	291
300	301	0	0						
587817314			967	1,183	1,310	1,325	0	0	1,255
1,392	1,394	0	0						
587817316			1,287	1,447	1,479	1,469	0	0	1,441
1,482	1,480	0	0						
587817318			156	163	157	148	0	0	163
157	158	0	0						
587817319			1,254	1,386	1,415	1,443	0	0	1,388
1,408	1,400	0	0						
587817447			0	0	0	0	0	0	0
0	0	0	0						
587817448			1,410	1,549	1,572	1,591	0	0	1,551
1,564	1,557	0	0						
587817453			2,596	2,850	2,941	2,925	0	0	2,854
2,940	2,939	0	0						
589015491			3,507	3,876	3,957	3,973	0	0	3,897
3,954	3,949	0	0						

589015493		4,531	4,918	5,058	5,059	0	0	4,954
5,079	5,053	0	0					
589015494		4,285	4,784	4,963	4,965	0	0	4,783
4,974	4,956	0	0					
589626976		4,162	4,561	4,704	4,730	0	0	4,561
4,703	4,730	0	0					
590481852		3,992	4,459	4,657	4,620	0	0	4,459
4,657	4,620	0	0					
590481853		3,992	4,459	4,657	4,620	0	0	4,459
4,657	4,620	0	0					
590481868		956	1,092	1,147	1,157	0	0	1,092
1,147	1,157	0	0					
590522243		8,497	9,025	9,067	8,948	0	0	8,979
9,040	9,010	0	0					
590522244		8,497	9,025	9,067	8,948	0	0	8,979
9,040	9,010	0	0					
590522245		0	0	0	0	0	0	0
0	0	0	0					
1139400830		956	1,092	1,147	1,157	0	0	1,092
1,147	1,157	0	0					
1148054292		8,425	9,282	9,661	9,612	0	0	9,282
9,661	9,612	0	0					
1164076472		8,425	9,282	9,661	9,612	0	0	9,282
9,661	9,612	0	0					
1165618763		956	1,092	1,147	1,157	0	0	1,092
1,147	1,157	0	0					
1167345578		2,456	2,777	2,809	2,792	0	0	2,777
2,809	2,792	0	0					
1176181443		9,714	10,842	11,195	11,235	0	0	10,842
11,195	11,235	0	0					
1176242672		8,425	9,282	9,661	9,612	0	0	9,282
9,661	9,612	0	0					
1186121768		846	938	958	954	0	0	938
958	954	0	0					
2122362473		5,269	5,812	6,042	6,055	0	0	5,812
6,042	6,055	0	0					
2147474988		6,000	6,684	6,947	6,964	0	0	6,684
6,947	6,964	0	0					
2147475007		8,525	9,340	9,379	9,370	0	0	9,360
9,419	9,379	0	0					
2147475798		8,460	9,322	9,704	9,657	0	0	9,322
9,704	9,657	0	0					
2147475799		8,107	8,882	9,223	9,201	0	0	8,882
9,223	9,201	0	0					
2147475801		5,729	6,242	6,390	6,421	0	0	6,131
6,324	6,347	0	0					
2147475949		4,128	4,915	5,307	5,439	0	0	4,915
5,307	5,439	0	0					
2147481733		35	41	44	45	0	0	41
44	45	0	0					
2147481754		956	1,092	1,147	1,157	0	0	1,092
1,147	1,157	0	0					
2147481911		5,431	6,343	6,722	6,842	0	0	6,343
6,722	6,842	0	0					
2147481977		2,456	2,777	2,809	2,792	0	0	2,777
2,809	2,792	0	0					
2147482906		3,481	3,756	3,840	3,862	0	0	3,706
3,803	3,835	0	0					
2147482907		3,481	3,756	3,840	3,862	0	0	3,706

3,803	3,835	0	0						
	2147482908		2,459	2,889	3,012	3,008	0	0	2,855
2,971	2,986	0	0						
	2147482912		486	641	678	679	0	0	641
674	676	0	0						
	2147482916		3,729	4,207	4,361	4,376	0	0	4,216
4,357	4,390	0	0						
	2147482917		3,585	4,168	4,365	4,388	0	0	4,177
4,361	4,402	0	0						
	2147482919		5,171	5,718	5,905	5,958	0	0	5,718
5,905	5,958	0	0						
	2147482922		1,923	2,204	2,295	2,297	0	0	2,173
2,257	2,272	0	0						
	2147482923		1,923	2,204	2,295	2,297	0	0	2,173
2,257	2,272	0	0						
	2147482924		3,529	4,123	4,277	4,291	0	0	4,096
4,238	4,264	0	0						
	2147482925		203	211	207	205	0	0	212
208	205	0	0						
	2147482926		226	241	240	238	0	0	242
241	239	0	0						
	2147482927		22	30	33	33	0	0	30
33	33	0	0						
	2147482928		2,003	2,423	2,559	2,567	0	0	2,391
2,514	2,537	0	0						
	2147482930		1,964	2,378	2,511	2,519	0	0	2,346
2,467	2,490	0	0						
	2147482931		1,964	2,378	2,511	2,519	0	0	2,346
2,467	2,490	0	0						
	2147482932		0	0	0	0	0	0	0
0	0	0	0						
	2147482933		22	30	33	33	0	0	30
33	33	0	0						
	2147482937		1,850	2,054	2,087	2,070	0	0	2,054
2,087	2,070	0	0						
	2147482940		3,216	3,545	3,606	3,567	0	0	3,545
3,607	3,570	0	0						
	2147482941		1,997	2,228	2,268	2,252	0	0	2,228
2,268	2,253	0	0						
	2147482942		1,442	1,606	1,632	1,619	0	0	1,606
1,632	1,619	0	0						
	2147482943		14	32	38	38	0	0	32
36	37	0	0						
	2147482944		283	430	471	474	0	0	429
465	471	0	0						
	2147482945		14	32	38	38	0	0	32
36	37	0	0						
	2147482946		337	413	444	455	0	0	413
442	454	0	0						
	2147482947		283	430	471	474	0	0	429
465	471	0	0						
	2147482949		322	381	406	417	0	0	381
405	417	0	0						
	2147482950		323	384	410	421	0	0	384
409	420	0	0						
	2147482951		323	384	410	421	0	0	384
409	420	0	0						
	2147482952		0	0	0	0	0	0	0
0	0	0	0						



0	0	0	0							
	2147482997	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147482998	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147482999	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483000	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483001	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483002	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483003	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483004	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483005	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483006	5,644	0	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483007	5,644	0	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483008	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483009	2,157	0	2,369	2,437	2,441	0	0	0	2,365
2,438	2,442	0	0							
	2147483011	2,089	0	2,290	2,354	2,357	0	0	0	2,286
2,356	2,359	0	0							
	2147483012	2,089	0	2,290	2,354	2,357	0	0	0	2,286
2,356	2,359	0	0							
	2147483015	2,455	0	2,881	2,959	2,970	0	0	0	2,881
2,953	2,963	0	0							
	2147483016	2,258	0	2,559	2,621	2,628	0	0	0	2,558
2,619	2,626	0	0							
	2147483017	723	0	802	803	808	0	0	0	800
801	806	0	0							
	2147483019	1,335	0	1,481	1,494	1,501	0	0	0	1,481
1,494	1,501	0	0							
	2147483020	723	0	802	803	808	0	0	0	800
801	806	0	0							
	2147483021	5,171	0	5,718	5,905	5,958	0	0	0	5,718
5,905	5,958	0	0							
	2147483024	5,644	0	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483025	5,644	0	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483026	5,644	0	6,242	6,441	6,497	0	0	0	6,242
6,441	6,497	0	0							
	2147483027	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483028	29	0	34	36	36	0	0	0	34
35	36	0	0							
	2147483029	29	0	34	36	36	0	0	0	34
35	36	0	0							
	2147483030	39	0	45	47	48	0	0	0	45
47	48	0	0							
	2147483031	39	0	45	47	48	0	0	0	45
47	48	0	0							

	2147483032	68	79	83	83	0	0	79
83	83	0	0					
	2147483033	68	78	82	83	0	0	78
82	83	0	0					
	2147483034	0	1	1	0	0	0	1
1	0	0	0					
	2147483035	1,023	1,284	1,335	1,345	0	0	1,287
1,332	1,341	0	0					
	2147483037	1,023	1,283	1,335	1,344	0	0	1,286
1,331	1,341	0	0					
	2147483038	1,023	1,283	1,335	1,344	0	0	1,286
1,331	1,341	0	0					
	2147483039	1,023	1,283	1,335	1,344	0	0	1,286
1,331	1,341	0	0					
	2147483040	1,023	1,283	1,335	1,344	0	0	1,286
1,331	1,341	0	0					
	2147483041	0	0	0	0	0	0	0
0	0	0	0					
	2147483042	0	0	0	0	0	0	0
0	0	0	0					
	2147483043	0	0	0	0	0	0	0
0	0	0	0					
	2147483044	0	0	0	0	0	0	0
0	0	0	0					
	2147483045	1,635	1,962	2,026	2,037	0	0	1,966
2,024	2,036	0	0					
	2147483046	612	679	691	693	0	0	680
693	695	0	0					
	2147483047	612	679	691	693	0	0	680
693	695	0	0					
	2147483048	1,085	1,203	1,227	1,232	0	0	1,204
1,229	1,234	0	0					
	2147483049	473	524	536	539	0	0	524
536	539	0	0					
	2147483050	1,496	1,808	1,871	1,884	0	0	1,811
1,868	1,880	0	0					
	2147483051	473	524	536	539	0	0	524
536	539	0	0					
	2147483052	0	0	0	0	0	0	0
0	0	0	0					
	2147483054	5,729	6,242	6,390	6,421	0	0	6,131
6,324	6,347	0	0					
	2147483055	3,739	4,185	4,463	4,532	0	0	4,160
4,466	4,517	0	0					
	2147483058	2,299	2,541	2,666	2,682	0	0	2,531
2,664	2,680	0	0					
	2147483060	2,299	2,541	2,666	2,682	0	0	2,531
2,664	2,680	0	0					
	2147483061	2,727	3,019	3,154	3,156	0	0	3,010
3,149	3,160	0	0					
	2147483062	4,308	4,894	5,096	5,101	0	0	4,894
5,096	5,101	0	0					
	2147483063	8,505	9,238	9,302	9,241	0	0	9,186
9,274	9,237	0	0					
	2147483066	9,103	10,002	10,153	10,027	0	0	10,021
10,152	10,125	0	0					
	2147483067	6,857	7,646	7,866	7,786	0	0	7,625
7,850	7,847	0	0					
	2147483071	10,234	11,471	11,918	12,028	0	0	11,471

11,919	12,029	0	0						
	2147483073		10,234	11,471	11,918	12,028	0	0	11,471
11,919	12,029	0	0						
	2147483074		8,521	9,566	9,973	10,100	0	0	9,566
9,975	10,101	0	0						
	2147483075		55	70	80	84	0	0	70
79	84	0	0						
	2147483076		55	70	80	84	0	0	70
79	84	0	0						
	2147483077		55	70	80	84	0	0	70
79	84	0	0						
	2147483078		55	70	80	84	0	0	70
79	84	0	0						
	2147483079		262	321	341	347	0	0	320
338	343	0	0						
	2147483080		1,543	1,809	1,880	1,884	0	0	1,819
1,885	1,880	0	0						
	2147483081		1,543	1,809	1,880	1,884	0	0	1,819
1,885	1,880	0	0						
	2147483083		0	0	0	0	0	0	0
0	0	0	0						
	2147483084		0	0	0	0	0	0	0
0	0	0	0						
	2147483085		0	0	0	0	0	0	0
0	0	0	0						
	2147483086		9,732	10,792	11,196	11,301	0	0	10,793
11,203	11,304	0	0						
	2147483088		9,857	10,930	11,337	11,441	0	0	10,931
11,344	11,443	0	0						
	2147483089		9,857	10,930	11,337	11,441	0	0	10,931
11,344	11,443	0	0						
	2147483090		125	138	141	139	0	0	138
141	139	0	0						
	2147483091		0	0	0	0	0	0	0
0	0	0	0						
	2147483092		207	251	261	263	0	0	251
259	259	0	0						
	2147483093		207	251	261	263	0	0	251
259	259	0	0						
	2147483094		125	138	141	139	0	0	138
141	139	0	0						
	2147483095		125	138	141	139	0	0	138
141	139	0	0						
	2147483096		207	251	261	263	0	0	251
259	259	0	0						
	2147483097		0	0	0	0	0	0	0
0	0	0	0						
	2147483098		1,281	1,488	1,540	1,538	0	0	1,498
1,547	1,537	0	0						
	2147483099		1,281	1,488	1,540	1,538	0	0	1,498
1,547	1,537	0	0						
	2147483101		1,370	1,721	1,917	1,936	0	0	1,704
1,878	1,912	0	0						
	2147483102		1,370	1,721	1,917	1,936	0	0	1,704
1,878	1,912	0	0						
	2147483103		758	1,042	1,228	1,253	0	0	1,024
1,188	1,229	0	0						
	2147483104		428	479	488	474	0	0	478
485	480	0	0						

	2147483105		428		479	488	474	0	0	478
485	480	0	0							
	2147483106		0		0	0	0	0	0	0
0	0	0	0							
	2147483107		428		479	488	474	0	0	478
485	480	0	0							
	2147483108		0		0	0	0	0	0	0
0	0	0	0							
	2147483109		331		563	740	779	0	0	546
704	749	0	0							
	2147483110		331		563	740	779	0	0	546
704	749	0	0							
	2147483111		331		563	740	779	0	0	546
704	749	0	0							
	2147483112		50		56	58	58	0	0	56
58	58	0	0							
	2147483113		50		56	58	58	0	0	56
58	58	0	0							
	2147483114		50		56	58	58	0	0	56
58	58	0	0							
	2147483115		50		56	58	58	0	0	56
58	58	0	0							
	2147483117		0		0	0	0	0	0	0
0	0	0	0							
	2147483118		0		0	0	0	0	0	0
0	0	0	0							
	2147483119		8,003		8,907	9,089	9,113	0	0	8,922
9,123	9,121	0	0							
	2147483121		82		113	120	123	0	0	112
119	120	0	0							
	2147483122		82		113	120	123	0	0	112
119	120	0	0							
	2147483123		0		0	0	0	0	0	0
0	0	0	0							
	2147483124		82		113	120	123	0	0	112
119	120	0	0							
	2147483125		0		0	0	0	0	0	0
0	0	0	0							
	2147483126		0		0	0	0	0	0	0
0	0	0	0							
	2147483127		0		0	0	0	0	0	0
0	0	0	0							
	2147483128		1,281		1,488	1,540	1,538	0	0	1,498
1,547	1,537	0	0							
	2147483129		1,281		1,488	1,540	1,538	0	0	1,498
1,547	1,537	0	0							
	2147483131		5,778		6,295	6,445	6,476	0	0	6,184
6,379	6,402	0	0							
	2147483132		3,408		3,623	3,723	3,753	0	0	3,614
3,762	3,768	0	0							
	2147483134		0		0	0	0	0	0	0
0	0	0	0							
	2147483135		0		0	0	0	0	0	0
0	0	0	0							
	2147483136		0		0	0	0	0	0	0
0	0	0	0							
	2147483137		1,837		2,111	2,319	2,387	0	0	2,095
2,325	2,374	0	0							
	2147483139		1,837		2,111	2,319	2,387	0	0	2,095



2,325	2,374	0	0						
	2147483141		1,837	2,111	2,319	2,387	0	0	2,095
2,325	2,374	0	0						
	2147483143		3,949	4,655	4,916	5,003	0	0	4,655
4,916	5,003	0	0						
	2147483145		523	621	645	650	0	0	621
645	649	0	0						
	2147483146		523	621	645	650	0	0	621
645	649	0	0						
	2147483147		523	621	645	650	0	0	621
645	649	0	0						
	2147483148		2,236	2,574	2,650	2,675	0	0	2,585
2,660	2,694	0	0						
	2147483149		2,236	2,574	2,650	2,675	0	0	2,585
2,660	2,694	0	0						
	2147483150		2,236	2,574	2,650	2,675	0	0	2,585
2,660	2,694	0	0						
	2147483151		0	0	0	0	0	0	0
0	0	0	0						
	2147483152		0	0	0	0	0	0	0
0	0	0	0						
	2147483153		0	0	0	0	0	0	0
0	0	0	0						
	2147483154		0	0	0	0	0	0	0
0	0	0	0						
	2147483155		0	0	0	0	0	0	0
0	0	0	0						
	2147483156		0	0	0	0	0	0	0
0	0	0	0						
	2147483157		0	0	0	0	0	0	0
0	0	0	0						
	2147483158		0	0	0	0	0	0	0
0	0	0	0						
	2147483159		0	0	0	0	0	0	0
0	0	0	0						
	2147483161		2,767	3,271	3,503	3,585	0	0	3,287
3,498	3,598	0	0						
	2147483162		2,767	3,271	3,503	3,585	0	0	3,287
3,498	3,598	0	0						
	2147483163		0	0	0	0	0	0	0
0	0	0	0						
	2147483164		2,767	3,271	3,503	3,585	0	0	3,287
3,498	3,598	0	0						
	2147483165		531	697	853	910	0	0	702
838	904	0	0						
	2147483166		2,236	2,574	2,650	2,675	0	0	2,585
2,660	2,694	0	0						
	2147483168		2,236	2,574	2,650	2,675	0	0	2,585
2,660	2,694	0	0						
	2147483169		2,236	2,574	2,650	2,675	0	0	2,585
2,660	2,694	0	0						
	2147483170		2,368	2,809	3,172	3,297	0	0	2,797
3,163	3,278	0	0						
	2147483171		1,191	1,461	1,620	1,679	0	0	1,449
1,611	1,660	0	0						
	2147483172		0	0	0	0	0	0	0
0	0	0	0						
	2147483173		0	0	0	0	0	0	0
0	0	0	0						

2147483174	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0
2147483175	1,860	2,173	2,285	2,305	0	0	2,173	2,173
2,285 2,305	0	0	0	0	0	0	0	0
2147483178	1,198	1,295	1,349	1,354	0	0	1,295	1,295
1,353 1,359	0	0	0	0	0	0	0	0
2147483179	1,198	1,295	1,349	1,354	0	0	1,295	1,295
1,353 1,359	0	0	0	0	0	0	0	0
2147483180	1,198	1,295	1,349	1,354	0	0	1,295	1,295
1,353 1,359	0	0	0	0	0	0	0	0
2147483181	959	1,074	1,088	1,086	0	0	1,070	1,070
1,085 1,083	0	0	0	0	0	0	0	0
2147483182	959	1,074	1,088	1,086	0	0	1,070	1,070
1,085 1,083	0	0	0	0	0	0	0	0
2147483183	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0
2147483184	662	877	937	951	0	0	878	878
932 946	0	0	0	0	0	0	0	0
2147483185	662	877	937	951	0	0	878	878
932 946	0	0	0	0	0	0	0	0
2147483186	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0
2147483187	662	877	937	951	0	0	878	878
932 946	0	0	0	0	0	0	0	0
2147483188	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0
2147483189	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0
2147483190	612	679	691	693	0	0	680	680
693 695	0	0	0	0	0	0	0	0
2147483191	612	679	691	693	0	0	680	680
693 695	0	0	0	0	0	0	0	0
2147483192	612	679	691	693	0	0	680	680
693 695	0	0	0	0	0	0	0	0
2147483193	612	679	691	693	0	0	680	680
693 695	0	0	0	0	0	0	0	0
2147483194	612	679	691	693	0	0	680	680
693 695	0	0	0	0	0	0	0	0
2147483195	612	679	691	693	0	0	680	680
693 695	0	0	0	0	0	0	0	0
2147483196	612	679	691	693	0	0	680	680
693 695	0	0	0	0	0	0	0	0
2147483197	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0
2147483198	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0
2147483199	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0
2147483200	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0
2147483201	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0
2147483202	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0
2147483206	2,348	2,785	3,024	3,097	0	0	2,785	2,785
3,024 3,097	0	0	0	0	0	0	0	0
2147483207	1,958	2,338	2,527	2,582	0	0	2,338	2,338
2,527 2,582	0	0	0	0	0	0	0	0
2147483208	1,958	2,338	2,527	2,582	0	0	2,338	2,338

2,527	2,582	0	0							
	2147483209		4,128	4,915	5,307	5,439	0	0	4,915	
5,307	5,439	0	0							
	2147483210		4,128	4,915	5,307	5,439	0	0	4,915	
5,307	5,439	0	0							
	2147483211		0	0	0	0	0	0	0	
0	0	0	0							
	2147483212		0	0	0	0	0	0	0	
0	0	0	0							
	2147483213		0	0	0	0	0	0	0	
0	0	0	0							
	2147483214		0	0	0	0	0	0	0	
0	0	0	0							
	2147483215		0	0	0	0	0	0	0	
0	0	0	0							
	2147483216		0	0	0	0	0	0	0	
0	0	0	0							
	2147483217		0	0	0	0	0	0	0	
0	0	0	0							
	2147483218		0	0	0	0	0	0	0	
0	0	0	0							
	2147483219		0	0	0	0	0	0	0	
0	0	0	0							
	2147483222		1,380	1,678	1,770	1,810	0	0	1,678	
1,770	1,810	0	0							
	2147483224		1,385	1,681	1,777	1,818	0	0	1,681	
1,777	1,818	0	0							
	2147483226		182	222	249	258	0	0	222	
249	258	0	0							
	2147483227		1,780	2,130	2,282	2,342	0	0	2,130	
2,282	2,342	0	0							
	2147483229		1,780	2,130	2,282	2,342	0	0	2,130	
2,282	2,342	0	0							
	2147483230		1,780	2,130	2,282	2,342	0	0	2,130	
2,282	2,342	0	0							
	2147483231		1,380	1,678	1,770	1,810	0	0	1,678	
1,770	1,810	0	0							
	2147483234		1,380	1,678	1,770	1,810	0	0	1,678	
1,770	1,810	0	0							
	2147483236		1,958	2,338	2,527	2,582	0	0	2,338	
2,527	2,582	0	0							
	2147483237		1,958	2,338	2,527	2,582	0	0	2,338	
2,527	2,582	0	0							
	2147483238		1,958	2,338	2,527	2,582	0	0	2,338	
2,527	2,582	0	0							
	2147483239		1,380	1,678	1,770	1,810	0	0	1,678	
1,770	1,810	0	0							
	2147483240		1,380	1,678	1,770	1,810	0	0	1,678	
1,770	1,810	0	0							
	2147483241		0	0	0	0	0	0	0	
0	0	0	0							
	2147483242		0	0	0	0	0	0	0	
0	0	0	0							
	2147483243		0	0	0	0	0	0	0	
0	0	0	0							
	2147483244		0	0	0	0	0	0	0	
0	0	0	0							
	2147483245		0	0	0	0	0	0	0	
0	0	0	0							

2147483246	0	0	0	0	0	0	0	0	0
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2147483247	0	0	0	0	0	0	0	0	0
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2147483248	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483249	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483250	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483251	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483252	0	0	0	0	0	0	0	0	0
0 0	0	0	0	0	0	0	0	0	0
2147483254	2,794	3,045	3,161	3,198	0	0	3,045		
3,160 3,198	0	0	0	0	0	0	0	0	
2147483256	2,794	3,045	3,161	3,198	0	0	3,045		
3,160 3,198	0	0	0	0	0	0	0	0	
2147483258	3,112	3,408	3,547	3,593	0	0	3,408		
3,547 3,593	0	0	0	0	0	0	0	0	
2147483260	3,112	3,408	3,547	3,593	0	0	3,408		
3,547 3,593	0	0	0	0	0	0	0	0	
2147483264	2,254	2,447	2,534	2,562	0	0	2,447		
2,534 2,562	0	0	0	0	0	0	0	0	
2147483265	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483266	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483267	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483270	118	132	131	133	0	0	132		
133 133	0	0	0	0	0	0	0	0	
2147483271	318	363	387	395	0	0	363		
388 396	0	0	0	0	0	0	0	0	
2147483272	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483273	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483274	2,521	2,732	2,827	2,857	0	0	2,732		
2,827 2,857	0	0	0	0	0	0	0	0	
2147483275	2,521	2,733	2,827	2,858	0	0	2,733		
2,827 2,858	0	0	0	0	0	0	0	0	
2147483278	439	489	498	507	0	0	482		
506 514	0	0	0	0	0	0	0	0	
2147483280	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483281	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483282	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483283	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483284	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483285	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483286	0	0	0	0	0	0	0	0	
0 0	0	0	0	0	0	0	0	0	
2147483290DN	12,894	14,322	15,038	15,162	0	0	0		

0	0	0	0	0	0	0	0	0	0	8,106
7,920	2147483290DS	7,908	0	0	0	0	0	0	0	0
0	2147483297DN	0	8,394	9,201	9,657	9,740	0	0	0	0
3,992	2147483297DS	3,955	0	0	0	0	0	0	0	4,197
5,400	2147483300	5,564	0	6,860	7,623	8,018	8,111	0	0	4,612
5,171	2147483303	5,196	0	4,397	4,813	5,048	5,069	0	0	4,958
5,200	2147483304	5,226	0	4,424	4,845	5,082	5,103	0	0	4,987
0	2147483305DN	0	12,843	14,309	15,042	15,170	0	0	0	0
8,067	2147483305DS	8,062	0	0	0	0	0	0	0	8,235
0	2147483306DN	0	12,751	14,204	14,936	15,064	0	0	0	0
8,062	2147483306DS	8,059	0	0	0	0	0	0	0	8,228
5,200	2147483308	5,226	0	4,424	4,845	5,082	5,103	0	0	4,987
5,200	2147483309	5,226	0	4,424	4,845	5,082	5,103	0	0	4,987
3,547	2147483311	3,593	0	3,112	3,408	3,547	3,593	0	0	3,408
2,713	2147483312	2,744	0	2,405	2,617	2,713	2,744	0	0	2,617
2,534	2147483316	2,562	0	2,254	2,447	2,534	2,562	0	0	2,447
0	2147483319	0	0	0	0	0	0	0	0	0
34	2147483320	37	0	16	21	42	44	0	0	29
34	2147483321	37	0	16	21	42	44	0	0	29
34	2147483323	37	0	16	21	42	44	0	0	29
24	2147483325	26	0	16	19	22	37	0	0	22
24	2147483326	26	0	16	19	22	37	0	0	22
0	2147483327DN	0	13,437	14,998	15,790	15,922	0	0	0	0
8,675	2147483327DS	8,684	0	0	0	0	0	0	0	8,795
0	2147483330	0	0	0	0	0	0	0	0	0
862	2147483331	885	0	478	630	716	729	0	0	791
572	2147483333	592	0	395	515	578	597	0	0	519
572	2147483334	592	0	395	515	578	597	0	0	519
425	2147483335	438	0	447	527	574	590	0	0	391
429	2147483336	431	0	369	418	430	431	0	0	418

	2147483337		369		418	430	431	0	0	418
429	431	0	0							
	2147483338		369		418	430	431	0	0	418
429	431	0	0							
	2147483339		0		0	0	0	0	0	0
0	0	0	0							
	2147483340		0		0	0	0	0	0	0
0	0	0	0							
	2147483341		0		0	0	0	0	0	0
0	0	0	0							
	2147483342		0		0	0	0	0	0	0
0	0	0	0							
	2147483343		0		0	0	0	0	0	0
0	0	0	0							
	2147483344		0		0	0	0	0	0	0
0	0	0	0							
	2147483345		0		0	0	0	0	0	0
0	0	0	0							
	2147483346		0		0	0	0	0	0	0
0	0	0	0							
	2147483347		0		0	0	0	0	0	0
0	0	0	0							
	2147483348		0		0	0	0	0	0	0
0	0	0	0							
	2147483349		0		0	0	0	0	0	0
0	0	0	0							
	2147483350		0		0	0	0	0	0	0
0	0	0	0							
	2147483352		2,254		2,447	2,534	2,562	0	0	2,447
2,534	2,562	0	0							
	2147483355		334		378	394	400	0	0	378
395	400	0	0							
	2147483356		334		378	394	400	0	0	378
395	400	0	0							
	2147483357		82		91	88	88	0	0	91
88	87	0	0							
	2147483358		82		91	88	88	0	0	91
88	87	0	0							
	2147483359		82		91	88	88	0	0	91
88	87	0	0							
	2147483360		0		0	0	0	0	0	0
0	0	0	0							
	2147483362		0		0	0	0	0	0	0
0	0	0	0							
	2147483363		0		0	0	0	0	0	0
0	0	0	0							
	2147483364		0		0	0	0	0	0	0
0	0	0	0							
	2147483365		0		0	0	0	0	0	0
0	0	0	0							
	2147483366		0		0	0	0	0	0	0
0	0	0	0							
	2147483367		0		0	0	0	0	0	0
0	0	0	0							
	2147483368		0		0	0	0	0	0	0
0	0	0	0							
	2147483369		0		0	0	0	0	0	0
0	0	0	0							
	2147483371		261		253	256	260	0	0	183

201	207	0	0							
	2147483373	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483374	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483375	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483376	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483377	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483378	475	0	558	608	623	0	0	0	626
673	686	0	0							
	2147483380	475	0	558	608	623	0	0	0	626
673	686	0	0							
	2147483383DN	13,719	0	15,294	16,083	16,231	0	0	0	0
0	0	0	0							
	2147483383DS	0	0	0	0	0	0	0	0	9,046
8,936	8,950	0	0							
	2147483387	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483388	1	0	1	1	1	0	0	0	1
1	1	0	0							
	2147483389	1	0	1	1	1	0	0	0	1
1	1	0	0							
	2147483390	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483391	1	0	1	1	1	0	0	0	1
1	1	0	0							
	2147483392	28	0	33	34	34	0	0	0	29
30	30	0	0							
	2147483393	28	0	33	34	34	0	0	0	29
30	30	0	0							
	2147483394	28	0	33	34	34	0	0	0	29
30	30	0	0							
	2147483395	1	0	1	1	1	0	0	0	1
1	1	0	0							
	2147483396	1	0	1	1	1	0	0	0	1
1	1	0	0							
	2147483397	1	0	1	1	1	0	0	0	1
1	1	0	0							
	2147483398	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483400	273	0	311	332	339	0	0	0	312
332	339	0	0							
	2147483401	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483402	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483403	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483404	273	0	311	332	339	0	0	0	312
332	339	0	0							
	2147483405	273	0	311	332	339	0	0	0	312
332	339	0	0							
	2147483406	4,172	0	4,558	4,776	4,791	0	0	0	4,699
4,894	4,913	0	0							
	2147483408	662	0	743	784	799	0	0	0	744
786	800	0	0							

	2147483409	6	7	8	8	0	0	6
6	7	0	0					
	2147483410	5	6	7	7	0	0	5
6	6	0	0					
	2147483411	5	6	7	7	0	0	5
6	6	0	0					
	2147483412	153	178	183	183	0	0	175
180	180	0	0					
	2147483413	153	177	182	182	0	0	272
281	282	0	0					
	2147483414	9	13	15	15	0	0	106
112	113	0	0					
	2147483415	9	13	15	15	0	0	106
112	113	0	0					
	2147483416	35	71	94	96	0	0	201
213	215	0	0					
	2147483417DN	12,977	14,391	15,100	15,234	0	0	0
0	0	0	0					
	2147483417DS	0	0	0	0	0	0	8,027
7,838	7,827	0	0					
	2147483418DN	13,062	14,495	15,209	15,343	0	0	0
0	0	0	0					
	2147483418DS	0	0	0	0	0	0	8,120
7,935	7,924	0	0					
	2147483419	35	71	94	96	0	0	201
213	215	0	0					
	2147483420	35	71	94	96	0	0	201
213	215	0	0					
	2147483421	35	71	94	96	0	0	201
213	215	0	0					
	2147483423DN	13,623	15,195	15,980	16,126	0	0	0
0	0	0	0					
	2147483423DS	0	0	0	0	0	0	9,031
8,918	8,931	0	0					
	2147483424	256	308	343	350	0	0	355
377	383	0	0					
	2147483425	96	99	103	105	0	0	16
17	18	0	0					
	2147483426DN	13,550	15,104	15,862	16,005	0	0	0
0	0	0	0					
	2147483426DS	0	0	0	0	0	0	8,848
8,723	8,730	0	0					
	2147483428	463	611	695	692	0	0	769
838	859	0	0					
	2147483429	0	0	0	0	0	0	0
0	0	0	0					
	2147483431	199	213	202	200	0	0	155
156	156	0	0					
	2147483432	114	108	92	89	0	0	60
57	57	0	0					
	2147483433	85	105	110	110	0	0	95
98	99	0	0					
	2147483434	0	0	0	0	0	0	0
0	0	0	0					
	2147483435	0	0	0	0	0	0	0
0	0	0	0					
	2147483436	0	0	0	0	0	0	0
0	0	0	0					
	2147483437	0	0	0	0	0	0	0



0	0	0	0							
	2147483438	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483439	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483440	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483441	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483442	0	0	0	0	0	0	0	0	0
0	0	0	0							
	2147483443	2,254	0	2,447	2,534	2,562	0	0	2,447	
2,534	2,562	0	0							
	2147483444	2,254	0	2,447	2,534	2,562	0	0	2,447	
2,534	2,562	0	0							
	2147483445	3	0	3	3	3	0	0	3	
3	3	0	0							
	2147483446	3	0	3	3	3	0	0	3	
3	3	0	0							
	2147483447	3	0	3	3	3	0	0	3	
3	3	0	0							
	2147483448	3	0	3	3	3	0	0	3	
3	3	0	0							
	2147483449	3	0	3	3	3	0	0	3	
3	3	0	0							
	2147483450	0	0	0	0	0	0	0	0	
0	0	0	0							
	2147483451	0	0	0	0	0	0	0	0	
0	0	0	0							
	2147483452	0	0	0	0	0	0	0	0	
0	0	0	0							
	2147483453	3	0	3	3	3	0	0	3	
3	3	0	0							
	2147483454	3	0	3	3	3	0	0	3	
3	3	0	0							
	2147483455	0	0	0	0	0	0	0	0	
0	0	0	0							
	2147483456	0	0	0	0	0	0	0	0	
0	0	0	0							
	2147483457	0	0	0	0	0	0	0	0	
0	0	0	0							
	2147483458	0	0	0	0	0	0	0	0	
0	0	0	0							
	2147483459	152	0	170	179	182	0	0	170	
179	182	0	0							
	2147483460	152	0	170	179	182	0	0	170	
179	182	0	0							
	2147483461	0	0	0	0	0	0	0	0	
0	0	0	0							
	2147483464	152	0	170	179	182	0	0	170	
179	182	0	0							
	2147483465	152	0	170	179	182	0	0	170	
179	182	0	0							
	2147483466	0	0	0	0	0	0	0	0	
0	0	0	0							
	2147483468	0	0	0	0	0	0	0	0	
0	0	0	0							
	2147483469	0	0	0	0	0	0	0	0	
0	0	0	0							

2147483471	2,254		2,447	2,534	2,562	0	0	2,447
2,534 2,562	0	0						
2147483472	2,254		2,447	2,534	2,562	0	0	2,447
2,534 2,562	0	0						
2147483473	2,254		2,447	2,534	2,562	0	0	2,447
2,534 2,562	0	0						
2147483474	0		0	0	0	0	0	0
0 0	0	0						
2147483475	0		0	0	0	0	0	0
0 0	0	0						
2147483476	0		0	0	0	0	0	0
0 0	0	0						
2147483477	0		0	0	0	0	0	0
0 0	0	0						
2147483478	0		0	0	0	0	0	0
0 0	0	0						
2147483479	0		0	0	0	0	0	0
0 0	0	0						
2147483480	0		0	0	0	0	0	0
0 0	0	0						
2147483481	0		0	0	0	0	0	0
0 0	0	0						
2147483482	0		0	0	0	0	0	0
0 0	0	0						
2147483483	0		0	0	0	0	0	0
0 0	0	0						
2147483484	0		0	0	0	0	0	0
0 0	0	0						
2147483485	0		0	0	0	0	0	0
0 0	0	0						
2147483486	0		0	0	0	0	0	0
0 0	0	0						
2147483487	0		0	0	0	0	0	0
0 0	0	0						
2147483488	0		0	0	0	0	0	0
0 0	0	0						
2147483489	0		0	0	0	0	0	0
0 0	0	0						
2147483490	0		0	0	0	0	0	0
0 0	0	0						
2147483491	0		0	0	0	0	0	0
0 0	0	0						
2147483492	152		170	179	182	0	0	170
179 182	0	0						
2147483493	0		0	0	0	0	0	0
0 0	0	0						
2147483494	0		0	0	0	0	0	0
0 0	0	0						
2147483495	663		737	745	740	0	0	737
745 740	0	0						
2147483497	2,636		3,048	3,249	3,253	0	0	3,001
3,231 3,229	0	0						
2147483498	2,636		3,048	3,249	3,253	0	0	3,001
3,231 3,229	0	0						
2147483499	8,714		9,579	9,677	9,638	0	0	9,558
9,640 9,639	0	0						
2147483501	8,475		9,303	9,424	9,366	0	0	9,281
9,376 9,364	0	0						
2147483502	8,714		9,579	9,677	9,638	0	0	9,558

9,640	9,639	0	0						
	2147483504		8,430	8,917	8,919	8,808	0	0	8,880
8,885	8,862	0	0						
	2147483505		8,497	9,025	9,067	8,948	0	0	8,979
9,040	9,010	0	0						
	2147483506		8,497	9,025	9,067	8,948	0	0	8,979
9,040	9,010	0	0						
	2147483507		966	1,361	1,480	1,633	0	0	1,334
1,441	1,450	0	0						
	2147483508		966	1,361	1,480	1,633	0	0	1,334
1,441	1,450	0	0						
	2147483510		966	1,361	1,480	1,633	0	0	1,334
1,441	1,450	0	0						
	2147483511		1,337	1,785	1,885	2,040	0	0	1,762
1,865	1,863	0	0						
	2147483512		1,337	1,785	1,885	2,040	0	0	1,762
1,865	1,863	0	0						
	2147483513		1,935	2,144	2,189	2,174	0	0	2,144
2,189	2,174	0	0						
	2147483517		1,935	2,144	2,189	2,174	0	0	2,144
2,189	2,174	0	0						
	2147483518		1,935	2,144	2,189	2,174	0	0	2,144
2,189	2,174	0	0						
	2147483519		1,935	2,144	2,189	2,174	0	0	2,144
2,189	2,174	0	0						
	2147483520		1,935	2,144	2,189	2,174	0	0	2,144
2,189	2,174	0	0						
	2147483521		1,935	2,144	2,189	2,174	0	0	2,144
2,189	2,174	0	0						
	2147483522		1,935	2,144	2,189	2,174	0	0	2,144
2,189	2,174	0	0						
	2147483523		2,814	3,241	3,406	3,411	0	0	3,195
3,389	3,389	0	0						
	2147483524		2,814	3,241	3,406	3,411	0	0	3,195
3,389	3,389	0	0						
	2147483528		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,069	0	0						
	2147483531		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,069	0	0						
	2147483532		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,069	0	0						
	2147483533		1,850	2,053	2,086	2,066	0	0	2,053
2,086	2,069	0	0						
	2147483534		0	0	0	0	0	0	0
0	0	0	0						
	2147483537		2,533	2,798	2,850	2,829	0	0	2,799
2,854	2,831	0	0						
	2147483540		1,067	1,313	1,454	1,469	0	0	1,383
1,535	1,537	0	0						
	2147483543		9,732	10,792	11,196	11,301	0	0	10,793
11,203	11,304	0	0						
	2147483544		9,732	10,792	11,196	11,301	0	0	10,793
11,203	11,304	0	0						
	2147483545		8,125	9,043	9,224	9,243	0	0	9,058
9,258	9,254	0	0						
	2147483546		8,125	9,043	9,224	9,243	0	0	9,058
9,258	9,254	0	0						
	2147483547		710	789	803	796	0	0	789
803	796	0	0						

	2147483548		27		32	34	34	0	0	30
31	31	0	0							
5,200	2147483549	0	4,424		4,845	5,082	5,103	0	0	4,987
	5,226	0	0							
5,200	2147483550	0	4,424		4,845	5,082	5,103	0	0	4,987
	5,226	0	0							
9	2147483551	0	1		2	20	34	0	0	7
	11	0	0							
0	2147483552	0	0		0	0	0	0	0	0
	0	0	0							
0	2147483553	0	0		0	0	0	0	0	0
	0	0	0							
0	2147483554	0	0		0	0	0	0	0	0
	0	0	0							
0	2147483555DN	0	14,012		15,649	16,479	16,635	0	0	0
	0	0	0							
9,451	2147483555DS	0	0		0	0	0	0	0	9,532
	9,473	0	0							
0	2147483556DN	0	13,878		15,503	16,322	16,476	0	0	0
	0	0	0							
9,295	2147483556DS	0	0		0	0	0	0	0	9,386
	9,314	0	0							
617	2147483557	0	518		584	617	628	0	0	584
	628	0	0							
9,065	2147483558	0	7,596		8,561	9,065	9,158	0	0	8,561
	9,158	0	0							
0	2147483561	0	0		0	0	0	0	0	0
	0	0	0							
0	2147483562	0	0		0	0	0	0	0	0
	0	0	0							
0	2147483563	0	0		0	0	0	0	0	0
	0	0	0							
1,547	2147483564	0	1,281		1,488	1,540	1,538	0	0	1,498
	1,537	0	0							
1,547	2147483565	0	1,281		1,488	1,540	1,538	0	0	1,498
	1,537	0	0							
16	2147483566	0	167		173	171	181	0	0	14
	16	0	0							
16	2147483567	0	167		173	171	181	0	0	14
	16	0	0							
0	2147483568	0	0		0	0	0	0	0	0
	0	0	0							
5,224	2147483569	0	4,231		4,868	5,206	5,259	0	0	4,881
	5,269	0	0							
7,836	2147483572	0	6,645		7,481	7,862	7,938	0	0	7,444
	7,924	0	0							
468	2147483573	0	416		462	468	465	0	0	462
	465	0	0							
4,668	2147483575	0	3,841		4,408	4,658	4,697	0	0	4,403
	4,719	0	0							
4,646	2147483576	0	3,822		4,387	4,636	4,677	0	0	4,382
	4,699	0	0							
828	2147483577	0	448		595	679	691	0	0	758
	850	0	0							
828	2147483578	0	448		595	679	691	0	0	758
	850	0	0							
0	2147483579	0	0		0	0	0	0	0	0
	0	0	0							
	2147483580		5,104		5,614	5,865	5,896	0	0	5,751

5,974	5,999	0	0						
	2147483581		3,982	4,333	4,534	4,542	0	0	4,472
4,640	4,645	0	0						
	2147483582		1,863	2,170	2,307	2,361	0	0	2,170
2,307	2,361	0	0						
	2147483585		3,560	4,130	4,328	4,354	0	0	4,139
4,326	4,369	0	0						
	2147483588		8,041	8,969	9,158	9,185	0	0	8,984
9,190	9,190	0	0						
	2147483590		5,935	6,739	6,977	7,006	0	0	6,771
7,011	7,036	0	0						
	2147483593		7,543	8,265	8,508	8,615	0	0	8,271
8,514	8,596	0	0						
	2147483595		5,900	6,642	6,858	6,920	0	0	6,679
6,890	6,937	0	0						
	2147483596		6,403	7,010	7,382	7,463	0	0	7,133
7,494	7,575	0	0						
	2147483599		9,732	10,792	11,196	11,301	0	0	10,793
11,203	11,304	0	0						
	2147483600		7,758	8,571	8,834	8,904	0	0	8,572
8,842	8,903	0	0						
	2147483601		5,232	6,020	6,378	6,488	0	0	6,000
6,372	6,485	0	0						
	2147483603		1,974	2,221	2,362	2,398	0	0	2,221
2,362	2,401	0	0						
	2147483605		0	0	0	0	0	0	0
0	0	0	0						
	2147483606		2,293	2,514	2,670	2,720	0	0	2,516
2,662	2,708	0	0						
	2147483608		811	944	1,022	1,054	0	0	943
1,020	1,054	0	0						
	2147483610		323	380	399	405	0	0	380
399	405	0	0						
	2147483612		7,206	8,241	8,740	8,886	0	0	8,222
8,734	8,886	0	0						
	2147483615		6,126	6,955	7,327	7,420	0	0	6,936
7,325	7,421	0	0						
	2147483617		488	563	623	648	0	0	563
621	648	0	0						
	2147483618		6,175	6,894	7,225	7,337	0	0	6,901
7,260	7,366	0	0						
	2147483619		6,005	6,719	6,990	7,074	0	0	6,608
6,930	7,012	0	0						
	2147483621		2,055	2,457	2,624	2,664	0	0	2,338
2,527	2,572	0	0						
	2147483622		593	723	790	817	0	0	723
788	817	0	0						
	2147483626		9,041	10,227	10,798	10,927	0	0	10,091
10,689	10,823	0	0						
	2147483627		4,685	5,224	5,519	5,602	0	0	6,060
6,619	6,719	0	0						
	2147483630		1,651	1,775	1,884	1,911	0	0	1,776
1,872	1,898	0	0						
	2147483631		0	0	0	0	0	0	0
0	0	0	0						
	2147483632		0	0	0	0	0	0	6,117
7,027	7,162	0	0						
	2147483633		0	0	0	0	0	0	4,597
5,398	5,568	0	0						

2147483637	0	0	0	0	0	0	0	9,238
9,771	9,917	0	0					

Combined Local Collision Rate Subsection

Link	Observed	First Observed	Local Severity	Split
Name	Collisions	Collision Year	Ratio	Year

[Section 5] Input Data - Parameter File

COBALT Parameter File  
Version 2,019.10

Cost Base Year  
2011

Appraisal Period  
30

Discount Rate	
Years from	Discount
Current Year	Rate (%)
30	4.00
60	3.50
100	3.00

Cost per Casualty	
Severity	Cost
Fatal	2,310,500
Serious	331,400
Slight	31,100

Cost per Collision				
Severity	Insurance	Damage to Property		
	Administration	Urban	Rural	Motorway
Fatal	375	13,952	13,952	13,952
Serious	233	6,225	6,225	6,225
Slight	142	3,713	3,713	3,713
Damage	67	2,346	2,346	2,346
Gardai Cost				
		Urban	Rural	Motorway
Fatal		21,521	21,521	21,521
Serious		2,519	2,519	2,519
Slight		653	653	653
Damage		42	42	42

Compound Annual Rates of Growth of Collision Values	
Range of Years	Rate of Growth (%p.a.)
2011-2015	1.040
2015-2020	1.036
2020-2025	1.022
2025-2111	1.023

Number of Damage Only Collisions per PIA			
	Urban	Rural	Motorway
Damage	0.0	0.0	0.0

Link and Junction Combined Collision Proportions  
Base Year

2011 Road Type	Speed Limit (km/h)	Collision Proportions		
		Fatal	Serious	Slight
1	70	0.013	0.027	0.960
1	80	0.013	0.027	0.960
1	90	0.013	0.027	0.960
1	100	0.013	0.027	0.960
1	110	0.013	0.027	0.960
1	120	0.013	0.027	0.960
1	130	0.013	0.027	0.960
2	70	0.023	0.053	0.925
2	80	0.023	0.053	0.925
2	90	0.023	0.053	0.925
2	100	0.023	0.053	0.925
2	110	0.023	0.053	0.925
2	120	0.023	0.053	0.925
2	130	0.023	0.053	0.925
3	50	0.005	0.032	0.963
3	60	0.005	0.032	0.963
4	70	0.012	0.026	0.962
4	80	0.012	0.026	0.962
4	90	0.012	0.026	0.962
4	100	0.012	0.026	0.962
4	110	0.012	0.026	0.962
4	120	0.012	0.026	0.962
4	130	0.012	0.026	0.962
5	50	0.008	0.028	0.963
5	60	0.008	0.028	0.963
6	70	0.023	0.053	0.925
6	80	0.023	0.053	0.925
6	90	0.023	0.053	0.925
6	100	0.023	0.053	0.925
6	110	0.023	0.053	0.925
6	120	0.023	0.053	0.925
6	130	0.023	0.053	0.925
7	50	0.005	0.032	0.963
7	60	0.005	0.032	0.963
8	70	0.012	0.026	0.962
8	80	0.012	0.026	0.962
8	90	0.012	0.026	0.962
8	100	0.012	0.026	0.962
8	110	0.012	0.026	0.962
8	120	0.012	0.026	0.962
8	130	0.012	0.026	0.962
9	50	0.008	0.028	0.963
9	60	0.008	0.028	0.963
10	30	0.005	0.032	0.963
10	40	0.005	0.032	0.963
10	50	0.005	0.032	0.963
10	60	0.005	0.032	0.963
11	70	0.123	0.140	0.737
11	80	0.123	0.140	0.737
11	90	0.123	0.140	0.737
11	100	0.123	0.140	0.737
11	110	0.123	0.140	0.737
11	120	0.123	0.140	0.737
11	130	0.123	0.140	0.737

Link and Junction Combined Collision Rates and Change Factors

Base Year

2011

Road Type	Speed Limit (km/h)	Collision Rate	Beta Factor
1	70	0.057	0.956
1	80	0.057	0.956
1	90	0.057	0.956
1	100	0.057	0.956
1	110	0.057	0.956
1	120	0.057	0.956
1	130	0.057	0.956
2	70	0.219	0.955
2	80	0.219	0.955
2	90	0.219	0.955
2	100	0.219	0.955
2	110	0.219	0.955
2	120	0.219	0.955
2	130	0.219	0.955
3	50	0.613	0.959
3	60	0.613	0.959
4	70	0.094	0.956
4	80	0.094	0.956
4	90	0.094	0.956
4	100	0.094	0.956
4	110	0.094	0.956
4	120	0.094	0.956
4	130	0.094	0.956
5	50	0.402	0.967
5	60	0.402	0.967
6	70	0.219	0.955
6	80	0.219	0.955
6	90	0.219	0.955
6	100	0.219	0.955
6	110	0.219	0.955
6	120	0.219	0.955
6	130	0.219	0.955
7	50	0.613	0.959
7	60	0.613	0.959
8	70	0.094	0.955
8	80	0.094	0.955
8	90	0.094	0.955
8	100	0.094	0.955
8	110	0.094	0.955
8	120	0.094	0.955
8	130	0.094	0.955
9	50	0.402	0.959
9	60	0.402	0.959
10	30	0.449	0.959
10	40	0.449	0.959
10	50	0.449	0.959
10	60	0.449	0.959
11	70	0.115	0.955
11	80	0.115	0.955
11	90	0.115	0.955
11	100	0.115	0.955
11	110	0.115	0.955
11	120	0.115	0.955
11	130	0.115	0.955



Link and Junction Combined Collision Beta Factor Changes over Time

Range of Years Change to Beta Factor

2011-2016	1.000
2017-2026	0.500
2027-2036	0.250
2037-2160	0.000

Link and Junction Combined Casualty Rates

Base Year

2011

Road Type	Speed Limit (km/h)	Casualties per P.I.A.		
		Fatal	Serious	Slight
1	70	0.025	0.033	1.393
1	80	0.025	0.033	1.393
1	90	0.025	0.033	1.393
1	100	0.025	0.033	1.393
1	110	0.025	0.033	1.393
1	120	0.025	0.033	1.393
1	130	0.025	0.033	1.393
2	70	0.050	0.106	1.451
2	80	0.050	0.106	1.451
2	90	0.050	0.106	1.451
2	100	0.050	0.106	1.451
2	110	0.050	0.106	1.451
2	120	0.050	0.106	1.451
2	130	0.050	0.106	1.451
3	50	0.007	0.051	1.325
3	60	0.007	0.051	1.325
4	70	0.018	0.043	1.342
4	80	0.018	0.043	1.342
4	90	0.018	0.043	1.342
4	100	0.018	0.043	1.342
4	110	0.018	0.043	1.342
4	120	0.018	0.043	1.342
4	130	0.018	0.043	1.342
5	50	0.008	0.045	1.233
5	60	0.008	0.045	1.233
6	70	0.050	0.106	1.451
6	80	0.050	0.106	1.451
6	90	0.050	0.106	1.451
6	100	0.050	0.106	1.451
6	110	0.050	0.106	1.451
6	120	0.050	0.106	1.451
6	130	0.050	0.106	1.451
7	50	0.007	0.051	1.325
7	60	0.007	0.051	1.325
8	70	0.018	0.043	1.342
8	80	0.018	0.043	1.342
8	90	0.018	0.043	1.342
8	100	0.018	0.043	1.342
8	110	0.018	0.043	1.342
8	120	0.018	0.043	1.342
8	130	0.018	0.043	1.342
9	50	0.008	0.045	1.233
9	60	0.008	0.045	1.233
10	30	0.007	0.051	1.325
10	40	0.007	0.051	1.325
10	50	0.007	0.051	1.325
10	60	0.007	0.051	1.325

11	70	0.050	0.106	1.451
11	80	0.050	0.106	1.451
11	90	0.050	0.106	1.451
11	100	0.050	0.106	1.451
11	110	0.050	0.106	1.451
11	120	0.050	0.106	1.451
11	130	0.050	0.106	1.451

Link and Junction Combined Casualty Change Factors

Base Year

2011

Road Type	Speed Limit (km/h)	Beta Factor		
		Fatal	Serious	Slight
1	70	0.978	0.979	1.002
1	80	0.978	0.979	1.002
1	90	0.978	0.979	1.002
1	100	0.978	0.979	1.002
1	110	0.978	0.979	1.002
1	120	0.978	0.979	1.002
1	130	0.978	0.979	1.002
2	70	0.979	0.983	1.002
2	80	0.979	0.983	1.002
2	90	0.979	0.983	1.002
2	100	0.979	0.983	1.002
2	110	0.979	0.983	1.002
2	120	0.979	0.983	1.002
2	130	0.979	0.983	1.002
3	50	0.971	0.995	1.001
3	60	0.971	0.995	1.001
4	70	0.984	0.985	0.998
4	80	0.984	0.985	0.998
4	90	0.984	0.985	0.998
4	100	0.984	0.985	0.998
4	110	0.984	0.985	0.998
4	120	0.984	0.985	0.998
4	130	0.984	0.985	0.998
5	50	0.998	0.990	1.002
5	60	0.998	0.990	1.002
6	70	0.979	0.983	1.002
6	80	0.979	0.983	1.002
6	90	0.979	0.983	1.002
6	100	0.979	0.983	1.002
6	110	0.979	0.983	1.002
6	120	0.979	0.983	1.002
6	130	0.979	0.983	1.002
7	50	0.971	0.995	1.001
7	60	0.971	0.995	1.001
8	70	0.979	0.983	1.002
8	80	0.979	0.983	1.002
8	90	0.979	0.983	1.002
8	100	0.979	0.983	1.002
8	110	0.979	0.983	1.002
8	120	0.979	0.983	1.002
8	130	0.979	0.983	1.002
9	50	0.971	0.995	1.001
9	60	0.971	0.995	1.001
10	30	0.971	0.995	1.001
10	40	0.971	0.995	1.001
10	50	0.971	0.995	1.001

10	60	0.971	0.995	1.001
11	70	0.979	0.983	1.002
11	80	0.979	0.983	1.002
11	90	0.979	0.983	1.002
11	100	0.979	0.983	1.002
11	110	0.979	0.983	1.002
11	120	0.979	0.983	1.002
11	130	0.979	0.983	1.002

Link and Junction Combined Casualty Beta Factor Changes over Time

Range of Years	Change to Beta Factor
2011-2016	1.000
2017-2026	0.500
2027-2036	0.250
2037-2160	0.000

# Appendix C. TUBA Economics Input File

```

1  TUBA 1.9.8      ECONOMIC PARAMETERS FILE
2
3  PARAMETERS
4  TUBA_version    1.9.8          the current version of TUBA
5  base_year       2011          defines base year for economic parameters
6  pres_val_year   2011          present value year for discounting
7  GDP_base        100.0         value of RPI in base year
8  av_ind_tax      18.3          % average final indirect tax rate
9  NT_CARBDXVALUES 20.0 20.0 20.0  base year non-traded carbon values in €/tonne (low
high central) 2011 values based on CAF
10
11  MODES
12  *no.           description
13     1           Road
14     2           Bus
15     3           Rail
16
17  VEHICLE_TYPE/SUBMODE
18  *no.           mode  new_mode  P&R   type  description
19     1           1     N         N     per   Car
20     2           1     N         N     per   LGV
21     3           1     N         N     fre   OGV1
22     4           1     N         N     fre   OGV2
23     5           2     N         N     per   Bus
24     6           3     N         N     per   Light Rail
25     7           3     N         N     per   Heavy Rail
26
27
28  PERSON_TYPE
29  *no.           type (D/P)  description
30     1           D         Driver
31     2           P         Passenger
32
33  PURPOSE
34  *no.           type (B/C)  description
35     1           B         Business
36     2           C         Commuting
37     3           O         Other
38
39  FUEL_TYPE
40  *no.           sector  name (sector: 1=untraded sector 2=traded sector)
41     1           1         petrol
42     2           1         diesel
43
44  TIME_PERIODS
45  *no.           description  comments
46     1           AM Peak      (8-9)
47     2           Inter Peak   (Avg 12-14)
48     3           PM Peak      (17-18)
49
50  BREAKPOINTS
51  *description  breakpoint1  breakpoint2  ..
52  Distance      1.0         5.0         10.0         15.0
20.0         50.0         100.0
53  TimeSaving    -5.0        -2.0         0.0         2.0         5.0
54
55  CHARGES
56  *no.           sector  description
57     1           pri     PT fares (private operators)
58     2           loc     PT fares (LA operated)
59     3           loc     LA tolls
60     4           cen     National tolls
61     5           pri     Private tolls
62     6           loc     LA on-street parking
63     7           loc     LA off-street parking
64     8           pri     Private parking
65
66  DISCOUNT_RATE
67  ** %change p.a.
68  *Start_yr     End_yr     Rate
69     1  30  4.00
70    31  60  3.50
71    61 100  3.00

```

```

72
73 VALUE_OF_TIME_ALLOCATION
74 ** Default VOT Method to be used: Method 3 for purposes
75 *Vtype/submode Purpose_type Person_type VOT_Method
76 1 1 1 3
77 1 2 1 3
78 1 3 1 3
79 1 1 2 3
80 1 2 2 3
81 1 3 2 3
82 3 1 1 3
83 3 2 1 3
84 3 3 1 3
85 3 1 2 3
86 3 2 2 3
87 3 3 2 3
88
89 VALUE_OF_TIME_METHOD1
90
91 VALUE_OF_TIME_METHOD2
92
93 VALUE_OF_TIME_METHOD3
94 *cents per hour(Perceived Costs)
95 *Vtype/submode Person_type VOT_purpose1 VOT_purpose2 VOT_purpose3
96 1 1 2612.0 967.0 870.0
97 1 2 2612.0 967.0 870.0
98 2 1 2612.0 967.0 870.0
99 2 2 2612.0 967.0 870.0
100 3 1 2612.0 0.0 0.0
101 3 2 2612.0 0.0 0.0
102 4 1 2612.0 0.0 0.0
103 4 2 2612.0 0.0 0.0
104 5 1 2612.0 0.0 0.0
105 5 2 2612.0 967.0 870.0
106 6 1 2612.0 0.0 0.0
107 6 2 2612.0 967.0 870.0
108 7 1 2612.0 0.0 0.0
109 7 2 2612.0 967.0 870.0
110
111
112 VALUE_OF_TIME_GROWTH
113 *% change p.a. based on GNP growth in CAF
114 *Start_yr End_yr VOT_Gr_purpose1 VOT_Gr_purpose2 VOT_Gr_purpose3 ..
115 2012 2014 1.40 1.40 1.40
116 2015 2019 3.60 3.60 3.60
117 2020 2024 2.20 2.20 2.20
118 2025 2100 2.30 2.30 2.30
119
120 AV_IND_TAX_CHANGES
121 *% change p.a.
122 *Start_yr End_yr Growth
123 2012 2080 0.00
124
125 CHARGE_TAX_RATES
126 *
127 *charge final intermediate
128 1 0.0 0.0
129 2 0.0 0.0
130 3 0.0 0.0
131 4 0.0 0.0
132 5 0.0 0.0
133 6 0.0 0.0
134 7 0.0 0.0
135
136 CHARGE_TAX_RATES_CHANGES
137 *% change p.a.
138 *Start_yr End_yr charge final intermediate
139 2012 2080 1 0.0 0.0
140 2012 2080 2 0.0 0.0
141 2012 2080 3 0.0 0.0
142 2012 2080 4 0.0 0.0
143 2012 2080 5 0.0 0.0
144 2012 2080 6 0.0 0.0

```

145 2012 2080 7 0.0 0.0

146  
147 FUEL\_COST  
148 \*type resource(c/lit) duty(c/lit) VAT(%) CO2\_grammes/litre  
149 1 63.00 57.62 21.0 2230.00  
150 2 70.00 46.57 21.0 2562.00

151  
152 FUEL\_COST\_CHANGES  
153 \*% change p.a.  
154 \*Start\_yr End\_yr fuel\_type resource duty VAT  
Carb\_Den\_change  
155 2012 2012 1 10.70 0.00 2.00  
0.00  
156 2012 2012 2 3.90 0.00 0.00  
0.00  
157 2013 2013 1 -5.70 0.00 0.00  
0.00  
158 2013 2013 2 -5.20 0.00 0.00  
0.00  
159 2014 2014 1 0.00 0.00 0.00  
0.00  
160 2014 2014 2 -3.30 0.00 0.00  
0.00  
161 2015 2015 1 -30.60 2.00 0.00  
0.00  
162 2015 2015 2 -32.60 2.90 0.00  
0.00  
163 2016 2080 1 0.00 0.00 0.00  
0.00  
164 2016 2080 2 0.00 0.00 0.00  
0.00

165  
166  
167 CARBDX\_VALUE\_CHANGES  
168 \*relative (%p.a.) or absolute (€/p.a.) growth; either absolute or relative may be  
defined, not both  
169 \*As per CAF (5% p.a growth assumed beyond 2050)  
170 \*same growth applies to low, central and high carbon values  
171 \*Start\_yr End\_yr Rel.(%) Abs.(€/tonne/year)  
172 2012 2019 0.0  
173 2020 2020 60.0  
174 2021 2021 21.9  
175 2022 2022 17.9  
176 2023 2023 13.0  
177 2024 2024 13.5  
178 2025 2025 11.9  
179 2026 2026 10.6  
180 2027 2027 9.6  
181 2028 2028 7.5  
182 2029 2029 8.1  
183 2030 2030 7.5  
184 2031 2100 5.0

185  
186 FLEET  
187 \*2011 Split  
188 \*veh\_type %petrol %diesel  
189 1 69.9 30.1  
190 2 0.3 99.7  
191 3 0.0 100.0  
192 4 0.0 100.0  
193 5 0.0 100.0  
194 6 0.0 100.0  
195 7 0.0 100.0

196  
197 FLEET\_CHANGES  
198 \*Based on DTTAS data used in CAF calculations  
199 \*% p.a.  
200 \*Start\_yr End\_yr Veh\_type %Change\_Petrol %Change\_Diesel  
201 2012 2015 1 -2.6422 5.4373  
202 2016 2020 1 0.4732 -0.8198  
203 2021 2025 1 -0.6619 1.1497  
204 2026 2030 1 -0.8836 1.3894  
205 2012 2015 2 -9.6398 0.0251

206	2016	2020	2	-60.0000	0.0400
207	2021	2025	2	0.0000	0.0000
208	2026	2030	2	0.0000	0.0000

209  
 210 FUEL\_CONSUMPTION  
 211 \*\* Source: TAG Data Book - Table A 1.3.8  
 212 \*\* Fuel consumption (l/km) = (a\_fuel+b\_fuel\*V+c\_fuel\*V^2+d\_fuel\*v^3)/v where v is speed in km/h

213	*Veh_type	Fuel_type	a_Fuel	b_Fuel	c_Fuel	d_Fuel
214	1	1	1.119322393	0.044004770	-8.13834E-05	2.44908E-06
	140					
215	1	2	0.492145560	0.062181967	-5.90984E-04	4.64689E-06
	140					
216	2	1	1.950832769	0.034527979	6.79868E-05	3.71490E-06
	140					
217	2	2	1.396883496	0.033477400	-2.29978E-04	7.67320E-06
	140					
218	3	2	1.812903362	0.326784428	-4.94783E-03	4.25842E-05
	96					
219	4	2	2.893291507	0.603481017	-8.63693E-03	6.51028E-05
	96					
220	5	2	5.980054953	0.245278327	-3.06499E-03	3.06148E-05
	96					

221  
 222 FUEL EFFICIENCY  
 223 \*% p.a.

224	*Start_yr	End_yr	veh_type	fuel_type	change
225	2012	2012	1	1	-0.46
226	2012	2012	1	2	0.09
227	2013	2013	1	1	-0.42
228	2013	2013	1	2	0.07
229	2014	2020	1	1	2.48
230	2014	2020	1	2	2.92
231	2021	2025	1	1	2.37
232	2021	2025	1	2	1.62
233	2026	2030	1	1	0.92
234	2026	2030	1	2	0.77
235	2012	2012	2	2	0.20
236	2013	2013	2	2	0.18
237	2014	2020	2	2	3.25
238	2021	2025	2	2	0.67
239	2026	2030	2	2	0.27
240	2012	2012	3	2	0.43
241	2013	2013	3	2	0.38
242	2014	2020	3	2	-1.67
243	2021	2025	3	2	0.07
244	2026	2030	3	2	0.01
245	2012	2012	4	2	0.43
246	2013	2013	4	2	0.38
247	2014	2020	4	2	-1.67
248	2021	2025	4	2	0.07
249	2026	2030	4	2	0.01
250	2012	2012	5	2	0.32
251	2013	2013	5	2	0.34
252	2014	2020	5	2	-0.64
253	2021	2025	5	2	0.03
254	2026	2030	5	2	-0.02
255	2012	2012	6	2	0.00
256	2013	2013	6	2	0.00
257	2014	2020	6	2	0.00
258	2021	2025	6	2	0.00
259	2026	2030	6	2	0.00
260	2012	2012	7	2	0.00
261	2013	2013	7	2	0.00
262	2014	2020	7	2	0.00
263	2021	2025	7	2	0.00
264	2026	2030	7	2	0.00

265  
 266 NON\_FUEL\_VOC

267	*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw
268	1	1	6.265	171.493	5.507
269	1	2	6.265	171.493	5.507



270	2	1	9.099	70.308	10.327	0.000
271	3	1	10.020	393.702	0.000	0.000
272	3	2	10.020	393.702	0.000	0.000
273	4	2	19.491	758.888	0.000	0.000
274	5	2	45.458	1036.494	0.000	0.000
275	6	2	0.000	0.000	0.000	0.000
276	7	2	0.000	0.000	0.000	0.000

277  
278 NON\_FUEL\_VOC\_CHANGES

279 \*% p.a.

280	*Start_yr	End_yr	veh_type	gnf
281	2012	2080	1	0.000
282	2012	2080	2	0.000
283	2012	2080	3	0.000
284	2012	2080	4	0.000
285	2012	2080	5	0.000

286  
287 NON\_FUEL\_TAX\_RATES

288 \*%

289	*submode	final	intermediate
290	1	21.0	0.0
291	2	21.0	0.0
292	3	21.0	0.0
293	4	21.0	0.0
294	5	21.0	0.0
295	6	21.0	0.0
296	7	21.0	0.0

297  
298 NON\_FUEL\_TAX\_RATES\_CHANGES

299 \*% change p.a.

300 \*Sub-Mode 1 values weighted based on petrol/diesel car fleet split (77.6%/22.4%)

301	*Start_yr	End_yr	Submode	final	intermediate
302	2012	2012	1	5.7	7.9
303	2013	2080	1	0.0	0.0
304	2012	2012	2	7.9	10.3
305	2013	2080	2	0.0	0.0
306	2012	2012	3	7.9	10.3
307	2013	2080	3	0.0	0.0
308	2012	2012	4	7.9	10.3
309	2013	2080	4	0.0	0.0
310	2012	2012	5	7.9	10.3
311	2013	2080	5	0.0	0.0
312	2012	2012	6	7.9	10.3
313	2013	2080	6	0.0	0.0
314	2012	2012	7	0.0	0.0
315	2013	2080	7	0.0	0.0

316  
317 DEFAULT\_PURPOSE\_SPLIT

318	*Vtype/submode	purpose	Period1	Period2	Period3
319	1	1	13.3	16.9	12
320	1	2	44.2	36.7	42.9
321	1	3	42.5	46.4	45.1
322	2	1	41.3	50.3	40.2
323	2	2	45.2	35.1	45.1
324	2	3	13.5	14.6	14.7
325	3	1	76.7	81.4	75.6
326	3	2	16.1	11.1	17
327	3	3	7.2	7.5	7.4
328	4	1	82.5	86.9	79.7
329	4	2	11.7	7.8	13.2
330	4	3	5.8	5.3	7.1
331	5	1	10.2	10.2	10.2
332	5	2	18.9	18.9	18.9
333	5	3	70.8	70.8	70.9
334	6	1	10.2	10.2	10.2
335	6	2	18.9	18.9	18.9
336	6	3	70.8	70.8	70.9
337	7	1	10.2	10.2	10.2
338	7	2	18.9	18.9	18.9
339	7	3	70.8	70.8	70.9

340  
341 DEFAULT\_PERSON\_FACTORS

342	*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2	FactorPer3
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343	1	1	1	1	1	1	1
344	1	1	2	0.26	0.25	0.26	0.26
345	1	2	1	1	1	1	1
346	1	2	2	0.23	0.22	0.23	0.23
347	1	3	1	1	1	1	1
348	1	3	2	0.66	0.65	0.68	0.68
349	2	1	1	1	1	1	1
350	2	1	2	0.37	0.32	0.38	0.38
351	2	2	1	1	1	1	1
352	2	2	2	0.4	0.41	0.4	0.4
353	2	3	1	1	1	1	1
354	2	3	2	0.49	0.45	0.48	0.48
355	3	1	1	1	1	1	1
356	3	1	2	0.09	0.09	0.09	0.09
357	3	2	1	1	1	1	1
358	3	2	2	0.24	0.28	0.24	0.24
359	3	3	1	1	1	1	1
360	3	3	2	0.26	0.33	0.27	0.27
361	4	1	1	1	1	1	1
362	4	1	2	0.03	0.03	0.03	0.03
363	4	2	1	1	1	1	1
364	4	2	2	0.11	0.14	0.08	0.08
365	4	3	1	1	1	1	1
366	4	3	2	0.11	0.12	0.16	0.16
367	5	1	1	1	1	1	1
368	5	1	2	0.35	0.35	0.35	0.35
369	5	2	1	1	1	1	1
370	5	2	2	1.5	1.5	1.5	1.5
371	5	3	1	1	1	1	1
372	5	3	2	8.35	8.35	8.35	8.35

373  
374

DEFAULT\_PERSON\_FACTORS\_CHANGE

\*% change p.a.

377	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3
	ChangePer4	ChangePer5						
378	2011	2080	1	1	2	0.00	0.00	0.00
379	2011	2080	1	2	2	0.00	0.00	0.00

380

PREPARATION&SUPERVISION

\* total preparation (by stage) and supervision costs as % of land and construction costs

383	*Mode	*Prep:SI	Prep:PC	Prep:PR	Prep:OP	Prep: WC	Super
384	1	12.0	9.0	9.0	6.0	2.0	5.0
385	2	12.0	9.0	9.0	6.0	2.0	5.0
386	3	12.0	9.0	9.0	6.0	2.0	5.0

## Appendix D. TUBA Scheme Input Files

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SCHEME SPECIFIC PARAMETERS

PARAMETERS

TUBA\_version 1.9.8  
run\_name N25 Waterford to Glenmore - Lime\_Green Route Option  
do\_min\_name Do Min  
do\_som\_name Lime\_Green  
first\_yr 2030  
horizon\_yr 2059  
modelled\_yrs 2030 2045 2059  
detail Yes  
current\_yr 2020  
print\_warn 5.0  
P&R\_car\_speed 65.0  
zones\_as\_sectors No

TIME\_SLICES

*no.	duration (min)	annualisation	period	description
1	60	646	1	0800-0900
2	60	2424	2	1200-1400
3	60	640	3	1700-1800

SCHEMES\_DM

*Mode	1st Construction year	Opening_yr	Stage
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DO\_MIN\_COSTS

*Type	Mode	Funding	Cost	Price	RPI
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DO\_MIN\_PROFILE

*Year	Mode	%Const	%Land	%Prep	%Super	%Maint	%Op	%Grant
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%Dev

DO\_MIN\_DELAY\_COSTS

*Year	Mode	Business	Commuting	Other	Freight
-------	------	----------	-----------	-------	---------

SCHEMES\_DS

*Mode	1st Construction year	Opening_yr	Stage
1	2028	2030	OP
2	2028	2030	OP

DO\_SOM\_COSTS

*Type	Mode	Funding	Cost	Price	RPI
C	1	cen	96534.9	F	100.00
S	1	cen	4957.6	F	100.00
L	1	cen	14242.2	F	100.00
P	1	cen	4362.7	F	100.00
M	1	cen	11058.8	F	100.00

DO\_SOM\_PROFILE

*Year	Mode	%Const	%Land	%Prep	%Super	%Maint	%Op	%Grant
2020	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2021	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2022	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

61	2026 0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	2027 0.0	1	23.8	50.0	75.0	0.0	0.0	0.0	0.0
63	2028 0.0	1	50.2	50.0	15.0	50.0	0.0	0.0	0.0
64	2029 0.0	1	26.0	0.0	10.0	50.0	0.0	0.0	0.0
65	2030 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
66	2031 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
67	2032 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
68	2033 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
69	2034 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
70	2035 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
71	2036 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
72	2037 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
73	2038 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
74	2039 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
75	2040 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
76	2041 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
77	2042 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
78	2043 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
79	2044 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
80	2045 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
81	2046 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
82	2047 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
83	2048 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
84	2049 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
85	2050 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
86	2051 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
87	2052 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
88	2053 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
89	2054 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
90	2055 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
91	2056 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
92	2057 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
93	2058 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
94	2059 0.0	1	0.0	0.0	0.0	0.0	4.3	0.0	0.0

```

96 DO_SOM_DELAY_COSTS
97 *Year Mode Business Commuting Other Freight
98
99 BENEFIT_CHANGE
100 *% change p.a.
101 *Start_yr End_yr Submode ChangePer1 ChangePer2 ChangePer3 ChangePer4 ChangePer5
102
103 USER_CLASSES
104 *no. Veh/submode purpose person_type
105 1 1 0 0
106 2 4 0 0
107
108 INPUT_MATRICES
109 *no. userclasses timeslice type format scenario year factor filename
110 1 1 1 V 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\LV_Demand.TXT
111 2 2 1 V 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\HV_Demand.TXT
112 3 1 1 V 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\LV_Demand.TXT
113 4 2 1 V 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\HV_Demand.TXT
114 5 1 1 V 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\LV_Demand.TXT
115 6 2 1 V 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\HV_Demand.TXT
116 7 1 1 V 3 1 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Lime_Green\2030_Lime_Green_AM\LV_Demand.TXT
117 8 2 1 V 3 1 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Lime_Green\2030_Lime_Green_AM\HV_Demand.TXT
118 9 1 1 V 3 1 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Lime_Green\2045_Lime_Green_AM\LV_Demand.TXT
119 10 2 1 V 3 1 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Lime_Green\2045_Lime_Green_AM\HV_Demand.TXT
120 11 1 1 V 3 1 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Lime_Green\2060_Lime_Green_AM\LV_Demand.TXT
121 12 2 1 V 3 1 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Lime_Green\2060_Lime_Green_AM\HV_Demand.TXT
122 13 1 1 T 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\LV_Time.txt
123 14 2 1 T 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\HV_Time.txt
124 15 1 1 T 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\LV_Time.txt
125 16 2 1 T 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\HV_Time.txt
126 17 1 1 T 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\LV_Time.txt
127 18 2 1 T 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\HV_Time.txt
128 19 1 1 T 3 1 2030 1.00

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129	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_AM\LV_Time.txt	20	2	1	T	3	1	2030	1.00
130	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_AM\HV_Time.txt	21	1	1	T	3	1	2045	1.00
131	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_AM\LV_Time.txt	22	2	1	T	3	1	2045	1.00
132	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_AM\HV_Time.txt	23	1	1	T	3	1	2059	1.00
133	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_AM\LV_Time.txt	24	2	1	T	3	1	2059	1.00
134	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_AM\HV_Time.txt	25	1	1	D	3	0	2030	1.00
135	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_AM\LV_Distance.txt	26	2	1	D	3	0	2030	1.00
136	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_AM\HV_Distance.txt	27	1	1	D	3	0	2045	1.00
137	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_AM\LV_Distance.txt	28	2	1	D	3	0	2045	1.00
138	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_AM\HV_Distance.txt	29	1	1	D	3	0	2059	1.00
139	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_AM\LV_Distance.txt	30	2	1	D	3	0	2059	1.00
140	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_AM\HV_Distance.txt	31	1	1	D	3	1	2030	1.00
141	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_AM\LV_Distance.txt	32	2	1	D	3	1	2030	1.00
142	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_AM\HV_Distance.txt	33	1	1	D	3	1	2045	1.00
143	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_AM\LV_Distance.txt	34	2	1	D	3	1	2045	1.00
144	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_AM\HV_Distance.txt	35	1	1	D	3	1	2059	1.00
145	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_AM\LV_Distance.txt	36	2	1	D	3	1	2059	1.00
146	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_AM\HV_Distance.txt	37	1	2	V	3	0	2030	1.00
147	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Demand.TXT	38	2	2	V	3	0	2030	1.00
148	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Demand.TXT	39	1	2	V	3	0	2045	1.00
149	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Demand.TXT	40	2	2	V	3	0	2045	1.00
150	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\HV_Demand.TXT	41	1	2	V	3	0	2059	1.00
151	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Demand.TXT	42	2	2	V	3	0	2059	1.00

	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Demand.TXT						
152	43	1	2	V	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_IP\LV_Demand.TXT						
153	44	2	2	V	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_IP\HV_Demand.TXT						
154	45	1	2	V	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_IP\LV_Demand.TXT						
155	46	2	2	V	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_IP\HV_Demand.TXT						
156	47	1	2	V	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_IP\LV_Demand.TXT						
157	48	2	2	V	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_IP\HV_Demand.TXT						
158	49	1	2	T	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Time.txt						
159	50	2	2	T	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Time.txt						
160	51	1	2	T	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Time.txt						
161	52	2	2	T	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\HV_Time.txt						
162	53	1	2	T	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Time.txt						
163	54	2	2	T	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Time.txt						
164	55	1	2	T	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_IP\LV_Time.txt						
165	56	2	2	T	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_IP\HV_Time.txt						
166	57	1	2	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_IP\LV_Time.txt						
167	58	2	2	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_IP\HV_Time.txt						
168	59	1	2	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_IP\LV_Time.txt						
169	60	2	2	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_IP\HV_Time.txt						
170	61	1	2	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Distance.txt						
171	62	2	2	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Distance.txt						
172	63	1	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Distance.txt						
173	64	2	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\HV_Distance.txt						
174	65	1	2	D	3	0	2059 1.00



175	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Distance.txt	66	2	2	D	3	0	2059	1.00
176	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Distance.txt	67	1	2	D	3	1	2030	1.00
177	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_IP\LV_Distance.txt	68	2	2	D	3	1	2030	1.00
178	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_IP\HV_Distance.txt	69	1	2	D	3	1	2045	1.00
179	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_IP\LV_Distance.txt	70	2	2	D	3	1	2045	1.00
180	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_IP\HV_Distance.txt	71	1	2	D	3	1	2059	1.00
181	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_IP\LV_Distance.txt	72	2	2	D	3	1	2059	1.00
182	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_IP\HV_Distance.txt	73	1	3	V	3	0	2030	1.00
183	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Demand.TXT	74	2	3	V	3	0	2030	1.00
184	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Demand.TXT	75	1	3	V	3	0	2045	1.00
185	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Demand.TXT	76	2	3	V	3	0	2045	1.00
186	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\HV_Demand.TXT	77	1	3	V	3	0	2059	1.00
187	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\LV_Demand.TXT	78	2	3	V	3	0	2059	1.00
188	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\HV_Demand.TXT	79	1	3	V	3	1	2030	1.00
189	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_PM\LV_Demand.TXT	80	2	3	V	3	1	2030	1.00
190	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2030_Lime_Green_PM\HV_Demand.TXT	81	1	3	V	3	1	2045	1.00
191	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_PM\LV_Demand.TXT	82	2	3	V	3	1	2045	1.00
192	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2045_Lime_Green_PM\HV_Demand.TXT	83	1	3	V	3	1	2059	1.00
193	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_PM\LV_Demand.TXT	84	2	3	V	3	1	2059	1.00
194	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime_Green\2060_Lime_Green_PM\HV_Demand.TXT	85	1	3	T	3	0	2030	1.00
195	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Time.txt	86	2	3	T	3	0	2030	1.00
196	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Time.txt	87	1	3	T	3	0	2045	1.00
197	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Time.txt	88	2	3	T	3	0	2045	1.00

G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045\_DN\_PM\HV\_Time.txt  
198 89 1 3 T 3 0 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\LV\_Time.txt  
199 90 2 3 T 3 0 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\HV\_Time.txt  
200 91 1 3 T 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2030\_Lime\_Green\_PM\LV\_Time.txt  
201 92 2 3 T 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2030\_Lime\_Green\_PM\HV\_Time.txt  
202 93 1 3 T 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2045\_Lime\_Green\_PM\LV\_Time.txt  
203 94 2 3 T 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2045\_Lime\_Green\_PM\HV\_Time.txt  
204 95 1 3 T 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2060\_Lime\_Green\_PM\LV\_Time.txt  
205 96 2 3 T 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2060\_Lime\_Green\_PM\HV\_Time.txt  
206 97 1 3 D 3 0 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030\_DN\_PM\LV\_Distance.txt  
207 98 2 3 D 3 0 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030\_DN\_PM\HV\_Distance.txt  
208 99 1 3 D 3 0 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045\_DN\_PM\LV\_Distance.txt  
209 100 2 3 D 3 0 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045\_DN\_PM\HV\_Distance.txt  
210 101 1 3 D 3 0 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\LV\_Distance.txt  
211 102 2 3 D 3 0 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\HV\_Distance.txt  
212 103 1 3 D 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2030\_Lime\_Green\_PM\LV\_Distance.txt  
213 104 2 3 D 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2030\_Lime\_Green\_PM\HV\_Distance.txt  
214 105 1 3 D 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2045\_Lime\_Green\_PM\LV\_Distance.txt  
215 106 2 3 D 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2045\_Lime\_Green\_PM\HV\_Distance.txt  
216 107 1 3 D 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2060\_Lime\_Green\_PM\LV\_Distance.txt  
217 108 2 3 D 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Lime\_Green\2060\_Lime\_Green\_PM\HV\_Distance.txt  
218 109 1 X R 3 X XXXX 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2020\_DN\_Ref\LV\_Distance.txt  
219 110 2 X R 3 X XXXX 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2020\_DN\_Ref\HV\_Distance.txt  
220

221

222 SECTORS

223 \*mode Sector\_file\_name

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SCHEME SPECIFIC PARAMETERS

PARAMETERS

TUBA\_version 1.9.8  
run\_name N25 Waterford to Glenmore - Magenta Route Option  
do\_min\_name Do Min  
do\_som\_name Magenta  
first\_yr 2030  
horizon\_yr 2059  
modelled\_yrs 2030 2045 2059  
detail Yes  
current\_yr 2020  
print\_warn 5.0  
P&R\_car\_speed 65.0  
zones\_as\_sectors No

TIME\_SLICES

*no.	duration (min)	annualisation	period	description
1	60	646	1	0800-0900
2	60	2424	2	1200-1400
3	60	640	3	1700-1800

SCHEMES\_DM

*Mode	1st Construction year	Opening_yr	Stage
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DO\_MIN\_COSTS

*Type	Mode	Funding	Cost	Price	RPI
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DO\_MIN\_PROFILE

*Year	Mode	%Const	%Land	%Prep	%Super	%Maint	%Op	%Grant
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%Dev

DO\_MIN\_DELAY\_COSTS

*Year	Mode	Business	Commuting	Other	Freight
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SCHEMES\_DS

*Mode	1st Construction year	Opening_yr	Stage
1	2028	2030	OP
2	2028	2030	OP

DO\_SOM\_COSTS

*Type	Mode	Funding	Cost	Price	RPI
C	1	cen	96081.6	F	100.00
S	1	cen	9361.0	F	100.00
L	1	cen	7881.0	F	100.00
P	1	cen	4118.9	F	100.00
M	1	cen	11821.5	F	100.00

DO\_SOM\_PROFILE

*Year	Mode	%Const	%Land	%Prep	%Super	%Maint	%Op	%Grant
2020	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2021	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2022	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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96 DO_SOM_DELAY_COSTS
97 *Year Mode Business Commuting Other Freight
98
99 BENEFIT_CHANGE
100 *% change p.a.
101 *Start_yr End_yr Submode ChangePer1 ChangePer2 ChangePer3 ChangePer4 ChangePer5
102
103 USER_CLASSES
104 *no. Veh/submode purpose person_type
105 1 1 0 0
106 2 4 0 0
107
108 INPUT_MATRICES
109 *no. userclasses timeslice type format scenario year factor filename
110 1 1 1 V 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\LV_Demand.TXT
111 2 2 1 V 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\HV_Demand.TXT
112 3 1 1 V 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\LV_Demand.TXT
113 4 2 1 V 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\HV_Demand.TXT
114 5 1 1 V 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\LV_Demand.TXT
115 6 2 1 V 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\HV_Demand.TXT
116 7 1 1 V 3 1 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Magenta\2030_Magenta_AM\LV_Demand.TXT
117 8 2 1 V 3 1 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Magenta\2030_Magenta_AM\HV_Demand.TXT
118 9 1 1 V 3 1 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Magenta\2045_Magenta_AM\LV_Demand.TXT
119 10 2 1 V 3 1 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Magenta\2045_Magenta_AM\HV_Demand.TXT
120 11 1 1 V 3 1 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Magenta\2060_Magenta_AM\LV_Demand.TXT
121 12 2 1 V 3 1 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Magenta\2060_Magenta_AM\HV_Demand.TXT
122 13 1 1 T 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\LV_Time.txt
123 14 2 1 T 3 0 2030 1.00
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124 15 1 1 T 3 0 2045 1.00
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Skims\DN\2045_DN_AM\LV_Time.txt
125 16 2 1 T 3 0 2045 1.00
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Skims\DN\2045_DN_AM\HV_Time.txt
126 17 1 1 T 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\LV_Time.txt
127 18 2 1 T 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\HV_Time.txt
128 19 1 1 T 3 1 2030 1.00

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	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2030_Magenta_AM\LV_Time.txt						
129	20	2	1	T	3	1	2030 1.00
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130	21	1	1	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2045_Magenta_AM\LV_Time.txt						
131	22	2	1	T	3	1	2045 1.00
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132	23	1	1	T	3	1	2059 1.00
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133	24	2	1	T	3	1	2059 1.00
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134	25	1	1	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_AM\LV_Distance.txt						
135	26	2	1	D	3	0	2030 1.00
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136	27	1	1	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_AM\LV_Distance.txt						
137	28	2	1	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_AM\HV_Distance.txt						
138	29	1	1	D	3	0	2059 1.00
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140	31	1	1	D	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2030_Magenta_AM\LV_Distance.txt						
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142	33	1	1	D	3	1	2045 1.00
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143	34	2	1	D	3	1	2045 1.00
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145	36	2	1	D	3	1	2059 1.00
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151	42	2	2	V	3	0	2059 1.00

	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Demand.TXT						
152	43	1	2	V	3	1	2030 1.00
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154	45	1	2	V	3	1	2045 1.00
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155	46	2	2	V	3	1	2045 1.00
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162	53	1	2	T	3	0	2059 1.00
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165	56	2	2	T	3	1	2030 1.00
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166	57	1	2	T	3	1	2045 1.00
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167	58	2	2	T	3	1	2045 1.00
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169	60	2	2	T	3	1	2059 1.00
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172	63	1	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Distance.txt						
173	64	2	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\HV_Distance.txt						
174	65	1	2	D	3	0	2059 1.00



175	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Distance.txt	66	2	2	D	3	0	2059	1.00
176	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Distance.txt	67	1	2	D	3	1	2030	1.00
177	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2030_Magenta_IP\LV_Distance.txt	68	2	2	D	3	1	2030	1.00
178	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2030_Magenta_IP\HV_Distance.txt	69	1	2	D	3	1	2045	1.00
179	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2045_Magenta_IP\LV_Distance.txt	70	2	2	D	3	1	2045	1.00
180	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2045_Magenta_IP\HV_Distance.txt	71	1	2	D	3	1	2059	1.00
181	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2060_Magenta_IP\LV_Distance.txt	72	2	2	D	3	1	2059	1.00
182	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2060_Magenta_IP\HV_Distance.txt	73	1	3	V	3	0	2030	1.00
183	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Demand.TXT	74	2	3	V	3	0	2030	1.00
184	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Demand.TXT	75	1	3	V	3	0	2045	1.00
185	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Demand.TXT	76	2	3	V	3	0	2045	1.00
186	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\HV_Demand.TXT	77	1	3	V	3	0	2059	1.00
187	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\LV_Demand.TXT	78	2	3	V	3	0	2059	1.00
188	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\HV_Demand.TXT	79	1	3	V	3	1	2030	1.00
189	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2030_Magenta_PM\LV_Demand.TXT	80	2	3	V	3	1	2030	1.00
190	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2030_Magenta_PM\HV_Demand.TXT	81	1	3	V	3	1	2045	1.00
191	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2045_Magenta_PM\LV_Demand.TXT	82	2	3	V	3	1	2045	1.00
192	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2045_Magenta_PM\HV_Demand.TXT	83	1	3	V	3	1	2059	1.00
193	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2060_Magenta_PM\LV_Demand.TXT	84	2	3	V	3	1	2059	1.00
194	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Magenta\2060_Magenta_PM\HV_Demand.TXT	85	1	3	T	3	0	2030	1.00
195	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Time.txt	86	2	3	T	3	0	2030	1.00
196	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Time.txt	87	1	3	T	3	0	2045	1.00
197	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Time.txt	88	2	3	T	3	0	2045	1.00

G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA  
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 220

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222 SECTORS

223 \*mode Sector\_file\_name

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SCHEME SPECIFIC PARAMETERS

PARAMETERS

TUBA\_version 1.9.8  
run\_name N25 Waterford to Glenmore - Navy Route Option  
do\_min\_name Do Min  
do\_som\_name Navy  
first\_yr 2030  
horizon\_yr 2059  
modelled\_yrs 2030 2045 2059  
detail Yes  
current\_yr 2020  
print\_warn 5.0  
P&R\_car\_speed 65.0  
zones\_as\_sectors No

TIME\_SLICES

*no.	duration (min)	annualisation	period	description
1	60	646	1	0800-0900
2	60	2424	2	1200-1400
3	60	640	3	1700-1800

SCHEMES\_DM

*Mode	1st Construction year	Opening_yr	Stage
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DO\_MIN\_COSTS

*Type	Mode	Funding	Cost	Price	RPI
-------	------	---------	------	-------	-----

DO\_MIN\_PROFILE

*Year	Mode	%Const	%Land	%Prep	%Super	%Maint	%Op	%Grant
-------	------	--------	-------	-------	--------	--------	-----	--------

%Dev

DO\_MIN\_DELAY\_COSTS

*Year	Mode	Business	Commuting	Other	Freight
-------	------	----------	-----------	-------	---------

SCHEMES\_DS

*Mode	1st Construction year	Opening_yr	Stage
1	2028	2030	OP
2	2028	2030	OP

DO\_SOM\_COSTS

*Type	Mode	Funding	Cost	Price	RPI
C	1	cen	80803.4	F	100.00
S	1	cen	4109.2	F	100.00
L	1	cen	14026.4	F	100.00
P	1	cen	3616.1	F	100.00
M	1	cen	12075.7	F	100.00

DO\_SOM\_PROFILE

*Year	Mode	%Const	%Land	%Prep	%Super	%Maint	%Op	%Grant
2020	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2021	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2022	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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96 DO_SOM_DELAY_COSTS
97 *Year Mode Business Commuting Other Freight
98
99 BENEFIT_CHANGE
100 *% change p.a.
101 *Start_yr End_yr Submode ChangePer1 ChangePer2 ChangePer3 ChangePer4 ChangePer5
102
103 USER_CLASSES
104 *no. Veh/submode purpose person_type
105 1 1 0 0
106 2 4 0 0
107
108 INPUT_MATRICES
109 *no. userclasses timeslice type format scenario year factor filename
110 1 1 1 V 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\LV_Demand.TXT
111 2 2 1 V 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\HV_Demand.TXT
112 3 1 1 V 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\LV_Demand.TXT
113 4 2 1 V 3 0 2045 1.00
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Skims\DN\2045_DN_AM\HV_Demand.TXT
114 5 1 1 V 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\LV_Demand.TXT
115 6 2 1 V 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\HV_Demand.TXT
116 7 1 1 V 3 1 2030 1.00
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117 8 2 1 V 3 1 2030 1.00
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Skims\Navy\2030_Navy_AM\HV_Demand.TXT
118 9 1 1 V 3 1 2045 1.00
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Skims\Navy\2045_Navy_AM\LV_Demand.TXT
119 10 2 1 V 3 1 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Navy\2045_Navy_AM\HV_Demand.TXT
120 11 1 1 V 3 1 2059 1.00
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121 12 2 1 V 3 1 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
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122 13 1 1 T 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
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123 14 2 1 T 3 0 2030 1.00
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Skims\DN\2030_DN_AM\HV_Time.txt
124 15 1 1 T 3 0 2045 1.00
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Skims\DN\2045_DN_AM\LV_Time.txt
125 16 2 1 T 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\HV_Time.txt
126 17 1 1 T 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\LV_Time.txt
127 18 2 1 T 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\HV_Time.txt
128 19 1 1 T 3 1 2030 1.00

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	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
129	Skims\Navy\2030_Navy_AM\LV_Time.txt	20	2	1	T	3	1	2030 1.00
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130	Skims\Navy\2030_Navy_AM\HV_Time.txt	21	1	1	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
131	Skims\Navy\2045_Navy_AM\LV_Time.txt	22	2	1	T	3	1	2045 1.00
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132	Skims\Navy\2045_Navy_AM\HV_Time.txt	23	1	1	T	3	1	2059 1.00
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133	Skims\Navy\2060_Navy_AM\LV_Time.txt	24	2	1	T	3	1	2059 1.00
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134	Skims\Navy\2060_Navy_AM\HV_Time.txt	25	1	1	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
135	Skims\DN\2030_DN_AM\LV_Distance.txt	26	2	1	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
136	Skims\DN\2030_DN_AM\HV_Distance.txt	27	1	1	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
137	Skims\DN\2045_DN_AM\LV_Distance.txt	28	2	1	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
138	Skims\DN\2045_DN_AM\HV_Distance.txt	29	1	1	D	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
139	Skims\DN\2060_DN_AM\LV_Distance.txt	30	2	1	D	3	0	2059 1.00
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140	Skims\DN\2060_DN_AM\HV_Distance.txt	31	1	1	D	3	1	2030 1.00
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141	Skims\Navy\2030_Navy_AM\LV_Distance.txt	32	2	1	D	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
142	Skims\Navy\2030_Navy_AM\HV_Distance.txt	33	1	1	D	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
143	Skims\Navy\2045_Navy_AM\LV_Distance.txt	34	2	1	D	3	1	2045 1.00
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144	Skims\Navy\2045_Navy_AM\HV_Distance.txt	35	1	1	D	3	1	2059 1.00
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145	Skims\Navy\2060_Navy_AM\LV_Distance.txt	36	2	1	D	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
146	Skims\Navy\2060_Navy_AM\HV_Distance.txt	37	1	2	V	3	0	2030 1.00
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147	Skims\DN\2030_DN_IP\LV_Demand.TXT	38	2	2	V	3	0	2030 1.00
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148	Skims\DN\2030_DN_IP\HV_Demand.TXT	39	1	2	V	3	0	2045 1.00
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149	Skims\DN\2045_DN_IP\LV_Demand.TXT	40	2	2	V	3	0	2045 1.00
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150	Skims\DN\2045_DN_IP\HV_Demand.TXT	41	1	2	V	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
151	Skims\DN\2060_DN_IP\LV_Demand.TXT	42	2	2	V	3	0	2059 1.00

	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Demand.TXT						
152	43	1	2	V	3	1	2030 1.00
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153	44	2	2	V	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2030_Navy_IP\HV_Demand.TXT						
154	45	1	2	V	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2045_Navy_IP\LV_Demand.TXT						
155	46	2	2	V	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2045_Navy_IP\HV_Demand.TXT						
156	47	1	2	V	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060_Navy_IP\LV_Demand.TXT						
157	48	2	2	V	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060_Navy_IP\HV_Demand.TXT						
158	49	1	2	T	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Time.txt						
159	50	2	2	T	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Time.txt						
160	51	1	2	T	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Time.txt						
161	52	2	2	T	3	0	2045 1.00
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162	53	1	2	T	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Time.txt						
163	54	2	2	T	3	0	2059 1.00
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164	55	1	2	T	3	1	2030 1.00
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165	56	2	2	T	3	1	2030 1.00
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166	57	1	2	T	3	1	2045 1.00
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167	58	2	2	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2045_Navy_IP\HV_Time.txt						
168	59	1	2	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060_Navy_IP\LV_Time.txt						
169	60	2	2	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060_Navy_IP\HV_Time.txt						
170	61	1	2	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Distance.txt						
171	62	2	2	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Distance.txt						
172	63	1	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Distance.txt						
173	64	2	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\HV_Distance.txt						
174	65	1	2	D	3	0	2059 1.00



175	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Distance.txt	66	2	2	D	3	0	2059	1.00
176	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Distance.txt	67	1	2	D	3	1	2030	1.00
177	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2030_Navy_IP\LV_Distance.txt	68	2	2	D	3	1	2030	1.00
178	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2030_Navy_IP\HV_Distance.txt	69	1	2	D	3	1	2045	1.00
179	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2045_Navy_IP\LV_Distance.txt	70	2	2	D	3	1	2045	1.00
180	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2045_Navy_IP\HV_Distance.txt	71	1	2	D	3	1	2059	1.00
181	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060_Navy_IP\LV_Distance.txt	72	2	2	D	3	1	2059	1.00
182	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060_Navy_IP\HV_Distance.txt	73	1	3	V	3	0	2030	1.00
183	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Demand.TXT	74	2	3	V	3	0	2030	1.00
184	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Demand.TXT	75	1	3	V	3	0	2045	1.00
185	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Demand.TXT	76	2	3	V	3	0	2045	1.00
186	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\HV_Demand.TXT	77	1	3	V	3	0	2059	1.00
187	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\LV_Demand.TXT	78	2	3	V	3	0	2059	1.00
188	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\HV_Demand.TXT	79	1	3	V	3	1	2030	1.00
189	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2030_Navy_PM\LV_Demand.TXT	80	2	3	V	3	1	2030	1.00
190	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2030_Navy_PM\HV_Demand.TXT	81	1	3	V	3	1	2045	1.00
191	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2045_Navy_PM\LV_Demand.TXT	82	2	3	V	3	1	2045	1.00
192	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2045_Navy_PM\HV_Demand.TXT	83	1	3	V	3	1	2059	1.00
193	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060_Navy_PM\LV_Demand.TXT	84	2	3	V	3	1	2059	1.00
194	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060_Navy_PM\HV_Demand.TXT	85	1	3	T	3	0	2030	1.00
195	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Time.txt	86	2	3	T	3	0	2030	1.00
196	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Time.txt	87	1	3	T	3	0	2045	1.00
197	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Time.txt	88	2	3	T	3	0	2045	1.00

G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045\_DN\_PM\HV\_Time.txt  
198 89 1 3 T 3 0 2059 1.00  
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199 90 2 3 T 3 0 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\HV\_Time.txt  
200 91 1 3 T 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2030\_Navy\_PM\LV\_Time.txt  
201 92 2 3 T 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2030\_Navy\_PM\HV\_Time.txt  
202 93 1 3 T 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2045\_Navy\_PM\LV\_Time.txt  
203 94 2 3 T 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2045\_Navy\_PM\HV\_Time.txt  
204 95 1 3 T 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060\_Navy\_PM\LV\_Time.txt  
205 96 2 3 T 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060\_Navy\_PM\HV\_Time.txt  
206 97 1 3 D 3 0 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030\_DN\_PM\LV\_Distance.txt  
207 98 2 3 D 3 0 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030\_DN\_PM\HV\_Distance.txt  
208 99 1 3 D 3 0 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045\_DN\_PM\LV\_Distance.txt  
209 100 2 3 D 3 0 2045 1.00  
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210 101 1 3 D 3 0 2059 1.00  
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211 102 2 3 D 3 0 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\HV\_Distance.txt  
212 103 1 3 D 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2030\_Navy\_PM\LV\_Distance.txt  
213 104 2 3 D 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2030\_Navy\_PM\HV\_Distance.txt  
214 105 1 3 D 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2045\_Navy\_PM\LV\_Distance.txt  
215 106 2 3 D 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2045\_Navy\_PM\HV\_Distance.txt  
216 107 1 3 D 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060\_Navy\_PM\LV\_Distance.txt  
217 108 2 3 D 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Navy\2060\_Navy\_PM\HV\_Distance.txt  
218 109 1 X R 3 X XXXX 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2020\_DN\_Ref\LV\_Distance.txt  
219 110 2 X R 3 X XXXX 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2020\_DN\_Ref\HV\_Distance.txt  
220

221

222 SECTORS

223 \*mode Sector\_file\_name

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SCHEME SPECIFIC PARAMETERS

PARAMETERS

TUBA\_version 1.9.8  
run\_name N25 Waterford to Glenmore - Purple Route Option  
do\_min\_name Do Min  
do\_som\_name Purple  
first\_yr 2030  
horizon\_yr 2059  
modelled\_yrs 2030 2045 2059  
detail Yes  
current\_yr 2020  
print\_warn 5.0  
P&R\_car\_speed 65.0  
zones\_as\_sectors No

TIME\_SLICES

*no.	duration (min)	annualisation	period	description
1	60	646	1	0800-0900
2	60	2424	2	1200-1400
3	60	640	3	1700-1800

SCHEMES\_DM

*Mode	1st Construction year	Opening_yr	Stage
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DO\_MIN\_COSTS

*Type	Mode	Funding	Cost	Price	RPI
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DO\_MIN\_PROFILE

*Year	Mode	%Const	%Land	%Prep	%Super	%Maint	%Op	%Grant
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%Dev

DO\_MIN\_DELAY\_COSTS

*Year	Mode	Business	Commuting	Other	Freight
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SCHEMES\_DS

*Mode	1st Construction year	Opening_yr	Stage
1	2028	2030	OP
2	2028	2030	OP

DO\_SOM\_COSTS

*Type	Mode	Funding	Cost	Price	RPI
C	1	cen	112681.7	F	100.00
S	1	cen	6180.4	F	100.00
L	1	cen	16888.0	F	100.00
P	1	cen	5438.8	F	100.00
M	1	cen	14745.1	F	100.00

DO\_SOM\_PROFILE

*Year	Mode	%Const	%Land	%Prep	%Super	%Maint	%Op	%Grant
2020	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2021	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2022	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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96 DO_SOM_DELAY_COSTS
97 *Year Mode Business Commuting Other Freight
98
99 BENEFIT_CHANGE
100 *% change p.a.
101 *Start_yr End_yr Submode ChangePer1 ChangePer2 ChangePer3 ChangePer4 ChangePer5
102
103 USER_CLASSES
104 *no. Veh/submode purpose person_type
105 1 1 0 0
106 2 4 0 0
107
108 INPUT_MATRICES
109 *no. userclasses timeslice type format scenario year factor filename
110 1 1 1 V 3 0 2030 1.00
111 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
112 Skims\DN\2030_DN_AM\LV_Demand.TXT
113 2 2 1 V 3 0 2030 1.00
114 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
115 Skims\DN\2030_DN_AM\HV_Demand.TXT
116 3 1 1 V 3 0 2045 1.00
117 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
118 Skims\DN\2045_DN_AM\LV_Demand.TXT
119 4 2 1 V 3 0 2045 1.00
120 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
121 Skims\DN\2045_DN_AM\HV_Demand.TXT
122 5 1 1 V 3 0 2059 1.00
123 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
124 Skims\DN\2060_DN_AM\LV_Demand.TXT
125 6 2 1 V 3 0 2059 1.00
126 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
127 Skims\DN\2060_DN_AM\HV_Demand.TXT
128 7 1 1 V 3 1 2030 1.00
129 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
130 Skims\Purple\2030_Purple_AM\LV_Demand.TXT
131 8 2 1 V 3 1 2030 1.00
132 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
133 Skims\Purple\2030_Purple_AM\HV_Demand.TXT
134 9 1 1 V 3 1 2045 1.00
135 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
136 Skims\Purple\2045_Purple_AM\LV_Demand.TXT
137 10 2 1 V 3 1 2045 1.00
138 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
139 Skims\Purple\2045_Purple_AM\HV_Demand.TXT
140 11 1 1 V 3 1 2059 1.00
141 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
142 Skims\Purple\2060_Purple_AM\LV_Demand.TXT
143 12 2 1 V 3 1 2059 1.00
144 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
145 Skims\Purple\2060_Purple_AM\HV_Demand.TXT
146 13 1 1 T 3 0 2030 1.00
147 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
148 Skims\DN\2030_DN_AM\LV_Time.txt
149 14 2 1 T 3 0 2030 1.00
150 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
151 Skims\DN\2030_DN_AM\HV_Time.txt
152 15 1 1 T 3 0 2045 1.00
153 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
154 Skims\DN\2045_DN_AM\LV_Time.txt
155 16 2 1 T 3 0 2045 1.00
156 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
157 Skims\DN\2045_DN_AM\HV_Time.txt
158 17 1 1 T 3 0 2059 1.00
159 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
160 Skims\DN\2060_DN_AM\LV_Time.txt
161 18 2 1 T 3 0 2059 1.00
162 G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
163 Skims\DN\2060_DN_AM\HV_Time.txt
164 19 1 1 T 3 1 2030 1.00

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	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_AM\LV_Time.txt						
129	20	2	1	T	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_AM\HV_Time.txt						
130	21	1	1	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_AM\LV_Time.txt						
131	22	2	1	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_AM\HV_Time.txt						
132	23	1	1	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_AM\LV_Time.txt						
133	24	2	1	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_AM\HV_Time.txt						
134	25	1	1	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_AM\LV_Distance.txt						
135	26	2	1	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_AM\HV_Distance.txt						
136	27	1	1	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_AM\LV_Distance.txt						
137	28	2	1	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_AM\HV_Distance.txt						
138	29	1	1	D	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_AM\LV_Distance.txt						
139	30	2	1	D	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_AM\HV_Distance.txt						
140	31	1	1	D	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_AM\LV_Distance.txt						
141	32	2	1	D	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_AM\HV_Distance.txt						
142	33	1	1	D	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_AM\LV_Distance.txt						
143	34	2	1	D	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_AM\HV_Distance.txt						
144	35	1	1	D	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_AM\LV_Distance.txt						
145	36	2	1	D	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_AM\HV_Distance.txt						
146	37	1	2	V	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Demand.TXT						
147	38	2	2	V	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Demand.TXT						
148	39	1	2	V	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Demand.TXT						
149	40	2	2	V	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\HV_Demand.TXT						
150	41	1	2	V	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Demand.TXT						
151	42	2	2	V	3	0	2059 1.00

	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Demand.TXT						
152	43	1	2	V	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_IP\LV_Demand.TXT						
153	44	2	2	V	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_IP\HV_Demand.TXT						
154	45	1	2	V	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_IP\LV_Demand.TXT						
155	46	2	2	V	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_IP\HV_Demand.TXT						
156	47	1	2	V	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_IP\LV_Demand.TXT						
157	48	2	2	V	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_IP\HV_Demand.TXT						
158	49	1	2	T	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Time.txt						
159	50	2	2	T	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Time.txt						
160	51	1	2	T	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Time.txt						
161	52	2	2	T	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\HV_Time.txt						
162	53	1	2	T	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Time.txt						
163	54	2	2	T	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Time.txt						
164	55	1	2	T	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_IP\LV_Time.txt						
165	56	2	2	T	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_IP\HV_Time.txt						
166	57	1	2	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_IP\LV_Time.txt						
167	58	2	2	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_IP\HV_Time.txt						
168	59	1	2	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_IP\LV_Time.txt						
169	60	2	2	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_IP\HV_Time.txt						
170	61	1	2	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Distance.txt						
171	62	2	2	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Distance.txt						
172	63	1	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Distance.txt						
173	64	2	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\HV_Distance.txt						
174	65	1	2	D	3	0	2059 1.00



175	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Distance.txt	66	2	2	D	3	0	2059	1.00
176	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Distance.txt	67	1	2	D	3	1	2030	1.00
177	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_IP\LV_Distance.txt	68	2	2	D	3	1	2030	1.00
178	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_IP\HV_Distance.txt	69	1	2	D	3	1	2045	1.00
179	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_IP\LV_Distance.txt	70	2	2	D	3	1	2045	1.00
180	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_IP\HV_Distance.txt	71	1	2	D	3	1	2059	1.00
181	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_IP\LV_Distance.txt	72	2	2	D	3	1	2059	1.00
182	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_IP\HV_Distance.txt	73	1	3	V	3	0	2030	1.00
183	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Demand.TXT	74	2	3	V	3	0	2030	1.00
184	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Demand.TXT	75	1	3	V	3	0	2045	1.00
185	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Demand.TXT	76	2	3	V	3	0	2045	1.00
186	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\HV_Demand.TXT	77	1	3	V	3	0	2059	1.00
187	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\LV_Demand.TXT	78	2	3	V	3	0	2059	1.00
188	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\HV_Demand.TXT	79	1	3	V	3	1	2030	1.00
189	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_PM\LV_Demand.TXT	80	2	3	V	3	1	2030	1.00
190	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2030_Purple_PM\HV_Demand.TXT	81	1	3	V	3	1	2045	1.00
191	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_PM\LV_Demand.TXT	82	2	3	V	3	1	2045	1.00
192	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2045_Purple_PM\HV_Demand.TXT	83	1	3	V	3	1	2059	1.00
193	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_PM\LV_Demand.TXT	84	2	3	V	3	1	2059	1.00
194	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Purple\2060_Purple_PM\HV_Demand.TXT	85	1	3	T	3	0	2030	1.00
195	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Time.txt	86	2	3	T	3	0	2030	1.00
196	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Time.txt	87	1	3	T	3	0	2045	1.00
197	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Time.txt	88	2	3	T	3	0	2045	1.00



221

222 SECTORS

223 \*mode Sector\_file\_name

224



61	2026 0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	2027 0.0	1	23.8	50.0	75.0	0.0	0.0	0.0	0.0
63	2028 0.0	1	50.2	50.0	15.0	50.0	0.0	0.0	0.0
64	2029 0.0	1	26.0	0.0	10.0	50.0	0.0	0.0	0.0
65	2030 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
66	2031 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
67	2032 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
68	2033 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
69	2034 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
70	2035 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
71	2036 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
72	2037 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
73	2038 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
74	2039 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
75	2040 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
76	2041 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
77	2042 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
78	2043 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
79	2044 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
80	2045 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
81	2046 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
82	2047 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
83	2048 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
84	2049 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
85	2050 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
86	2051 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
87	2052 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
88	2053 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
89	2054 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
90	2055 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
91	2056 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
92	2057 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
93	2058 0.0	1	0.0	0.0	0.0	0.0	3.3	0.0	0.0
94	2059 0.0	1	0.0	0.0	0.0	0.0	4.3	0.0	0.0

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96 DO_SOM_DELAY_COSTS
97 *Year Mode Business Commuting Other Freight
98
99 BENEFIT_CHANGE
100 *% change p.a.
101 *Start_yr End_yr Submode ChangePer1 ChangePer2 ChangePer3 ChangePer4 ChangePer5
102
103 USER_CLASSES
104 *no. Veh/submode purpose person_type
105 1 1 0 0
106 2 4 0 0
107
108 INPUT_MATRICES
109 *no. userclasses timeslice type format scenario year factor filename
110 1 1 1 V 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\LV_Demand.TXT
111 2 2 1 V 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\HV_Demand.TXT
112 3 1 1 V 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\LV_Demand.TXT
113 4 2 1 V 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\HV_Demand.TXT
114 5 1 1 V 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\LV_Demand.TXT
115 6 2 1 V 3 0 2059 1.00
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Skims\DN\2060_DN_AM\HV_Demand.TXT
116 7 1 1 V 3 1 2030 1.00
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Skims\Red\2030_Red_AM\LV_Demand.TXT
117 8 2 1 V 3 1 2030 1.00
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Skims\Red\2030_Red_AM\HV_Demand.TXT
118 9 1 1 V 3 1 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Red\2045_Red_AM\LV_Demand.TXT
119 10 2 1 V 3 1 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Red\2045_Red_AM\HV_Demand.TXT
120 11 1 1 V 3 1 2059 1.00
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Skims\Red\2060_Red_AM\LV_Demand.TXT
121 12 2 1 V 3 1 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Red\2060_Red_AM\HV_Demand.TXT
122 13 1 1 T 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\LV_Time.txt
123 14 2 1 T 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\HV_Time.txt
124 15 1 1 T 3 0 2045 1.00
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125 16 2 1 T 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
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126 17 1 1 T 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\LV_Time.txt
127 18 2 1 T 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\HV_Time.txt
128 19 1 1 T 3 1 2030 1.00

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	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030_Red_AM\LV_Time.txt						
129	20	2	1	T	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030_Red_AM\HV_Time.txt						
130	21	1	1	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2045_Red_AM\LV_Time.txt						
131	22	2	1	T	3	1	2045 1.00
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132	23	1	1	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060_Red_AM\LV_Time.txt						
133	24	2	1	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060_Red_AM\HV_Time.txt						
134	25	1	1	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_AM\LV_Distance.txt						
135	26	2	1	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_AM\HV_Distance.txt						
136	27	1	1	D	3	0	2045 1.00
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137	28	2	1	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_AM\HV_Distance.txt						
138	29	1	1	D	3	0	2059 1.00
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139	30	2	1	D	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_AM\HV_Distance.txt						
140	31	1	1	D	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030_Red_AM\LV_Distance.txt						
141	32	2	1	D	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030_Red_AM\HV_Distance.txt						
142	33	1	1	D	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2045_Red_AM\LV_Distance.txt						
143	34	2	1	D	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2045_Red_AM\HV_Distance.txt						
144	35	1	1	D	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060_Red_AM\LV_Distance.txt						
145	36	2	1	D	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060_Red_AM\HV_Distance.txt						
146	37	1	2	V	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Demand.TXT						
147	38	2	2	V	3	0	2030 1.00
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148	39	1	2	V	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Demand.TXT						
149	40	2	2	V	3	0	2045 1.00
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150	41	1	2	V	3	0	2059 1.00
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151	42	2	2	V	3	0	2059 1.00

	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Demand.TXT						
152	43	1	2	V	3	1	2030 1.00
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153	44	2	2	V	3	1	2030 1.00
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154	45	1	2	V	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2045_Red_IP\LV_Demand.TXT						
155	46	2	2	V	3	1	2045 1.00
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156	47	1	2	V	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060_Red_IP\LV_Demand.TXT						
157	48	2	2	V	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060_Red_IP\HV_Demand.TXT						
158	49	1	2	T	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Time.txt						
159	50	2	2	T	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Time.txt						
160	51	1	2	T	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Time.txt						
161	52	2	2	T	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\HV_Time.txt						
162	53	1	2	T	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Time.txt						
163	54	2	2	T	3	0	2059 1.00
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164	55	1	2	T	3	1	2030 1.00
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165	56	2	2	T	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030_Red_IP\HV_Time.txt						
166	57	1	2	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2045_Red_IP\LV_Time.txt						
167	58	2	2	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2045_Red_IP\HV_Time.txt						
168	59	1	2	T	3	1	2059 1.00
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169	60	2	2	T	3	1	2059 1.00
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170	61	1	2	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Distance.txt						
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	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Distance.txt						
172	63	1	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Distance.txt						
173	64	2	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\HV_Distance.txt						
174	65	1	2	D	3	0	2059 1.00



175	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Distance.txt	66	2	2	D	3	0	2059	1.00
176	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Distance.txt	67	1	2	D	3	1	2030	1.00
177	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030_Red_IP\LV_Distance.txt	68	2	2	D	3	1	2030	1.00
178	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030_Red_IP\HV_Distance.txt	69	1	2	D	3	1	2045	1.00
179	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2045_Red_IP\LV_Distance.txt	70	2	2	D	3	1	2045	1.00
180	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2045_Red_IP\HV_Distance.txt	71	1	2	D	3	1	2059	1.00
181	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060_Red_IP\LV_Distance.txt	72	2	2	D	3	1	2059	1.00
182	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060_Red_IP\HV_Distance.txt	73	1	3	V	3	0	2030	1.00
183	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Demand.TXT	74	2	3	V	3	0	2030	1.00
184	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Demand.TXT	75	1	3	V	3	0	2045	1.00
185	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Demand.TXT	76	2	3	V	3	0	2045	1.00
186	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\HV_Demand.TXT	77	1	3	V	3	0	2059	1.00
187	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\LV_Demand.TXT	78	2	3	V	3	0	2059	1.00
188	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\HV_Demand.TXT	79	1	3	V	3	1	2030	1.00
189	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030_Red_PM\LV_Demand.TXT	80	2	3	V	3	1	2030	1.00
190	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030_Red_PM\HV_Demand.TXT	81	1	3	V	3	1	2045	1.00
191	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2045_Red_PM\LV_Demand.TXT	82	2	3	V	3	1	2045	1.00
192	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2045_Red_PM\HV_Demand.TXT	83	1	3	V	3	1	2059	1.00
193	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060_Red_PM\LV_Demand.TXT	84	2	3	V	3	1	2059	1.00
194	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060_Red_PM\HV_Demand.TXT	85	1	3	T	3	0	2030	1.00
195	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Time.txt	86	2	3	T	3	0	2030	1.00
196	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Time.txt	87	1	3	T	3	0	2045	1.00
197	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Time.txt	88	2	3	T	3	0	2045	1.00

G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045\_DN\_PM\HV\_Time.txt  
198 89 1 3 T 3 0 2059 1.00  
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G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\HV\_Time.txt  
200 91 1 3 T 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030\_Red\_PM\LV\_Time.txt  
201 92 2 3 T 3 1 2030 1.00  
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203 94 2 3 T 3 1 2045 1.00  
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204 95 1 3 T 3 1 2059 1.00  
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205 96 2 3 T 3 1 2059 1.00  
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206 97 1 3 D 3 0 2030 1.00  
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207 98 2 3 D 3 0 2030 1.00  
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209 100 2 3 D 3 0 2045 1.00  
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210 101 1 3 D 3 0 2059 1.00  
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211 102 2 3 D 3 0 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\HV\_Distance.txt  
212 103 1 3 D 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030\_Red\_PM\LV\_Distance.txt  
213 104 2 3 D 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2030\_Red\_PM\HV\_Distance.txt  
214 105 1 3 D 3 1 2045 1.00  
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215 106 2 3 D 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2045\_Red\_PM\HV\_Distance.txt  
216 107 1 3 D 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060\_Red\_PM\LV\_Distance.txt  
217 108 2 3 D 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Red\2060\_Red\_PM\HV\_Distance.txt  
218 109 1 X R 3 X XXXX 1.00  
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219 110 2 X R 3 X XXXX 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2020\_DN\_Ref\HV\_Distance.txt  
220

221

222 SECTORS

223 \*mode Sector\_file\_name

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SCHEME SPECIFIC PARAMETERS

PARAMETERS

TUBA\_version 1.9.8  
run\_name N25 Waterford to Glenmore - Teal Route Option  
do\_min\_name Do Min  
do\_som\_name Teal  
first\_yr 2030  
horizon\_yr 2059  
modelled\_yrs 2030 2045 2059  
detail Yes  
current\_yr 2020  
print\_warn 5.0  
P&R\_car\_speed 65.0  
zones\_as\_sectors No

TIME\_SLICES

*no.	duration (min)	annualisation	period	description
1	60	646	1	0800-0900
2	60	2424	2	1200-1400
3	60	640	3	1700-1800

SCHEMES\_DM

*Mode	1st Construction year	Opening_yr	Stage
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DO\_MIN\_COSTS

*Type	Mode	Funding	Cost	Price	RPI
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DO\_MIN\_PROFILE

*Year	Mode	%Const	%Land	%Prep	%Super	%Maint	%Op	%Grant
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%Dev

DO\_MIN\_DELAY\_COSTS

*Year	Mode	Business	Commuting	Other	Freight
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SCHEMES\_DS

*Mode	1st Construction year	Opening_yr	Stage
1	2028	2030	OP
2	2028	2030	OP

DO\_SOM\_COSTS

*Type	Mode	Funding	Cost	Price	RPI
C	1	cen	132435.1	F	100.00
S	1	cen	7191.3	F	100.00
L	1	cen	16831.7	F	100.00
P	1	cen	6328.3	F	100.00
M	1	cen	11313.1	F	100.00

DO\_SOM\_PROFILE

*Year	Mode	%Const	%Land	%Prep	%Super	%Maint	%Op	%Grant
2020	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2021	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2022	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0



```

96 DO_SOM_DELAY_COSTS
97 *Year Mode Business Commuting Other Freight
98
99 BENEFIT_CHANGE
100 *% change p.a.
101 *Start_yr End_yr Submode ChangePer1 ChangePer2 ChangePer3 ChangePer4 ChangePer5
102
103 USER_CLASSES
104 *no. Veh/submode purpose person_type
105 1 1 0 0
106 2 4 0 0
107
108 INPUT_MATRICES
109 *no. userclasses timeslice type format scenario year factor filename
110 1 1 1 V 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\LV_Demand.TXT
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G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\HV_Demand.TXT
112 3 1 1 V 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\LV_Demand.TXT
113 4 2 1 V 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\HV_Demand.TXT
114 5 1 1 V 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\LV_Demand.TXT
115 6 2 1 V 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\HV_Demand.TXT
116 7 1 1 V 3 1 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Teal\2030_Teal_AM\LV_Demand.TXT
117 8 2 1 V 3 1 2030 1.00
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Skims\Teal\2030_Teal_AM\HV_Demand.TXT
118 9 1 1 V 3 1 2045 1.00
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Skims\Teal\2045_Teal_AM\LV_Demand.TXT
119 10 2 1 V 3 1 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
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120 11 1 1 V 3 1 2059 1.00
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121 12 2 1 V 3 1 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\Teal\2060_Teal_AM\HV_Demand.TXT
122 13 1 1 T 3 0 2030 1.00
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Skims\DN\2030_DN_AM\LV_Time.txt
123 14 2 1 T 3 0 2030 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2030_DN_AM\HV_Time.txt
124 15 1 1 T 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\LV_Time.txt
125 16 2 1 T 3 0 2045 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2045_DN_AM\HV_Time.txt
126 17 1 1 T 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\LV_Time.txt
127 18 2 1 T 3 0 2059 1.00
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA
Skims\DN\2060_DN_AM\HV_Time.txt
128 19 1 1 T 3 1 2030 1.00

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	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
129	Skims\Teal\2030_Teal_AM\LV_Time.txt	20	2	1	T	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
130	Skims\Teal\2030_Teal_AM\HV_Time.txt	21	1	1	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
131	Skims\Teal\2045_Teal_AM\LV_Time.txt	22	2	1	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
132	Skims\Teal\2045_Teal_AM\HV_Time.txt	23	1	1	T	3	1	2059 1.00
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133	Skims\Teal\2060_Teal_AM\LV_Time.txt	24	2	1	T	3	1	2059 1.00
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134	Skims\Teal\2060_Teal_AM\HV_Time.txt	25	1	1	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
135	Skims\DN\2030_DN_AM\LV_Distance.txt	26	2	1	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
136	Skims\DN\2030_DN_AM\HV_Distance.txt	27	1	1	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
137	Skims\DN\2045_DN_AM\LV_Distance.txt	28	2	1	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
138	Skims\DN\2045_DN_AM\HV_Distance.txt	29	1	1	D	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
139	Skims\DN\2060_DN_AM\LV_Distance.txt	30	2	1	D	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
140	Skims\DN\2060_DN_AM\HV_Distance.txt	31	1	1	D	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
141	Skims\Teal\2030_Teal_AM\LV_Distance.txt	32	2	1	D	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
142	Skims\Teal\2030_Teal_AM\HV_Distance.txt	33	1	1	D	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
143	Skims\Teal\2045_Teal_AM\LV_Distance.txt	34	2	1	D	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
144	Skims\Teal\2045_Teal_AM\HV_Distance.txt	35	1	1	D	3	1	2059 1.00
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145	Skims\Teal\2060_Teal_AM\LV_Distance.txt	36	2	1	D	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
146	Skims\Teal\2060_Teal_AM\HV_Distance.txt	37	1	2	V	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
147	Skims\DN\2030_DN_IP\LV_Demand.TXT	38	2	2	V	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
148	Skims\DN\2030_DN_IP\HV_Demand.TXT	39	1	2	V	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
149	Skims\DN\2045_DN_IP\LV_Demand.TXT	40	2	2	V	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
150	Skims\DN\2045_DN_IP\HV_Demand.TXT	41	1	2	V	3	0	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA							
151	Skims\DN\2060_DN_IP\LV_Demand.TXT	42	2	2	V	3	0	2059 1.00

	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Demand.TXT						
152	43	1	2	V	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2030_Teal_IP\LV_Demand.TXT						
153	44	2	2	V	3	1	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2030_Teal_IP\HV_Demand.TXT						
154	45	1	2	V	3	1	2045 1.00
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155	46	2	2	V	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2045_Teal_IP\HV_Demand.TXT						
156	47	1	2	V	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060_Teal_IP\LV_Demand.TXT						
157	48	2	2	V	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060_Teal_IP\HV_Demand.TXT						
158	49	1	2	T	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Time.txt						
159	50	2	2	T	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Time.txt						
160	51	1	2	T	3	0	2045 1.00
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161	52	2	2	T	3	0	2045 1.00
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162	53	1	2	T	3	0	2059 1.00
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163	54	2	2	T	3	0	2059 1.00
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165	56	2	2	T	3	1	2030 1.00
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166	57	1	2	T	3	1	2045 1.00
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167	58	2	2	T	3	1	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2045_Teal_IP\HV_Time.txt						
168	59	1	2	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060_Teal_IP\LV_Time.txt						
169	60	2	2	T	3	1	2059 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060_Teal_IP\HV_Time.txt						
170	61	1	2	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\LV_Distance.txt						
171	62	2	2	D	3	0	2030 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_IP\HV_Distance.txt						
172	63	1	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\LV_Distance.txt						
173	64	2	2	D	3	0	2045 1.00
	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_IP\HV_Distance.txt						
174	65	1	2	D	3	0	2059 1.00



175	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\LV_Distance.txt	66	2	2	D	3	0	2059	1.00
176	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_IP\HV_Distance.txt	67	1	2	D	3	1	2030	1.00
177	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2030_Teal_IP\LV_Distance.txt	68	2	2	D	3	1	2030	1.00
178	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2030_Teal_IP\HV_Distance.txt	69	1	2	D	3	1	2045	1.00
179	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2045_Teal_IP\LV_Distance.txt	70	2	2	D	3	1	2045	1.00
180	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2045_Teal_IP\HV_Distance.txt	71	1	2	D	3	1	2059	1.00
181	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060_Teal_IP\LV_Distance.txt	72	2	2	D	3	1	2059	1.00
182	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060_Teal_IP\HV_Distance.txt	73	1	3	V	3	0	2030	1.00
183	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Demand.TXT	74	2	3	V	3	0	2030	1.00
184	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Demand.TXT	75	1	3	V	3	0	2045	1.00
185	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Demand.TXT	76	2	3	V	3	0	2045	1.00
186	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\HV_Demand.TXT	77	1	3	V	3	0	2059	1.00
187	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\LV_Demand.TXT	78	2	3	V	3	0	2059	1.00
188	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060_DN_PM\HV_Demand.TXT	79	1	3	V	3	1	2030	1.00
189	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2030_Teal_PM\LV_Demand.TXT	80	2	3	V	3	1	2030	1.00
190	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2030_Teal_PM\HV_Demand.TXT	81	1	3	V	3	1	2045	1.00
191	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2045_Teal_PM\LV_Demand.TXT	82	2	3	V	3	1	2045	1.00
192	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2045_Teal_PM\HV_Demand.TXT	83	1	3	V	3	1	2059	1.00
193	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060_Teal_PM\LV_Demand.TXT	84	2	3	V	3	1	2059	1.00
194	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060_Teal_PM\HV_Demand.TXT	85	1	3	T	3	0	2030	1.00
195	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\LV_Time.txt	86	2	3	T	3	0	2030	1.00
196	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030_DN_PM\HV_Time.txt	87	1	3	T	3	0	2045	1.00
197	G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045_DN_PM\LV_Time.txt	88	2	3	T	3	0	2045	1.00

G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045\_DN\_PM\HV\_Time.txt  
198 89 1 3 T 3 0 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\LV\_Time.txt  
199 90 2 3 T 3 0 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\HV\_Time.txt  
200 91 1 3 T 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2030\_Teal\_PM\LV\_Time.txt  
201 92 2 3 T 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2030\_Teal\_PM\HV\_Time.txt  
202 93 1 3 T 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2045\_Teal\_PM\LV\_Time.txt  
203 94 2 3 T 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2045\_Teal\_PM\HV\_Time.txt  
204 95 1 3 T 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060\_Teal\_PM\LV\_Time.txt  
205 96 2 3 T 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060\_Teal\_PM\HV\_Time.txt  
206 97 1 3 D 3 0 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030\_DN\_PM\LV\_Distance.txt  
207 98 2 3 D 3 0 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2030\_DN\_PM\HV\_Distance.txt  
208 99 1 3 D 3 0 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045\_DN\_PM\LV\_Distance.txt  
209 100 2 3 D 3 0 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2045\_DN\_PM\HV\_Distance.txt  
210 101 1 3 D 3 0 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\LV\_Distance.txt  
211 102 2 3 D 3 0 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2060\_DN\_PM\HV\_Distance.txt  
212 103 1 3 D 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2030\_Teal\_PM\LV\_Distance.txt  
213 104 2 3 D 3 1 2030 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2030\_Teal\_PM\HV\_Distance.txt  
214 105 1 3 D 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2045\_Teal\_PM\LV\_Distance.txt  
215 106 2 3 D 3 1 2045 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2045\_Teal\_PM\HV\_Distance.txt  
216 107 1 3 D 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060\_Teal\_PM\LV\_Distance.txt  
217 108 2 3 D 3 1 2059 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\Teal\2060\_Teal\_PM\HV\_Distance.txt  
218 109 1 X R 3 X XXXX 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2020\_DN\_Ref\LV\_Distance.txt  
219 110 2 X R 3 X XXXX 1.00  
G:\Projects\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Skims\DN\2020\_DN\_Ref\HV\_Distance.txt  
220

221

222 SECTORS

223 \*mode Sector\_file\_name

224

## Appendix E. TUBA Scheme Output Files

1 Transport User Benefit Appraisal TUBA (64-BIT) 1.9.8(1xA) - Interim  
2 Program run on Mon Nov 16, 2020 at 18:37:23

3  
4 ERRORS AND WARNINGS  
5 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
6 year 2080 is ignored  
7 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
8 year 2080 is ignored  
9 3 Warnings found

10 TUBA ECONOMICS FILE DIFFERENCES

11  
12 PARAMETERS - (used)  
13 TUBA\_version 1.9.8  
14 base\_year 2011  
15 pres\_val\_year 2011  
16 GDP\_base 100.00 0.00 0.00  
17 av\_ind\_tax 18.30 0.00 0.00  
18 nt\_carbdxvalues 20.00 20.00 20.00

19  
20 PARAMETERS - (std)  
21 TUBA\_version 1.9.8  
22 base\_year 2010  
23 pres\_val\_year 2010  
24 GDP\_base 100.00 0.00 0.00  
25 av\_ind\_tax 19.00 0.00 0.00  
26 nt\_carbdxvalues 26.60 79.80 53.20  
27 t\_carbdxvalues 11.80 11.80 11.80

28  
29 VEHICLE\_TYPE/SUBMODE - (used)

*no.	mode	new_mode	P&R	type	description
1	1	N	N	per	
	Car				
2	1	N	N	per	
	LGV				
3	1	N	N	fre	
	OGV1				
4	1	N	N	fre	
	OGV2				
5	2	N	N	per	
	Bus				
6	3	N	N	per	Light
	Rail				
7	3	N	N	per	Heavy
	Rail				

38  
39 VEHICLE\_TYPE/SUBMODE - (std)

*no.	mode	new_mode	P&R	type	description
1	1	N	N	per	
	Car				
2	1	N	N	per	LGV
	Personal				
3	1	N	N	fre	LGV
	Freight				
4	1	N	N	fre	
	OGV1				
5	1	N	N	fre	
	OGV2				
6	2	N	N	per	
	Bus				
7	3	N	N	per	Light
	Rail				
8	3	N	N	per	Heavy
	rail				

49  
50 FUEL\_TYPE - (used)

*no.	name
1	petrol

51  
52

```

53         2      diesel
54
55 FUEL_TYPE - (std)
56 *no.      name
57     1      Petrol
58     2      Diesel
59     3      Electric
60
61 TIME_PERIODS - (used)
62 *no.      description      comments
63     1      AM Peak          (8-9)
64     2      Inter Peak       (Avg
65     3      PM Peak          (17-1
66
67 TIME_PERIODS - (std)
68 *no.      description      comments
69     1      AM peak          (7-10 weekdays)
70     2      PM peak          (4-7 weekdays)
71     3      Inter-peak      (10-4 weekdays)
72     4      Off-peak         (7-7 weekdays)
73     5      Weekend          (weekend)
74
75 BREAKPOINTS - (used)
76 *description breakpoint1 breakpoint2 ..
77     Distance      1.0          5.0          10.0         15.0
78     20.0          50.0         100.0
79     TimeSaving    -5.0         -2.0         0.0          2.0
80     5.0
81
82 BREAKPOINTS - (std)
83 *description breakpoint1 breakpoint2 ..
84     Distance      1.0          5.0          10.0         25.0
85     50.0          100.0        200.0
86     TimeSaving    -5.0         -2.0         0.0          2.0
87     5.0
88
89 DISCOUNT_RATE - (used)
90 *% change p.a.
91 *Start_yr      End_yr      Rate
92     1           30         4.00
93     31          60         3.50
94     61          100        3.00
95
96 DISCOUNT_RATE - (std)
97 *% change p.a.
98 *Start_yr      End_yr      Rate
99     1           30         3.50
100    31          75         3.00
101    76          80         2.50
102
103 VALUE_OF_TIME_ALLOCATION - (used)
104 *Vtype/submode Purpose_type Person_type VOT_METHOD
105     1 1 1 3
106     1 2 1 3
107     1 3 1 3
108     1 1 2 3
109     1 2 2 3
110     1 3 2 3
111     3 1 1 3
112     3 2 1 3
113     3 3 1 3
114     3 1 2 3
115     3 2 2 3
116     3 3 2 3
117
118 VALUE_OF_TIME_ALLOCATION - (std)
119 *Vtype/submode Purpose_type Person_type VOT_METHOD
120     1 1 1 1
121     1 1 2 1

```

```

118         8   1   2   1
119
120 VALUE_OF_TIME_METHOD1 - (used)
121 *pence per hour
122 *Vtype/submode Person_type U_purpose1 U_purpose2 U_purpose3 .. xmid_purpose1
xmid_purpose2 xmis_purpose3 .. k_purpose1 k_purpose2 k_purpose3 ..
123
124 VALUE_OF_TIME_METHOD1 - (std)
125 *pence per hour
126 *Vtype/submode Person_type U_purpose1 U_purpose2 U_purpose3 .. xmid_purpose1
xmid_purpose2 xmis_purpose3 .. k_purpose1 k_purpose2 k_purpose3 ..
127     1           1           2480.0           0.0           0.0
128     67.0         0.0           0.0           67.0           0.0           0.0
129     1           2           2480.0           0.0           0.0
130     67.0         0.0           0.0           67.0           0.0           0.0
131     2           1           0.0           0.0           0.0
132     0.0          0.0           0.0           0.0           0.0           0.0
133     2           2           0.0           0.0           0.0
134     0.0          0.0           0.0           0.0           0.0           0.0
135     3           1           0.0           0.0           0.0
136     0.0          0.0           0.0           0.0           0.0           0.0
137     3           2           0.0           0.0           0.0
138     0.0          0.0           0.0           0.0           0.0           0.0
139     4           1           0.0           0.0           0.0
140     0.0          0.0           0.0           0.0           0.0           0.0
141     4           2           0.0           0.0           0.0
142     0.0          0.0           0.0           0.0           0.0           0.0
143     5           1           0.0           0.0           0.0
144     0.0          0.0           0.0           0.0           0.0           0.0
145     5           2           0.0           0.0           0.0
146     0.0          0.0           0.0           0.0           0.0           0.0
147     6           1           0.0           0.0           0.0
148     0.0          0.0           0.0           0.0           0.0           0.0
149     6           2           0.0           0.0           0.0
150     0.0          0.0           0.0           0.0           0.0           0.0
151     7           1           0.0           0.0           0.0
152     0.0          0.0           0.0           0.0           0.0           0.0
153     7           2           0.0           0.0           0.0
154     0.0          0.0           0.0           0.0           0.0           0.0
155     8           1           0.0           0.0           0.0
156     0.0          0.0           0.0           0.0           0.0           0.0
157     8           2           3647.0          0.0           0.0
158     107.0        0.0           0.0           64.0           0.0           0.0
159
160 VALUE_OF_TIME_METHOD2 - (used)
161 *pence per hour
162 *Vtype/submode Person_type 0_50km_purpose1 0_50km_purpose2 0_50km_purpose3 ..
50_100km_purpose1 50_100km_purpose2 50_100km_purpose3 .. 100_200km_purpose1
100_200km_purpose2 100_200km_purpose3 .. 200+km_purpose1 200+km_purpose2
200+km_purpose3..
163
164 VALUE_OF_TIME_METHOD2 - (std)
165 *pence per hour
166 *Vtype/submode Person_type 0_50km_purpose1 0_50km_purpose2 0_50km_purpose3 ..
50_100km_purpose1 50_100km_purpose2 50_100km_purpose3 .. 100_200km_purpose1
100_200km_purpose2 100_200km_purpose3 .. 200+km_purpose1 200+km_purpose2
200+km_purpose3..
167     1           1           842.0           0.0           0.0
168     1362.0        0.0           0.0           1849.0          0.0           0.0
169     2377.0        0.0           0.0
170     1           2           842.0           0.0           0.0
171     1362.0        0.0           0.0           1849.0          0.0           0.0
172     2377.0        0.0           0.0
173     2           1           0.0           0.0           0.0
174     0.0          0.0           0.0           0.0           0.0           0.0
175     0.0          0.0           0.0
176     2           2           0.0           0.0           0.0
177     0.0          0.0           0.0           0.0           0.0           0.0
178     0.0          0.0           0.0

```

155	3	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
156	3	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
157	4	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
158	4	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
159	5	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
160	5	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
161	6	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
162	6	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
163	7	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
164	7	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
165	8	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
166	8	2	842.0	0.0	0.0	
	1362.0	0.0	0.0	2372.0	0.0	0.0
	3422.0	0.0	0.0			

167

168 VALUE\_OF\_TIME\_METHOD3 - (used)

169 \*pence per hour

170 \*Vtype/submode Person\_type VOT\_purpose1 VOT\_purpose2 VOT\_purpose3 ..

171	1	1	2612.0	967.0	870.0	
172	1	2	2612.0	967.0	870.0	
173	2	1	2612.0	967.0	870.0	
174	2	2	2612.0	967.0	870.0	
175	3	1	2612.0	0.0	0.0	
176	3	2	2612.0	0.0	0.0	
177	4	1	2612.0	0.0	0.0	
178	4	2	2612.0	0.0	0.0	
179	5	1	2612.0	0.0	0.0	
180	5	2	2612.0	967.0	870.0	
181	6	1	2612.0	0.0	0.0	
182	6	2	2612.0	967.0	870.0	
183	7	1	2612.0	0.0	0.0	
184	7	2	2612.0	967.0	870.0	

185

186 VALUE\_OF\_TIME\_METHOD3 - (std)

187 \*pence per hour

188 \*Vtype/submode Person\_type VOT\_purpose1 VOT\_purpose2 VOT\_purpose3 ..

189	1	1	1486.0	995.0	454.0	
190	1	2	1486.0	995.0	454.0	
191	2	1	1024.0	995.0	454.0	
192	2	2	1024.0	995.0	454.0	
193	3	1	1024.0	0.0	0.0	
194	3	2	1024.0	0.0	0.0	
195	4	1	1206.0	0.0	0.0	
196	4	2	1206.0	0.0	0.0	
197	5	1	1206.0	0.0	0.0	
198	5	2	1206.0	0.0	0.0	
199	6	1	1232.0	0.0	0.0	



200	6	2	842.0	995.0	454.0
201	7	1	0.0	0.0	0.0
202	7	2	842.0	995.0	454.0
203	8	1	0.0	0.0	0.0
204	8	2	2452.0	995.0	454.0

205  
 206 VALUE\_OF\_TIME\_GROWTH - (used)

207 \*% change p.a.

208 *Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
209 2012	2014	1.40	1.40	1.40	
210 2015	2019	3.60	3.60	3.60	
211 2020	2024	2.20	2.20	2.20	
212 2025	2100	2.30	2.30	2.30	

213  
 214 VALUE\_OF\_TIME\_GROWTH - (std)

215 \*% change p.a.

216 *Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
217 2011	2011	0.67	0.67	0.67	
218 2012	2012	0.64	0.64	0.64	
219 2013	2013	1.27	1.27	1.27	
220 2014	2014	2.29	2.29	2.29	
221 2015	2015	1.44	1.44	1.44	
222 2016	2016	1.26	1.26	1.26	
223 2017	2017	1.49	1.49	1.49	
224 2018	2018	1.40	1.40	1.40	
225 2019	2019	1.43	1.43	1.43	
226 2020	2020	1.45	1.45	1.45	
227 2021	2021	1.76	1.76	1.76	
228 2022	2022	1.77	1.77	1.77	
229 2023	2023	1.78	1.78	1.78	
230 2024	2024	1.89	1.89	1.89	
231 2025	2025	1.91	1.91	1.91	
232 2026	2026	1.93	1.93	1.93	
233 2027	2027	1.94	1.94	1.94	
234 2028	2028	1.96	1.96	1.96	
235 2029	2029	1.98	1.98	1.98	
236 2030	2030	1.99	1.99	1.99	
237 2031	2031	2.01	2.01	2.01	
238 2032	2032	2.02	2.02	2.02	
239 2033	2033	2.04	2.04	2.04	
240 2034	2034	2.15	2.15	2.15	
241 2035	2035	2.06	2.06	2.06	
242 2036	2036	2.07	2.07	2.07	
243 2037	2037	2.08	2.08	2.08	
244 2038	2038	2.09	2.09	2.09	
245 2039	2039	2.09	2.09	2.09	
246 2040	2040	2.09	2.09	2.09	
247 2041	2041	2.09	2.09	2.09	
248 2042	2042	2.11	2.11	2.11	
249 2043	2043	2.11	2.11	2.11	
250 2044	2044	2.11	2.11	2.11	
251 2045	2045	2.11	2.11	2.11	
252 2046	2046	2.21	2.21	2.21	
253 2047	2047	2.14	2.14	2.14	
254 2048	2048	2.14	2.14	2.14	
255 2049	2049	2.14	2.14	2.14	
256 2050	2050	2.14	2.14	2.14	
257 2051	2051	2.04	2.04	2.04	
258 2052	2052	2.07	2.07	2.07	
259 2053	2053	2.07	2.07	2.07	
260 2054	2054	2.07	2.07	2.07	
261 2055	2055	2.07	2.07	2.07	
262 2056	2056	2.07	2.07	2.07	
263 2057	2057	2.09	2.09	2.09	
264 2058	2058	2.19	2.19	2.19	
265 2059	2059	2.19	2.19	2.19	
266 2060	2060	2.29	2.29	2.29	
267 2061	2061	2.29	2.29	2.29	
268 2062	2062	2.30	2.30	2.30	

269	2063	2063	2.30	2.30	2.30
270	2064	2064	2.20	2.20	2.20
271	2065	2065	2.20	2.20	2.20
272	2066	2066	2.20	2.20	2.20
273	2067	2067	2.18	2.18	2.18
274	2068	2068	2.18	2.18	2.18
275	2069	2069	2.18	2.18	2.18
276	2070	2070	2.18	2.18	2.18
277	2071	2071	2.18	2.18	2.18
278	2072	2072	2.17	2.17	2.17
279	2073	2073	2.17	2.17	2.17
280	2074	2074	2.17	2.17	2.17
281	2075	2075	2.17	2.17	2.17
282	2076	2076	2.17	2.17	2.17
283	2077	2077	2.16	2.16	2.16
284	2078	2078	2.16	2.16	2.16
285	2079	2079	2.16	2.16	2.16
286	2080	2080	2.16	2.16	2.16
287	2081	2081	2.16	2.16	2.16
288	2082	2082	2.17	2.17	2.17
289	2083	2083	2.17	2.17	2.17
290	2084	2084	2.17	2.17	2.17
291	2085	2085	2.17	2.17	2.17
292	2086	2086	2.17	2.17	2.17
293	2087	2087	2.18	2.18	2.18
294	2088	2088	2.18	2.18	2.18
295	2089	2089	2.18	2.18	2.18
296	2090	2090	2.18	2.18	2.18
297	2091	2091	2.18	2.18	2.18
298	2092	2092	2.18	2.18	2.18
299	2093	2093	2.18	2.18	2.18
300	2094	2094	2.18	2.18	2.18
301	2095	2095	2.18	2.18	2.18
302	2096	2096	2.18	2.18	2.18
303	2097	2097	2.18	2.18	2.18
304	2098	2098	2.18	2.18	2.18
305	2099	2099	2.18	2.18	2.18
306	2100	2100	2.18	2.18	2.18

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AV\_IND\_TAX\_CHANGES - (used)

\*% change p.a.

*Start_yr	End_yr	Growth
2012	2080	0.00

AV\_IND\_TAX\_CHANGES - (std)

\*% change p.a.

*Start_yr	End_yr	Growth
2011	2050	0.00

CHARGE\_TAX\_RATES - (used)

\*%

*charge	final	intermediate
1	0.0	0.0
2	0.0	0.0
3	0.0	0.0
4	0.0	0.0
5	0.0	0.0
6	0.0	0.0
7	0.0	0.0

CHARGE\_TAX\_RATES - (std)

\*%

*charge	final	intermediate
1	0.0	0.0
2	0.0	0.0
3	0.0	0.0
4	0.0	0.0
5	17.5	0.0
6	0.0	0.0

338 7 17.5 0.0  
 339 8 17.5 0.0

340

341 CHARGE\_TAX\_RATES\_CHANGES - (used)

342 \*% change p.a.

343 *Start_yr	End_yr	charge	final	intermediate
344 2012	2080	1	0.00	0.00
345 2012	2080	2	0.00	0.00
346 2012	2080	3	0.00	0.00
347 2012	2080	4	0.00	0.00
348 2012	2080	5	0.00	0.00
349 2012	2080	6	0.00	0.00
350 2012	2080	7	0.00	0.00

351

352 CHARGE\_TAX\_RATES\_CHANGES - (std)

353 \*% change p.a.

354 *Start_yr	End_yr	charge	final	intermediate
355 2011	2011	1	0.00	0.00
356 2011	2011	2	0.00	0.00
357 2011	2011	3	0.00	0.00
358 2011	2011	4	0.00	0.00
359 2011	2011	5	14.29	0.00
360 2011	2011	6	0.00	0.00
361 2011	2011	7	14.29	0.00
362 2011	2011	8	14.29	0.00
363 2012	2100	1	0.00	0.00
364 2012	2100	2	0.00	0.00
365 2012	2100	3	0.00	0.00
366 2012	2100	4	0.00	0.00
367 2012	2100	5	0.00	0.00
368 2012	2100	6	0.00	0.00
369 2012	2100	7	0.00	0.00
370 2012	2100	8	0.00	0.00

371

372 FUEL\_COST - (used)

373 \*type resource (p/unit) duty(p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)

374 1	63.0	57.6	21.0	2230.00
375 2	70.0	46.6	21.0	2562.00

376

377 FUEL\_COST - (std)

378 \*type resource (p/unit) duty(p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)

379 1	42.5	57.0	17.5	2230.00
380 2	44.2	57.0	17.5	2562.00
381 3	11.5	0.0	5.0	372.00

382

383 FUEL\_COST\_CHANGES - (used)

384 \*% change p.a.

385 *Start_yr	End_yr	fuel_type	resource	duty	VAT
386 2012	2012	1	10.70	0.00	
2.00	0.00				
387 2012	2012	2	3.90	0.00	
0.00	0.00				
388 2013	2013	1	-5.70	0.00	
0.00	0.00				
389 2013	2013	2	-5.20	0.00	
0.00	0.00				
390 2014	2014	1	0.00	0.00	
0.00	0.00				
391 2014	2014	2	-3.30	0.00	
0.00	0.00				
392 2015	2015	1	-30.60	2.00	
0.00	0.00				
393 2015	2015	2	-32.60	2.90	
0.00	0.00				
394 2016	2080	1	0.00	0.00	
0.00	0.00				

395 2016 2080 2 0.00 0.00  
0.00 0.00

396

397 FUEL\_COST\_CHANGES - (std)

398 \*% change p.a.

399 \*Start\_yr End\_yr fuel\_type resource duty VAT  
CO2\_Den\_change

400 2011 2011 1 22.14 -0.37  
14.29 -0.84

401 2012 2012 1 1.99 -2.09  
0.00 -0.02

402 2013 2013 1 -3.44 -1.74  
0.00 -0.44

403 2014 2014 1 -11.68 -1.62  
0.00 -0.54

404 2015 2015 1 -29.94 -1.09  
0.00 0.00

405 2016 2016 1 7.91 -0.89  
0.00 0.00

406 2017 2017 1 2.98 -0.08  
0.00 -1.35

407 2018 2018 1 2.03 0.67  
0.00 -1.37

408 2019 2019 1 2.08 1.05  
0.00 -1.39

409 2020 2020 1 6.76 0.71  
0.00 -1.41

410 2021 2021 1 6.33 0.78  
0.00 0.00

411 2022 2022 1 5.95 0.72  
0.00 0.00

412 2023 2023 1 5.62 0.68  
0.00 0.00

413 2024 2024 1 5.32 0.68  
0.00 0.00

414 2025 2025 1 5.05 0.68  
0.00 0.00

415 2026 2026 1 0.00 0.68  
0.00 0.00

416 2027 2027 1 0.00 0.68  
0.00 0.00

417 2028 2028 1 0.00 0.68  
0.00 0.00

418 2029 2029 1 0.00 0.68  
0.00 0.00

419 2030 2030 1 0.00 0.68  
0.00 0.00

420 2031 2031 1 0.00 0.68  
0.00 0.00

421 2032 2032 1 0.00 0.68  
0.00 0.00

422 2033 2033 1 0.00 0.68  
0.00 0.00

423 2034 2034 1 0.00 0.68  
0.00 0.00

424 2035 2035 1 0.00 0.68  
0.00 0.00

425 2036 2036 1 0.00 0.68  
0.00 0.00

426 2037 2037 1 0.00 0.68  
0.00 0.00

427 2038 2038 1 0.00 0.68  
0.00 0.00

428 2039 2039 1 0.00 0.68  
0.00 0.00

429 2040 2040 1 0.00 0.68  
0.00 0.00

430 2041 2041 1 0.00 0.68  
0.00 0.00

431	2042 0.00	2042 0.00	1	0.00	0.68
432	2043 0.00	2043 0.00	1	0.00	0.68
433	2044 0.00	2044 0.00	1	0.00	0.68
434	2045 0.00	2045 0.00	1	0.00	0.68
435	2046 0.00	2046 0.00	1	0.00	0.68
436	2047 0.00	2047 0.00	1	0.00	0.68
437	2048 0.00	2048 0.00	1	0.00	0.68
438	2049 0.00	2049 0.00	1	0.00	0.68
439	2050 0.00	2050 0.00	1	0.00	0.68
440	2051 0.00	2051 0.00	1	0.00	0.68
441	2052 0.00	2052 0.00	1	0.00	0.68
442	2053 0.00	2053 0.00	1	0.00	0.68
443	2054 0.00	2054 0.00	1	0.00	0.68
444	2055 0.00	2055 0.00	1	0.00	0.68
445	2056 0.00	2056 0.00	1	0.00	0.68
446	2057 0.00	2057 0.00	1	0.00	0.68
447	2058 0.00	2058 0.00	1	0.00	0.68
448	2059 0.00	2059 0.00	1	0.00	0.68
449	2060 0.00	2060 0.00	1	0.00	0.68
450	2061 0.00	2061 0.00	1	0.00	0.68
451	2062 0.00	2062 0.00	1	0.00	0.68
452	2063 0.00	2063 0.00	1	0.00	0.68
453	2064 0.00	2064 0.00	1	0.00	0.68
454	2065 0.00	2065 0.00	1	0.00	0.68
455	2066 0.00	2066 0.00	1	0.00	0.68
456	2067 0.00	2067 0.00	1	0.00	0.68
457	2068 0.00	2068 0.00	1	0.00	0.68
458	2069 0.00	2069 0.00	1	0.00	0.68
459	2070 0.00	2070 0.00	1	0.00	0.68
460	2071 0.00	2071 0.00	1	0.00	0.68
461	2072 0.00	2072 0.00	1	0.00	0.68
462	2073 0.00	2073 0.00	1	0.00	0.68
463	2074 0.00	2074 0.00	1	0.00	0.68
464	2075 0.00	2075 0.00	1	0.00	0.68
465	2076	2076	1	0.00	0.68

	0.00	0.00			
466	2077	2077	1	0.00	0.68
	0.00	0.00			
467	2078	2078	1	0.00	0.68
	0.00	0.00			
468	2079	2079	1	0.00	0.68
	0.00	0.00			
469	2080	2080	1	0.00	0.68
	0.00	0.00			
470	2081	2081	1	0.00	0.68
	0.00	0.00			
471	2082	2082	1	0.00	0.68
	0.00	0.00			
472	2083	2083	1	0.00	0.68
	0.00	0.00			
473	2084	2084	1	0.00	0.68
	0.00	0.00			
474	2085	2085	1	0.00	0.68
	0.00	0.00			
475	2086	2086	1	0.00	0.68
	0.00	0.00			
476	2087	2087	1	0.00	0.68
	0.00	0.00			
477	2088	2088	1	0.00	0.68
	0.00	0.00			
478	2089	2089	1	0.00	0.68
	0.00	0.00			
479	2090	2090	1	0.00	0.68
	0.00	0.00			
480	2091	2091	1	0.00	0.68
	0.00	0.00			
481	2092	2092	1	0.00	0.68
	0.00	0.00			
482	2093	2093	1	0.00	0.68
	0.00	0.00			
483	2094	2094	1	0.00	0.68
	0.00	0.00			
484	2095	2095	1	0.00	0.68
	0.00	0.00			
485	2096	2096	1	0.00	0.68
	0.00	0.00			
486	2097	2097	1	0.00	0.68
	0.00	0.00			
487	2098	2098	1	0.00	0.68
	0.00	0.00			
488	2099	2099	1	0.00	0.68
	0.00	0.00			
489	2100	2100	1	0.00	0.68
	0.00	0.00			
490	2011	2011	2	26.82	-0.37
	14.29	0.19			
491	2012	2012	2	3.20	-2.09
	0.00	1.64			
492	2013	2013	2	-3.67	-1.74
	0.00	-0.44			
493	2014	2014	2	-11.26	-1.62
	0.00	0.15			
494	2015	2015	2	-30.27	-1.09
	0.00	0.00			
495	2016	2016	2	8.32	-0.89
	0.00	0.00			
496	2017	2017	2	3.12	-0.08
	0.00	-1.74			
497	2018	2018	2	2.12	0.67
	0.00	-1.77			
498	2019	2019	2	2.17	1.05
	0.00	-1.81			
499	2020	2020	2	7.06	0.71
	0.00	-1.84			

500	2021 0.00	2021 0.00	2	6.59	0.78
501	2022 0.00	2022 0.00	2	6.18	0.72
502	2023 0.00	2023 0.00	2	5.82	0.68
503	2024 0.00	2024 0.00	2	5.50	0.68
504	2025 0.00	2025 0.00	2	5.22	0.68
505	2026 0.00	2026 0.00	2	0.00	0.68
506	2027 0.00	2027 0.00	2	0.00	0.68
507	2028 0.00	2028 0.00	2	0.00	0.68
508	2029 0.00	2029 0.00	2	0.00	0.68
509	2030 0.00	2030 0.00	2	0.00	0.68
510	2031 0.00	2031 0.00	2	0.00	0.68
511	2032 0.00	2032 0.00	2	0.00	0.68
512	2033 0.00	2033 0.00	2	0.00	0.68
513	2034 0.00	2034 0.00	2	0.00	0.68
514	2035 0.00	2035 0.00	2	0.00	0.68
515	2036 0.00	2036 0.00	2	0.00	0.68
516	2037 0.00	2037 0.00	2	0.00	0.68
517	2038 0.00	2038 0.00	2	0.00	0.68
518	2039 0.00	2039 0.00	2	0.00	0.68
519	2040 0.00	2040 0.00	2	0.00	0.68
520	2041 0.00	2041 0.00	2	0.00	0.68
521	2042 0.00	2042 0.00	2	0.00	0.68
522	2043 0.00	2043 0.00	2	0.00	0.68
523	2044 0.00	2044 0.00	2	0.00	0.68
524	2045 0.00	2045 0.00	2	0.00	0.68
525	2046 0.00	2046 0.00	2	0.00	0.68
526	2047 0.00	2047 0.00	2	0.00	0.68
527	2048 0.00	2048 0.00	2	0.00	0.68
528	2049 0.00	2049 0.00	2	0.00	0.68
529	2050 0.00	2050 0.00	2	0.00	0.68
530	2051 0.00	2051 0.00	2	0.00	0.68
531	2052 0.00	2052 0.00	2	0.00	0.68
532	2053 0.00	2053 0.00	2	0.00	0.68
533	2054 0.00	2054 0.00	2	0.00	0.68
534	2055	2055	2	0.00	0.68

	0.00	0.00			
535	2056	2056	2	0.00	0.68
	0.00	0.00			
536	2057	2057	2	0.00	0.68
	0.00	0.00			
537	2058	2058	2	0.00	0.68
	0.00	0.00			
538	2059	2059	2	0.00	0.68
	0.00	0.00			
539	2060	2060	2	0.00	0.68
	0.00	0.00			
540	2061	2061	2	0.00	0.68
	0.00	0.00			
541	2062	2062	2	0.00	0.68
	0.00	0.00			
542	2063	2063	2	0.00	0.68
	0.00	0.00			
543	2064	2064	2	0.00	0.68
	0.00	0.00			
544	2065	2065	2	0.00	0.68
	0.00	0.00			
545	2066	2066	2	0.00	0.68
	0.00	0.00			
546	2067	2067	2	0.00	0.68
	0.00	0.00			
547	2068	2068	2	0.00	0.68
	0.00	0.00			
548	2069	2069	2	0.00	0.68
	0.00	0.00			
549	2070	2070	2	0.00	0.68
	0.00	0.00			
550	2071	2071	2	0.00	0.68
	0.00	0.00			
551	2072	2072	2	0.00	0.68
	0.00	0.00			
552	2073	2073	2	0.00	0.68
	0.00	0.00			
553	2074	2074	2	0.00	0.68
	0.00	0.00			
554	2075	2075	2	0.00	0.68
	0.00	0.00			
555	2076	2076	2	0.00	0.68
	0.00	0.00			
556	2077	2077	2	0.00	0.68
	0.00	0.00			
557	2078	2078	2	0.00	0.68
	0.00	0.00			
558	2079	2079	2	0.00	0.68
	0.00	0.00			
559	2080	2080	2	0.00	0.68
	0.00	0.00			
560	2081	2081	2	0.00	0.68
	0.00	0.00			
561	2082	2082	2	0.00	0.68
	0.00	0.00			
562	2083	2083	2	0.00	0.68
	0.00	0.00			
563	2084	2084	2	0.00	0.68
	0.00	0.00			
564	2085	2085	2	0.00	0.68
	0.00	0.00			
565	2086	2086	2	0.00	0.68
	0.00	0.00			
566	2087	2087	2	0.00	0.68
	0.00	0.00			
567	2088	2088	2	0.00	0.68
	0.00	0.00			
568	2089	2089	2	0.00	0.68
	0.00	0.00			



569	2090	2090	2	0.00	0.68	
	0.00	0.00				
570	2091	2091	2	0.00	0.68	
	0.00	0.00				
571	2092	2092	2	0.00	0.68	
	0.00	0.00				
572	2093	2093	2	0.00	0.68	
	0.00	0.00				
573	2094	2094	2	0.00	0.68	
	0.00	0.00				
574	2095	2095	2	0.00	0.68	
	0.00	0.00				
575	2096	2096	2	0.00	0.68	
	0.00	0.00				
576	2097	2097	2	0.00	0.68	
	0.00	0.00				
577	2098	2098	2	0.00	0.68	
	0.00	0.00				
578	2099	2099	2	0.00	0.68	
	0.00	0.00				
579	2100	2100	2	0.00	0.68	
	0.00	0.00				
580	2011	2011	3	4.95	0.00	
	0.00	-1.89				
581	2012	2012	3	4.01	0.00	
	0.00	-2.03				
582	2013	2013	3	5.45	0.00	
	0.00	-2.18				
583	2014	2014	3	3.88	0.00	
	0.00	-2.35				
584	2015	2015	3	-5.82	0.00	
	0.00	-2.54				
585	2016	2016	3	3.17	0.00	
	0.00	-2.74				
586	2017	2017	3	6.71	0.00	
	0.00	-2.98				
587	2018	2018	3	4.60	0.00	
	0.00	-3.23				
588	2019	2019	3	2.96	0.00	
	0.00	-3.52				
589	2020	2020	3	1.91	0.00	
	0.00	-3.85				
590	2021	2021	3	0.52	0.00	
	0.00	-4.22				
591	2022	2022	3	2.13	0.00	
	0.00	-4.65				
592	2023	2023	3	-0.64	0.00	
	0.00	-5.14				
593	2024	2024	3	2.55	0.00	
	0.00	-5.71				
594	2025	2025	3	4.49	0.00	
	0.00	-6.39				
595	2026	2026	3	0.01	0.00	
	0.00	-7.19				
596	2027	2027	3	2.37	0.00	
	0.00	-8.17				
597	2028	2028	3	-1.49	0.00	
	0.00	-9.38				
598	2029	2029	3	-1.58	0.00	0.00
	-10.92					
599	2030	2030	3	0.32	0.00	0.00
	-12.92					
600	2031	2031	3	0.00	0.00	
	0.00	-8.85				
601	2032	2032	3	0.00	0.00	
	0.00	-8.85				
602	2033	2033	3	0.00	0.00	
	0.00	-8.85				
603	2034	2034	3	0.00	0.00	

604	0.00	-8.85				
	2035	2035	3	0.00	0.00	
	0.00	-8.85				
605	2036	2036	3	0.00	0.00	
	0.00	-8.85				
606	2037	2037	3	0.00	0.00	
	0.00	-8.85				
607	2038	2038	3	0.00	0.00	
	0.00	-8.85				
608	2039	2039	3	0.00	0.00	
	0.00	-8.85				
609	2040	2040	3	0.00	0.00	
	0.00	-8.85				
610	2041	2041	3	0.00	0.00	0.00
	-11.07					
611	2042	2042	3	0.00	0.00	
	0.00	-0.85				
612	2043	2043	3	0.00	0.00	0.00
	-11.10					
613	2044	2044	3	0.00	0.00	0.00
	-11.60					
614	2045	2045	3	0.00	0.00	
	0.00	1.50				
615	2046	2046	3	0.00	0.00	
	0.00	-8.95				
616	2047	2047	3	0.00	0.00	
	0.00	-7.43				
617	2048	2048	3	0.00	0.00	
	0.00	1.12				
618	2049	2049	3	0.00	0.00	
	0.00	-9.46				
619	2050	2050	3	0.00	0.00	
	0.00	-0.90				
620	2051	2100	3	0.00	0.00	
	0.00	0.00				

621						
622	CARBDX_VALUE_CHANGES - (used)					
623	*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be defined, not both					
624	*same growth applies to low, central and high CO2 values					
625	*Start_yr	End_yr	Rel. (%)	<b>Abs. (£/tonne/year)</b>		
626	2012	2019	0.000	0.000		
627	2020	2020	60.000	0.000		
628	2021	2021	21.900	0.000		
629	2022	2022	17.900	0.000		
630	2023	2023	13.000	0.000		
631	2024	2024	13.500	0.000		
632	2025	2025	11.900	0.000		
633	2026	2026	10.600	0.000		
634	2027	2027	9.600	0.000		
635	2028	2028	7.500	0.000		
636	2029	2029	8.100	0.000		
637	2030	2030	7.500	0.000		
638	2031	2100	5.000	0.000		

639						
640	CARBDX_VALUE_CHANGES - (std)					
641	*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be defined, not both					
642	*same growth applies to low, central and high CO2 values					
643	*Start_yr	End_yr	Rel. (%)	<b>Abs. (£/tonne/year)</b>		
644	2011	2011	1.500	0.000		
645	2012	2012	1.500	0.000		
646	2013	2013	1.500	0.000		
647	2014	2014	1.500	0.000		
648	2015	2015	1.500	0.000		
649	2016	2016	1.500	0.000		
650	2017	2017	1.500	0.000		
651	2018	2018	1.500	0.000		
652	2019	2019	1.500	0.000		

653	2020	2020	1.500	0.000
654	2021	2021	1.667	0.000
655	2022	2022	1.639	0.000
656	2023	2023	1.613	0.000
657	2024	2024	1.587	0.000
658	2025	2025	1.563	0.000
659	2026	2026	1.538	0.000
660	2027	2027	1.515	0.000
661	2028	2028	1.493	0.000
662	2029	2029	1.471	0.000
663	2030	2030	1.449	0.000
664	2031	2031	9.286	0.000
665	2032	2032	8.497	0.000
666	2033	2033	7.831	0.000
667	2034	2034	7.263	0.000
668	2035	2035	6.771	0.000
669	2036	2036	6.341	0.000
670	2037	2037	5.963	0.000
671	2038	2038	5.628	0.000
672	2039	2039	5.328	0.000
673	2040	2040	5.058	0.000
674	2041	2041	4.815	0.000
675	2042	2042	4.594	0.000
676	2043	2043	4.392	0.000
677	2044	2044	4.207	0.000
678	2045	2045	4.037	0.000
679	2046	2046	3.881	0.000
680	2047	2047	3.736	0.000
681	2048	2048	3.601	0.000
682	2049	2049	3.476	0.000
683	2050	2050	3.359	0.000
684	2051	2051	2.501	0.000
685	2052	2052	2.265	0.000
686	2053	2053	2.165	0.000
687	2054	2054	2.056	0.000
688	2055	2055	1.856	0.000
689	2056	2056	1.779	0.000
690	2057	2057	1.589	0.000
691	2058	2058	1.446	0.000
692	2059	2059	1.330	0.000
693	2060	2060	1.201	0.000
694	2061	2061	0.673	0.000
695	2062	2062	0.618	0.000
696	2063	2063	0.401	0.000
697	2064	2064	0.283	0.000
698	2065	2065	0.079	0.000
699	2066	2066	0.033	0.000
700	2067	2067	-0.193	0.000
701	2068	2068	-0.302	0.000
702	2069	2069	-0.461	0.000
703	2070	2070	-0.585	0.000
704	2071	2071	-0.609	0.000
705	2072	2072	-0.738	0.000
706	2073	2073	-0.837	0.000
707	2074	2074	-1.033	0.000
708	2075	2075	-1.037	0.000
709	2076	2076	-1.310	0.000
710	2077	2077	-1.316	0.000
711	2078	2078	-1.493	0.000
712	2079	2079	-1.571	0.000
713	2080	2080	-1.769	0.000
714	2081	2081	-1.478	0.000
715	2082	2082	-1.672	0.000
716	2083	2083	-1.769	0.000
717	2084	2084	-1.854	0.000
718	2085	2085	-1.834	0.000
719	2086	2086	-2.050	0.000
720	2087	2087	-2.154	0.000
721	2088	2088	-2.198	0.000

722	2089	2089	-2.321	0.000
723	2090	2090	-2.359	0.000
724	2091	2091	-2.279	0.000
725	2092	2092	-2.328	0.000
726	2093	2093	-2.521	0.000
727	2094	2094	-2.577	0.000
728	2095	2095	-2.649	0.000
729	2096	2096	-2.712	0.000
730	2097	2097	-2.715	0.000
731	2098	2098	-2.915	0.000
732	2099	2099	-2.865	0.000
733	2100	2100	-3.011	0.000

734

735 FLEET - (used)

736	*veh_type	%petrol	%diesel
737	1	69.90	30.10
738	2	0.30	99.70
739	3	0.00	100.00
740	4	0.00	100.00
741	5	0.00	100.00
742	6	0.00	100.00
743	7	0.00	100.00

744

745 FLEET - (std)

746	*veh_type	%Petrol	%Diesel	%Electric
747	1	59.27	40.73	0.01
748	2	5.86	94.14	0.00
749	3	5.86	94.14	0.00
750	4	0.00	100.00	0.00
751	5	0.00	100.00	0.00
752	6	0.00	100.00	0.00
753	7	0.00	100.00	0.00
754	8	0.00	100.00	0.00

755

756 FLEET\_CHANGES - (used)

757 \*% p.a.

758	*Start_yr	End_yr	Veh_type	%Change_petrol	%Change_diesel
759	2012	2015	1	-2.642	5.437
760	2016	2020	1	0.473	-0.820
761	2021	2025	1	-0.662	1.150
762	2026	2030	1	-0.884	1.389
763	2012	2015	2	-9.640	0.025
764	2016	2020	2	-60.000	0.040
765	2021	2025	2	0.000	0.000
766	2026	2030	2	0.000	0.000

767

768 FLEET\_CHANGES - (std)

769 \*% p.a.

770	*Start_yr	End_yr	Veh_type	%Change_Petrol	%Change_Diesel	%Change_Electric
771	2011	2011	1	-3.810	5.477	502.540
772	2012	2012	1	-3.966	5.188	100.000
773	2013	2013	1	-4.130	4.932	50.000
774	2014	2014	1	-4.308	4.700	33.333
775	2015	2015	1	-4.502	4.489	25.000
776	2016	2016	1	-1.777	1.335	97.788
777	2017	2017	1	-1.809	1.317	49.441
778	2018	2018	1	-1.842	1.300	33.084
779	2019	2019	1	-1.877	1.283	24.859
780	2020	2020	1	-1.913	1.267	19.910
781	2021	2021	1	0.323	-0.826	32.794
782	2022	2022	1	0.322	-0.833	24.695
783	2023	2023	1	0.321	-0.840	19.804
784	2024	2024	1	0.320	-0.847	16.531
785	2025	2025	1	0.319	-0.854	14.186
786	2026	2026	1	0.021	-1.060	21.755
787	2027	2027	1	0.021	-1.071	17.868
788	2028	2028	1	0.021	-1.083	15.159
789	2029	2029	1	0.021	-1.095	13.164

790	2030	2030	1	0.021	-1.107	11.632
791	2011	2011	2	-7.579	0.472	0.000
792	2012	2012	2	-8.200	0.470	0.000
793	2013	2013	2	-8.932	0.468	0.000
794	2014	2014	2	-9.809	0.465	0.000
795	2015	2015	2	-10.875	0.463	0.000
796	2016	2016	2	-9.634	0.364	0.000
797	2017	2017	2	-10.661	0.363	0.000
798	2018	2018	2	-11.933	0.361	0.000
799	2019	2019	2	-13.550	0.360	0.000
800	2020	2020	2	-15.674	0.359	0.000
801	2021	2021	2	-8.979	0.173	0.000
802	2022	2022	2	-9.865	0.172	0.000
803	2023	2023	2	-10.945	0.172	0.000
804	2024	2024	2	-12.290	0.172	0.000
805	2025	2025	2	-14.012	0.171	0.000
806	2026	2026	2	-4.888	0.051	0.000
807	2027	2027	2	-5.139	0.051	0.000
808	2028	2028	2	-5.418	0.051	0.000
809	2029	2029	2	-5.728	0.051	0.000
810	2030	2030	2	-6.076	0.051	0.000
811	2011	2011	3	-7.579	0.472	0.000
812	2012	2012	3	-8.200	0.470	0.000
813	2013	2013	3	-8.932	0.468	0.000
814	2014	2014	3	-9.809	0.465	0.000
815	2015	2015	3	-10.875	0.463	0.000
816	2016	2016	3	-9.634	0.364	0.000
817	2017	2017	3	-10.661	0.363	0.000
818	2018	2018	3	-11.933	0.361	0.000
819	2019	2019	3	-13.550	0.360	0.000
820	2020	2020	3	-15.674	0.359	0.000
821	2021	2021	3	-8.979	0.173	0.000
822	2022	2022	3	-9.865	0.172	0.000
823	2023	2023	3	-10.945	0.172	0.000
824	2024	2024	3	-12.290	0.172	0.000
825	2025	2025	3	-14.012	0.171	0.000
826	2026	2026	3	-4.888	0.051	0.000
827	2027	2027	3	-5.139	0.051	0.000
828	2028	2028	3	-5.418	0.051	0.000
829	2029	2029	3	-5.728	0.051	0.000
830	2030	2030	3	-6.076	0.051	0.000

831								
832	FUEL_CONSUMPTION - (used)							
833	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel		
	cut-off_speed(km/h)							
834	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140	
835	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140	
836	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
837	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
838	3	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96	
839	4	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96	
840	5	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96	

841								
842	FUEL_CONSUMPTION - (std)							
843	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel		
	cut-off_speed(km/h)							
844	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140	
845	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140	
846	1	3	0.0000	0.12564	0.00000E+00	0.00000E+00	140	
847	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
848	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
849	3	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
850	3	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
851	4	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96	
852	5	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96	
853	6	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96	

854								
855	FUEL EFFICIENCY - (used)							
856	*%	p.a.						

	*Start_yr	End_yr	veh_type	fuel_type	change
857					
858	2012	2012	1	1	-0.46
859	2012	2012	1	2	0.09
860	2013	2013	1	1	-0.42
861	2013	2013	1	2	0.07
862	2014	2020	1	1	2.48
863	2014	2020	1	2	2.92
864	2021	2025	1	1	2.37
865	2021	2025	1	2	1.62
866	2026	2030	1	1	0.92
867	2026	2030	1	2	0.77
868	2012	2012	2	2	0.20
869	2013	2013	2	2	0.18
870	2014	2020	2	2	3.25
871	2021	2025	2	2	0.67
872	2026	2030	2	2	0.27
873	2012	2012	3	2	0.43
874	2013	2013	3	2	0.38
875	2014	2020	3	2	-1.67
876	2021	2025	3	2	0.07
877	2026	2030	3	2	0.01
878	2012	2012	4	2	0.43
879	2013	2013	4	2	0.38
880	2014	2020	4	2	-1.67
881	2021	2025	4	2	0.07
882	2026	2030	4	2	0.01
883	2012	2012	5	2	0.32
884	2013	2013	5	2	0.34
885	2014	2020	5	2	-0.64
886	2021	2025	5	2	0.03
887	2026	2030	5	2	-0.02
888	2012	2012	6	2	0.00
889	2013	2013	6	2	0.00
890	2014	2020	6	2	0.00
891	2021	2025	6	2	0.00
892	2026	2030	6	2	0.00
893	2012	2012	7	2	0.00
894	2013	2013	7	2	0.00
895	2014	2020	7	2	0.00
896	2021	2025	7	2	0.00
897	2026	2030	7	2	0.00

	FUEL EFFICIENCY - (std)				
	*% p.a.				
	*Start_yr	End_yr	veh_type	fuel_type	change
898					
899					
900					
901					
902	2011	2015	1	1	1.81
903	2011	2015	1	2	2.23
904	2011	2015	1	3	-0.10
905	2011	2015	2	1	0.11
906	2011	2015	2	2	2.71
907	2011	2015	3	1	0.11
908	2011	2015	3	2	2.71
909	2016	2020	1	1	3.32
910	2016	2020	1	2	2.22
911	2016	2020	1	3	0.02
912	2016	2020	2	1	2.35
913	2016	2020	2	2	2.35
914	2016	2020	3	1	2.35
915	2016	2020	3	2	2.35
916	2021	2025	1	1	3.16
917	2021	2025	1	2	2.02
918	2021	2025	1	3	0.12
919	2021	2025	2	1	2.85
920	2021	2025	2	2	1.65
921	2021	2025	3	1	2.85
922	2021	2025	3	2	1.65
923	2026	2030	1	1	1.56
924	2026	2030	1	2	1.19
925	2026	2030	1	3	0.00

926	2026	2030	2	1	2.40
927	2026	2030	2	2	0.74
928	2026	2030	3	1	2.40
929	2026	2030	3	2	0.74
930	2031	2035	1	1	0.57
931	2031	2035	1	2	0.52
932	2031	2035	1	3	-0.08
933	2031	2035	2	1	0.54
934	2031	2035	2	2	0.22
935	2031	2035	3	1	0.54
936	2031	2035	3	2	0.22
937	2036	2100	1	1	0.00
938	2036	2100	1	2	0.00
939	2036	2100	1	3	0.00
940	2036	2100	2	1	0.00
941	2036	2100	2	2	0.00
942	2036	2100	3	1	0.00
943	2036	2100	3	2	0.00

NON\_FUEL\_VOC - (used)

	*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw
946	1	6.265	171.493	5.507	0.000
947	1	6.265	171.493	5.507	0.000
948	2	9.099	70.308	10.327	0.000
949	3	10.020	393.702	0.000	0.000
950	3	10.020	393.702	0.000	0.000
951	4	19.491	758.888	0.000	0.000
952	5	45.458	1036.494	0.000	0.000
953	6	0.000	0.000	0.000	0.000
954	7	0.000	0.000	0.000	0.000

NON\_FUEL\_VOC - (std)

	*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw
955	1	4.966	135.946	3.846	0.000
956	1	4.966	135.946	3.846	0.000
957	1	1.157	135.946	1.157	0.000
958	2	7.213	47.113	7.213	0.000
959	2	7.213	47.113	7.213	0.000
960	3	7.213	47.113	7.213	0.000
961	3	7.213	47.113	7.213	0.000
962	4	6.714	263.817	0.000	0.000
963	5	13.061	508.525	0.000	0.000
964	6	30.461	694.547	0.000	0.000

NON\_FUEL\_VOC\_CHANGES - (used)

	*% p.a.	*Start_yr	End_yr	veh_type	gnf
970		2012	2080	1	0.000
971		2012	2080	2	0.000
972		2012	2080	3	0.000
973		2012	2080	4	0.000
974		2012	2080	5	0.000

NON\_FUEL\_VOC\_CHANGES - (std)

	*% p.a.	*Start_yr	End_yr	veh_type	gnf
975		2011	2100	1	0.000
976		2011	2100	2	0.000
977		2011	2100	3	0.000
978		2011	2100	4	0.000
979		2011	2100	5	0.000
980		2011	2100	6	0.000
981		2011	2100	7	0.000
982		2011	2100	8	0.000

NON\_FUEL\_TAX\_RATES - (used)

	*% submode	final	intermediate
990	1	21.0	0.0

995	2	21.0	0.0
996	3	21.0	0.0
997	4	21.0	0.0
998	5	21.0	0.0
999	6	21.0	0.0
1000	7	21.0	0.0

1001  
1002 NON\_FUEL\_TAX\_RATES - (std)

1003 \*%  
1004 \*submode        final        intermediate  
1005        1        17.5        0.0  
1006        2        17.5        0.0  
1007        3        17.5        0.0  
1008        4        17.5        0.0  
1009        5        17.5        0.0  
1010        6        17.5        0.0  
1011        7        0.0        0.0  
1012        8        0.0        0.0

1013  
1014 NON\_FUEL\_TAX\_RATES\_CHANGES - (used)

1015 \*% change p.a.  
1016 \*Start\_yr        End\_yr        Submode        final        intermediate  
1017        2012        2012        1        5.7        7.9  
1018        2013        2080        1        0.0        0.0  
1019        2012        2012        2        7.9        10.3  
1020        2013        2080        2        0.0        0.0  
1021        2012        2012        3        7.9        10.3  
1022        2013        2080        3        0.0        0.0  
1023        2012        2012        4        7.9        10.3  
1024        2013        2080        4        0.0        0.0  
1025        2012        2012        5        7.9        10.3  
1026        2013        2080        5        0.0        0.0  
1027        2012        2012        6        7.9        10.3  
1028        2013        2080        6        0.0        0.0  
1029        2012        2012        7        0.0        0.0  
1030        2013        2080        7        0.0        0.0

1031  
1032 NON\_FUEL\_TAX\_RATES\_CHANGES - (std)

1033 \*% change p.a.  
1034 \*Start\_yr        End\_yr        Submode        final        intermediate  
1035        2011        2011        1        14.3        0.0  
1036        2011        2011        2        14.3        0.0  
1037        2011        2011        3        14.3        0.0  
1038        2011        2011        4        14.3        0.0  
1039        2011        2011        5        14.3        0.0  
1040        2011        2011        6        14.3        0.0  
1041        2011        2011        7        0.0        0.0  
1042        2011        2011        8        0.0        0.0  
1043        2012        2100        1        0.0        0.0  
1044        2012        2100        2        0.0        0.0  
1045        2012        2100        3        0.0        0.0  
1046        2012        2100        4        0.0        0.0  
1047        2012        2100        5        0.0        0.0  
1048        2012        2100        6        0.0        0.0  
1049        2012        2100        7        0.0        0.0  
1050        2012        2100        8        0.0        0.0

1051  
1052 DEFAULT\_PURPOSE\_SPLIT - (used)

1053 \*Vtype/submode    purpose        Period1    Period2    Period3    Period4    Period5  
1054        1        1        13.3        16.9        12.0  
1055        1        2        44.2        36.7        42.9  
1056        1        3        42.5        46.4        45.1  
1057        2        1        41.3        50.3        40.2  
1058        2        2        45.2        35.1        45.1  
1059        2        3        13.5        14.6        14.7  
1060        3        1        76.7        81.4        75.6  
1061        3        2        16.1        11.1        17.0  
1062        3        3        7.2        7.5        7.4  
1063        4        1        82.5        86.9        79.7



1064	4	2	11.7	7.8	13.2
1065	4	3	5.8	5.3	7.1
1066	5	1	10.2	10.2	10.2
1067	5	2	18.9	18.9	18.9
1068	5	3	70.8	70.8	70.9
1069	6	1	10.2	10.2	10.2
1070	6	2	18.9	18.9	18.9
1071	6	3	70.8	70.8	70.9
1072	7	1	10.2	10.2	10.2
1073	7	2	18.9	18.9	18.9
1074	7	3	70.8	70.8	70.9

1075

1076 DEFAULT\_PURPOSE\_SPLIT - (std)

*Vtype/submode	purpose	Period1	Period2	Period3	Period4	Period5	
1077	1	16.5	11.8	16.5	12.9	3.5	
1078	1	2	44.0	41.3	11.8	38.5	7.9
1079	1	3	39.5	46.9	71.7	48.6	88.6
1080	2	1	0.0	0.0	0.0	0.0	0.0
1081	2	2	0.0	0.0	0.0	0.0	0.0
1082	2	3	100.0	100.0	100.0	100.0	100.0
1083	3	1	100.0	100.0	100.0	100.0	100.0
1084	3	2	0.0	0.0	0.0	0.0	0.0
1085	3	3	0.0	0.0	0.0	0.0	0.0
1086	4	1	100.0	100.0	100.0	100.0	100.0
1087	4	2	0.0	0.0	0.0	0.0	0.0
1088	4	3	0.0	0.0	0.0	0.0	0.0
1089	5	1	100.0	100.0	100.0	100.0	100.0
1090	5	2	0.0	0.0	0.0	0.0	0.0
1091	5	3	0.0	0.0	0.0	0.0	0.0
1092	6	1	1.4	2.3	1.7	2.3	0.5
1093	6	2	18.4	25.9	6.5	35.4	6.1
1094	6	3	80.2	71.8	91.8	62.3	93.4
1095	7	1	4.5	5.2	3.2	2.5	0.7
1096	7	2	50.1	45.9	10.7	54.7	7.6
1097	7	3	45.4	48.9	86.1	42.8	91.7
1098	8	1	17.1	15.7	15.8	17.7	1.8
1099	8	2	31.2	38.1	5.5	38.6	2.8
1100	8	3	51.7	46.2	78.7	43.7	95.4

1102

1103 DEFAULT\_PERSON\_FACTORS - (used)

*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2..	
1104	1	1	1.00	1.00	1.00
1105	1	1	0.26	0.25	0.26
1106	1	2	1.00	1.00	1.00
1107	1	2	0.23	0.22	0.23
1108	1	3	1.00	1.00	1.00
1109	1	3	0.66	0.65	0.68
1110	2	1	1.00	1.00	1.00
1111	2	1	0.37	0.32	0.38
1112	2	2	1.00	1.00	1.00
1113	2	2	0.40	0.41	0.40
1114	2	3	1.00	1.00	1.00
1115	2	3	0.49	0.45	0.48
1116	3	1	1.00	1.00	1.00
1117	3	1	0.09	0.09	0.09
1118	3	2	1.00	1.00	1.00
1119	3	2	0.24	0.28	0.24
1120	3	3	1.00	1.00	1.00
1121	3	3	0.26	0.33	0.27
1122	4	1	1.00	1.00	1.00
1123	4	1	0.03	0.03	0.03
1124	4	2	1.00	1.00	1.00
1125	4	2	0.11	0.14	0.08
1126	4	3	1.00	1.00	1.00
1127	4	3	0.11	0.12	0.16
1128	5	1	1.00	1.00	1.00
1129	5	1	0.35	0.35	0.35
1130	5	2	1.00	1.00	1.00
1131	5	2	1.50	1.50	1.50

1133	5	3	1	1.00	1.00	1.00
1134	5	3	2	8.35	8.35	8.35

1135

1136 DEFAULT\_PERSON\_FACTORS - (std)

1137	*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2..
1138	1	1	1	1.00	1.00
	1.00	1.00	1.00	1.00	
1139	1	1	2	0.13	0.15
	0.16	0.17	0.31		
1140	1	2	1	1.00	1.00
	1.00	1.00	1.00		
1141	1	2	2	0.13	0.14
	0.15	0.15	0.21		
1142	1	3	1	1.00	1.00
	1.00	1.00	1.00		
1143	1	3	2	0.71	0.79
	0.82	0.79	1.12		
1144	2	2	1	1.00	1.00
	1.00	1.00	1.00		
1145	2	2	2	0.46	0.46
	0.46	0.46	1.03		
1146	2	3	1	1.00	1.00
	1.00	1.00	1.00		
1147	2	3	2	0.46	0.46
	0.46	0.46	1.03		
1148	3	1	1	1.00	1.00
	1.00	1.00	1.00		
1149	3	1	2	0.20	0.20
	0.20	0.20	0.26		
1150	4	1	1	1.00	1.00
	1.00	1.00	1.00		
1151	5	1	1	1.00	1.00
	1.00	1.00	1.00		

1152

1153 DEFAULT\_PERSON\_FACTORS\_CHANGE - (used)

1154 \*% change p.a.

1155	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3	
	ChangePer4	ChangePer5							
1156	2011	2080		1	1	2	0.00	0.00	0.00
1157	2011	2080		1	2	2	0.00	0.00	0.00

1158

1159 DEFAULT\_PERSON\_FACTORS\_CHANGE - (std)

1160 \*% change p.a.

1161	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3
	ChangePer4	ChangePer5						
1162	2011	2036		1	1	2	0.00	0.00
	0.00	0.00	0.00					
1163	2011	2036		1	2	2	0.00	0.00
	0.00	0.00	0.00					
1164	2011	2036		1	3	2	0.00	0.00
	0.00	0.00	0.00					

1165

1166 INPUT\_SUMMARY

1167 Run name N25 Waterford to Glenmore - Lime  
 1168 DM scheme Do **Min**  
 1169 DS scheme Lime\_Green

1170

1171 Economic parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Teal\Economics\_Input\_TUBAv1.9.8  
 (Oct2020).txt

1172 Scheme parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Lime\_Green\SS\TUBA\_Scheme\_Input\_LimeGreen\_30year\_v1.9.8\_SPL\_1\_0.txt

1173

1174 First year of scheme costs 2020  
 1175 First Appraisal Year 2030

1176	Last Appraisal Year	2059
1177	Modelled years	2030 2045 2059
1178		
1179	Time period	Total hours
1180	AM Peak	646
1181	Inter Peak	2424
1182	PM Peak	640
1183	Total	3710
1184		
1185		

1186 Note: All monetary values are in 2011 market prices. All monetary values discounted to 2011 unless otherwise stated.

1187						
1188	DM_SCHEME_COSTS					
1189	Do minimum scheme costs. Undiscounted £000s					
1190	Mode	Year	Prep.	Superv.	Constr.	Land
	Maint.	Oper.	Grant/Sub.	Dev._Cont		
1191	Road	2020	0	0	0	0
	0	0	0	0	0	0
1192	Road	2021	0	0	0	0
	0	0	0	0	0	0
1193	Road	2022	0	0	0	0
	0	0	0	0	0	0
1194	Road	2023	0	0	0	0
	0	0	0	0	0	0
1195	Road	2024	0	0	0	0
	0	0	0	0	0	0
1196	Road	2025	0	0	0	0
	0	0	0	0	0	0
1197	Road	2026	0	0	0	0
	0	0	0	0	0	0
1198	Road	2027	0	0	0	0
	0	0	0	0	0	0
1199	Road	2028	0	0	0	0
	0	0	0	0	0	0
1200	Road	2029	0	0	0	0
	0	0	0	0	0	0
1201	Road	2030	0	0	0	0
	0	0	0	0	0	0
1202	Road	2031	0	0	0	0
	0	0	0	0	0	0
1203	Road	2032	0	0	0	0
	0	0	0	0	0	0
1204	Road	2033	0	0	0	0
	0	0	0	0	0	0
1205	Road	2034	0	0	0	0
	0	0	0	0	0	0
1206	Road	2035	0	0	0	0
	0	0	0	0	0	0
1207	Road	2036	0	0	0	0
	0	0	0	0	0	0
1208	Road	2037	0	0	0	0
	0	0	0	0	0	0
1209	Road	2038	0	0	0	0
	0	0	0	0	0	0
1210	Road	2039	0	0	0	0
	0	0	0	0	0	0
1211	Road	2040	0	0	0	0
	0	0	0	0	0	0
1212	Road	2041	0	0	0	0
	0	0	0	0	0	0
1213	Road	2042	0	0	0	0
	0	0	0	0	0	0
1214	Road	2043	0	0	0	0
	0	0	0	0	0	0
1215	Road	2044	0	0	0	0
	0	0	0	0	0	0
1216	Road	2045	0	0	0	0
	0	0	0	0	0	0

1217	Road	2046	0	0	0	0	0
1218	Road	2047	0	0	0	0	0
1219	Road	2048	0	0	0	0	0
1220	Road	2049	0	0	0	0	0
1221	Road	2050	0	0	0	0	0
1222	Road	2051	0	0	0	0	0
1223	Road	2052	0	0	0	0	0
1224	Road	2053	0	0	0	0	0
1225	Road	2054	0	0	0	0	0
1226	Road	2055	0	0	0	0	0
1227	Road	2056	0	0	0	0	0
1228	Road	2057	0	0	0	0	0
1229	Road	2058	0	0	0	0	0
1230	Road	2059	0	0	0	0	0
1231	Bus	2020	0	0	0	0	0
1232	Bus	2021	0	0	0	0	0
1233	Bus	2022	0	0	0	0	0
1234	Bus	2023	0	0	0	0	0
1235	Bus	2024	0	0	0	0	0
1236	Bus	2025	0	0	0	0	0
1237	Bus	2026	0	0	0	0	0
1238	Bus	2027	0	0	0	0	0
1239	Bus	2028	0	0	0	0	0
1240	Bus	2029	0	0	0	0	0
1241	Bus	2030	0	0	0	0	0
1242	Bus	2031	0	0	0	0	0
1243	Bus	2032	0	0	0	0	0
1244	Bus	2033	0	0	0	0	0
1245	Bus	2034	0	0	0	0	0
1246	Bus	2035	0	0	0	0	0
1247	Bus	2036	0	0	0	0	0
1248	Bus	2037	0	0	0	0	0
1249	Bus	2038	0	0	0	0	0
1250	Bus	2039	0	0	0	0	0
1251	Bus	2040	0	0	0	0	0

1252	0	0	0	0	0	0	0
	Bus	2041	0	0	0	0	0
	0	0	0	0	0	0	0
1253	Bus	2042	0	0	0	0	0
	0	0	0	0	0	0	0
1254	Bus	2043	0	0	0	0	0
	0	0	0	0	0	0	0
1255	Bus	2044	0	0	0	0	0
	0	0	0	0	0	0	0
1256	Bus	2045	0	0	0	0	0
	0	0	0	0	0	0	0
1257	Bus	2046	0	0	0	0	0
	0	0	0	0	0	0	0
1258	Bus	2047	0	0	0	0	0
	0	0	0	0	0	0	0
1259	Bus	2048	0	0	0	0	0
	0	0	0	0	0	0	0
1260	Bus	2049	0	0	0	0	0
	0	0	0	0	0	0	0
1261	Bus	2050	0	0	0	0	0
	0	0	0	0	0	0	0
1262	Bus	2051	0	0	0	0	0
	0	0	0	0	0	0	0
1263	Bus	2052	0	0	0	0	0
	0	0	0	0	0	0	0
1264	Bus	2053	0	0	0	0	0
	0	0	0	0	0	0	0
1265	Bus	2054	0	0	0	0	0
	0	0	0	0	0	0	0
1266	Bus	2055	0	0	0	0	0
	0	0	0	0	0	0	0
1267	Bus	2056	0	0	0	0	0
	0	0	0	0	0	0	0
1268	Bus	2057	0	0	0	0	0
	0	0	0	0	0	0	0
1269	Bus	2058	0	0	0	0	0
	0	0	0	0	0	0	0
1270	Bus	2059	0	0	0	0	0
	0	0	0	0	0	0	0

1271							
1272	DS_SCHEME_COSTS						
1273	Do something scheme costs. Undiscounted £000s						
1274	Mode	Year	Prep.	Superv.	Constr.	Land	
	Maint.	Oper.	Grant/Sub.	Dev._Cont			
1275	Road	2020	0	0	0	0	0
	0	0	0	0	0	0	0
1276	Road	2021	0	0	0	0	0
	0	0	0	0	0	0	0
1277	Road	2022	0	0	0	0	0
	0	0	0	0	0	0	0
1278	Road	2023	0	0	0	0	0
	0	0	0	0	0	0	0
1279	Road	2024	0	0	0	0	0
	0	0	0	0	0	0	0
1280	Road	2025	0	0	0	0	0
	0	0	0	0	0	0	0
1281	Road	2026	0	0	0	0	0
	0	0	0	0	0	0	0
1282	Road	2027	3818	0	26812	8825	
	0	0	0	0	0	0	
1283	Road	2028	764	2893	56553	8825	
	0	0	0	0	0	0	
1284	Road	2029	509	2893	29290	0	
	0	0	0	0	0	0	
1285	Road	2030	0	0	0	0	
	432	0	0	0	0	0	
1286	Road	2031	0	0	0	0	
	432	0	0	0	0	0	
1287	Road	2032	0	0	0	0	

1288	432	0	0	0	0	0	0
	Road	2033	0	0	0	0	0
1289	432	0	0	0	0	0	0
	Road	2034	0	0	0	0	0
1290	432	0	0	0	0	0	0
	Road	2035	0	0	0	0	0
1291	432	0	0	0	0	0	0
	Road	2036	0	0	0	0	0
1292	432	0	0	0	0	0	0
	Road	2037	0	0	0	0	0
1293	432	0	0	0	0	0	0
	Road	2038	0	0	0	0	0
1294	432	0	0	0	0	0	0
	Road	2039	0	0	0	0	0
1295	432	0	0	0	0	0	0
	Road	2040	0	0	0	0	0
1296	432	0	0	0	0	0	0
	Road	2041	0	0	0	0	0
1297	432	0	0	0	0	0	0
	Road	2042	0	0	0	0	0
1298	432	0	0	0	0	0	0
	Road	2043	0	0	0	0	0
1299	432	0	0	0	0	0	0
	Road	2044	0	0	0	0	0
1300	432	0	0	0	0	0	0
	Road	2045	0	0	0	0	0
1301	432	0	0	0	0	0	0
	Road	2046	0	0	0	0	0
1302	432	0	0	0	0	0	0
	Road	2047	0	0	0	0	0
1303	432	0	0	0	0	0	0
	Road	2048	0	0	0	0	0
1304	432	0	0	0	0	0	0
	Road	2049	0	0	0	0	0
1305	432	0	0	0	0	0	0
	Road	2050	0	0	0	0	0
1306	432	0	0	0	0	0	0
	Road	2051	0	0	0	0	0
1307	432	0	0	0	0	0	0
	Road	2052	0	0	0	0	0
1308	432	0	0	0	0	0	0
	Road	2053	0	0	0	0	0
1309	432	0	0	0	0	0	0
	Road	2054	0	0	0	0	0
1310	432	0	0	0	0	0	0
	Road	2055	0	0	0	0	0
1311	432	0	0	0	0	0	0
	Road	2056	0	0	0	0	0
1312	432	0	0	0	0	0	0
	Road	2057	0	0	0	0	0
1313	432	0	0	0	0	0	0
	Road	2058	0	0	0	0	0
1314	432	0	0	0	0	0	0
	Road	2059	0	0	0	0	0
1315	563	0	0	0	0	0	0
	Bus	2020	0	0	0	0	0
1316	0	0	0	0	0	0	0
	Bus	2021	0	0	0	0	0
1317	0	0	0	0	0	0	0
	Bus	2022	0	0	0	0	0
1318	0	0	0	0	0	0	0
	Bus	2023	0	0	0	0	0
1319	0	0	0	0	0	0	0
	Bus	2024	0	0	0	0	0
1320	0	0	0	0	0	0	0
	Bus	2025	0	0	0	0	0
1321	0	0	0	0	0	0	0
	Bus	2026	0	0	0	0	0

1322	Bus	2027	0	0	0	0	0
	0	0	0	0	0	0	0
1323	Bus	2028	0	0	0	0	0
	0	0	0	0	0	0	0
1324	Bus	2029	0	0	0	0	0
	0	0	0	0	0	0	0
1325	Bus	2030	0	0	0	0	0
	0	0	0	0	0	0	0
1326	Bus	2031	0	0	0	0	0
	0	0	0	0	0	0	0
1327	Bus	2032	0	0	0	0	0
	0	0	0	0	0	0	0
1328	Bus	2033	0	0	0	0	0
	0	0	0	0	0	0	0
1329	Bus	2034	0	0	0	0	0
	0	0	0	0	0	0	0
1330	Bus	2035	0	0	0	0	0
	0	0	0	0	0	0	0
1331	Bus	2036	0	0	0	0	0
	0	0	0	0	0	0	0
1332	Bus	2037	0	0	0	0	0
	0	0	0	0	0	0	0
1333	Bus	2038	0	0	0	0	0
	0	0	0	0	0	0	0
1334	Bus	2039	0	0	0	0	0
	0	0	0	0	0	0	0
1335	Bus	2040	0	0	0	0	0
	0	0	0	0	0	0	0
1336	Bus	2041	0	0	0	0	0
	0	0	0	0	0	0	0
1337	Bus	2042	0	0	0	0	0
	0	0	0	0	0	0	0
1338	Bus	2043	0	0	0	0	0
	0	0	0	0	0	0	0
1339	Bus	2044	0	0	0	0	0
	0	0	0	0	0	0	0
1340	Bus	2045	0	0	0	0	0
	0	0	0	0	0	0	0
1341	Bus	2046	0	0	0	0	0
	0	0	0	0	0	0	0
1342	Bus	2047	0	0	0	0	0
	0	0	0	0	0	0	0
1343	Bus	2048	0	0	0	0	0
	0	0	0	0	0	0	0
1344	Bus	2049	0	0	0	0	0
	0	0	0	0	0	0	0
1345	Bus	2050	0	0	0	0	0
	0	0	0	0	0	0	0
1346	Bus	2051	0	0	0	0	0
	0	0	0	0	0	0	0
1347	Bus	2052	0	0	0	0	0
	0	0	0	0	0	0	0
1348	Bus	2053	0	0	0	0	0
	0	0	0	0	0	0	0
1349	Bus	2054	0	0	0	0	0
	0	0	0	0	0	0	0
1350	Bus	2055	0	0	0	0	0
	0	0	0	0	0	0	0
1351	Bus	2056	0	0	0	0	0
	0	0	0	0	0	0	0
1352	Bus	2057	0	0	0	0	0
	0	0	0	0	0	0	0
1353	Bus	2058	0	0	0	0	0
	0	0	0	0	0	0	0
1354	Bus	2059	0	0	0	0	0
	0	0	0	0	0	0	0

1355  
1356 PRESENT\_VALUE\_COSTS  
1357 Scheme investment and operating costs (i.e. excluding grant/subsidy, developer

contributions and delays) and differences. £000s.

	Mode	Year	DM_scheme_costs	DS_scheme_costs	Difference
1358	Road	2020	0	0	0
1359	Road	2021	0	0	0
1360	Road	2022	0	0	0
1361	Road	2023	0	0	0
1362	Road	2024	0	0	0
1363	Road	2025	0	0	0
1364	Road	2026	0	0	0
1365	Road	2027	0	21066	21066
1366	Road	2028	0	35440	35440
1367	Road	2029	0	16138	16138
1368	Road	2030	0	205	205
1369	Road	2031	0	197	197
1370	Road	2032	0	189	189
1371	Road	2033	0	182	182
1372	Road	2034	0	175	175
1373	Road	2035	0	168	168
1374	Road	2036	0	162	162
1375	Road	2037	0	156	156
1376	Road	2038	0	150	150
1377	Road	2039	0	144	144
1378	Road	2040	0	138	138
1379	Road	2041	0	133	133
1380	Road	2042	0	128	128
1381	Road	2043	0	123	123
1382	Road	2044	0	118	118
1383	Road	2045	0	114	114
1384	Road	2046	0	109	109
1385	Road	2047	0	105	105
1386	Road	2048	0	101	101
1387	Road	2049	0	97	97
1388	Road	2050	0	94	94
1389	Road	2051	0	91	91
1390	Road	2052	0	88	88
1391	Road	2053	0	85	85
1392	Road	2054	0	82	82
1393	Road	2055	0	79	79
1394	Road	2056	0	76	76
1395	Road	2057	0	74	74
1396	Road	2058	0	71	71
1397	Road	2059	0	90	90
1398	Bus	2020	0	0	0
1399	Bus	2021	0	0	0
1400	Bus	2022	0	0	0
1401	Bus	2023	0	0	0
1402	Bus	2024	0	0	0
1403	Bus	2025	0	0	0
1404	Bus	2026	0	0	0
1405	Bus	2027	0	0	0
1406	Bus	2028	0	0	0
1407	Bus	2029	0	0	0
1408	Bus	2030	0	0	0
1409	Bus	2031	0	0	0
1410	Bus	2032	0	0	0
1411	Bus	2033	0	0	0
1412	Bus	2034	0	0	0
1413	Bus	2035	0	0	0
1414	Bus	2036	0	0	0
1415	Bus	2037	0	0	0
1416	Bus	2038	0	0	0
1417	Bus	2039	0	0	0
1418	Bus	2040	0	0	0
1419	Bus	2041	0	0	0
1420	Bus	2042	0	0	0
1421	Bus	2043	0	0	0
1422	Bus	2044	0	0	0
1423	Bus	2045	0	0	0
1424	Bus	2046	0	0	0



1426	Bus	2047	0	0	0
1427	Bus	2048	0	0	0
1428	Bus	2049	0	0	0
1429	Bus	2050	0	0	0
1430	Bus	2051	0	0	0
1431	Bus	2052	0	0	0
1432	Bus	2053	0	0	0
1433	Bus	2054	0	0	0
1434	Bus	2055	0	0	0
1435	Bus	2056	0	0	0
1436	Bus	2057	0	0	0
1437	Bus	2058	0	0	0
1438	Bus	2059	0	0	0
1439	Road	Total	0	76370	76370
1440	Bus	Total	0	0	0

1441					
1442	TRIP_MATRIX_TOTALS				
1443	Annualised total trip numbers (thousands)				
1444	Submode	Year	Time period	DO MIN	DO SOM
1445	Car	2030	AM Peak	4719	4719
1446	Car	2030	Inter Peak	15931	15931
1447	Car	2030	PM Peak	4822	4822
1448	Car	2030	All	25472	25472
1449	Car	2045	AM Peak	4859	4859
1450	Car	2045	Inter Peak	16387	16387
1451	Car	2045	PM Peak	4962	4962
1452	Car	2045	All	26208	26208
1453	Car	2059	AM Peak	4861	4861
1454	Car	2059	Inter Peak	16428	16428
1455	Car	2059	PM Peak	4963	4963
1456	Car	2059	All	26252	26252
1457	OGV2	2030	AM Peak	287	287
1458	OGV2	2030	Inter Peak	1018	1018
1459	OGV2	2030	PM Peak	236	236
1460	OGV2	2030	All	1541	1541
1461	OGV2	2045	AM Peak	339	339
1462	OGV2	2045	Inter Peak	1209	1209
1463	OGV2	2045	PM Peak	279	279
1464	OGV2	2045	All	1828	1828
1465	OGV2	2059	AM Peak	361	361
1466	OGV2	2059	Inter Peak	1292	1292
1467	OGV2	2059	PM Peak	297	297
1468	OGV2	2059	All	1950	1950
1469	All	2030	AM Peak	5006	5006
1470	All	2030	Inter Peak	16948	16948
1471	All	2030	PM Peak	5059	5059
1472	All	2030	All	27013	27013
1473	All	2045	AM Peak	5198	5198
1474	All	2045	Inter Peak	17596	17596
1475	All	2045	PM Peak	5241	5241
1476	All	2045	All	28035	28035
1477	All	2059	AM Peak	5221	5221
1478	All	2059	Inter Peak	17721	17721
1479	All	2059	PM Peak	5260	5260
1480	All	2059	All	28202	28202

1481						
1482	DM&DS_USER_COSTS					
1483	Total value of user costs, DM and DS. £000s.					
1484	Mode	Year	DMtot_time	DMtot_charge	DMtot_fuel	DMtot_nonfuel
	DStot_time	DStot_charge	DStot_fuel	DStot_nonfuel		
1485	Road	2030	104727	0	19837	20654
	103063	0	19703	20492		
1486	Road	2045	86732	0	12186	12416
	85238	0	12102	12314		
1487	Road	2059	73347	0	7656	7725
	71997	0	7602	7661		

1488					
1489	FUEL_CONSUMPTION				
1490	Total fuel consumption, DM and DS. kilounits.				

			Do minimum		Do something	
	Submode	Year	petrol	diesel	petrol	diesel
1491						
1492	Car	2030	11160	5939	11106	5903
1493	Car	2045	11511	6130	11455	6092
1494	Car	2059	11549	6151	11493	6112
1495	OGV2	2030	0	19097	0	18939
1496	OGV2	2045	0	22533	0	22345
1497	OGV2	2059	0	24009	0	23808
1498	All	2030	11160	25035	11106	24842
1499	All	2045	11511	28663	11455	28437
1500	All	2059	11549	30160	11493	29920
1501	Car	Total	342809	182521	341137	181396
1502	OGV2	Total	0	659576	0	654072
1503	All	Total	342809	842097	341137	835468

1505  
1506 CO2\_EMISSIONS\_UNTRADED  
1507

			Emissions (tonnes) (£000s, low central)			cost cost (£000s, high)	
	Submode	Year	DM	DS	Increase	DM	DM
	DS	Increase	DM	DS	Increase	DM	DM
	DS	Increase					
1508							
1509	Car	2030	40102	39889	-213	1902	
	1892	-10	381	379	-2	381	
	379	-2					
1510	Car	2045	41374	41152	-223	2266	
	2254	-12	218	217	-1	218	
	217	-1					
1511	Car	2059	41512	41288	-224	2728	
	2713	-15	133	132	-1	133	
	132	-1					
1512	OGV2	2030	48926	48523	-403	2321	
	2302	-19	464	461	-4	464	
	461	-4					
1513	OGV2	2045	57730	57247	-483	3161	
	3135	-26	304	302	-3	304	
	302	-3					
1514	OGV2	2059	61512	60995	-517	4042	
	4008	-34	196	195	-2	196	
	195	-2					
1515	All	2030	89027	88412	-616	4223	
	4194	-29	845	839	-6	845	
	839	-6					
1516	All	2031	89699	89078	-622	4296	
	4267	-30	819	813	-6	819	
	813	-6					
1517	All	2032	90371	89744	-628	4370	
	4340	-30	793	788	-6	793	
	788	-6					
1518	All	2033	91043	90409	-634	4445	
	4414	-31	768	763	-5	768	
	763	-5					
1519	All	2034	91715	91075	-640	4521	
	4489	-32	744	739	-5	744	
	739	-5					
1520	All	2035	92387	91741	-646	4598	
	4566	-32	721	716	-5	721	
	716	-5					
1521	All	2036	93058	92407	-652	4676	
	4643	-33	698	693	-5	698	
	693	-5					
1522	All	2037	93730	93073	-658	4755	
	4721	-33	676	671	-5	676	
	671	-5					
1523	All	2038	94402	93738	-664	4835	
	4801	-34	655	650	-5	655	
	650	-5					
1524	All	2039	95074	94404	-670	4916	
	4881	-35	634	630	-4	634	

1525	630	-4				
	All	2040	95746	95070	-676	4998
	4963	-35	614	610	-4	614
	610	-4				
1526	All	2041	96417	95736	-682	5082
	5046	-36	595	590	-4	595
	590	-4				
1527	All	2042	97089	96402	-688	5166
	5130	-37	576	572	-4	576
	572	-4				
1528	All	2043	97761	97067	-694	5252
	5215	-37	557	553	-4	557
	553	-4				
1529	All	2044	98433	97733	-700	5339
	5301	-38	540	536	-4	540
	536	-4				
1530	All	2045	99105	98399	-706	5427
	5389	-39	522	519	-4	522
	519	-4				
1531	All	2046	99385	98676	-708	5495
	5456	-39	504	500	-4	504
	500	-4				
1532	All	2047	99665	98954	-711	5563
	5524	-40	486	482	-3	486
	482	-3				
1533	All	2048	99944	99231	-713	5633
	5592	-40	468	465	-3	468
	465	-3				
1534	All	2049	100224	99509	-716	5703
	5662	-41	452	448	-3	452
	448	-3				
1535	All	2050	100504	99786	-718	5802
	5760	-41	438	434	-3	438
	434	-3				
1536	All	2051	100784	100064	-721	5902
	5860	-42	424	421	-3	424
	421	-3				
1537	All	2052	101064	100341	-723	6004
	5961	-43	411	408	-3	411
	408	-3				
1538	All	2053	101344	100618	-726	6108
	6064	-44	398	395	-3	398
	395	-3				
1539	All	2054	101624	100896	-728	6214
	6169	-45	386	383	-3	386
	383	-3				
1540	All	2055	101904	101173	-731	6321
	6276	-45	374	371	-3	374
	371	-3				
1541	All	2056	102184	101451	-733	6430
	6384	-46	362	359	-3	362
	359	-3				
1542	All	2057	102464	101728	-736	6541
	6494	-47	351	348	-3	351
	348	-3				
1543	All	2058	102744	102005	-739	6654
	6607	-48	340	337	-2	340
	337	-2				
1544	All	2059	103024	102283	-741	6769
	6721	-49	329	327	-2	329
	327	-2				
1545	Car	Total	1232082	1225471	-6611	68119
	67753	-366	7024	6987	-38	7024
	6987	-38				
1546	OGV2	Total	1689834	1675731	-14103	93921
	93136	-784	9453	9374	-79	9453
	9374	-79				
1547	All	Total	2921917	2901203	-20714	162039
	160889	-1150	16477	16361	-116	16477



1572	All	2044	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1573	All	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1574	All	2046	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1575	All	2047	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1576	All	2048	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1577	All	2049	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1578	All	2050	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1579	All	2051	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1580	All	2052	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1581	All	2053	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1582	All	2054	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1583	All	2055	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1584	All	2056	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1585	All	2057	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1586	All	2058	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1587	All	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1588	Car	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1589	OGV2	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1590	All	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0

1591  
1592 CO2\_EMISSIONS\_BY\_TIME\_PERIOD\_UNTRADED

		Emissions (tonnes)				cost	
		(£000s, low)		central)		cost (£000s, high)	
1594	Submode	Year	DM	DS	Increase	DM	DM
	DS	Increase	DM	DS	Increase	DM	DM
	DS	Increase					
1595	AM Peak	2030	17616	17486	-130	836	
	830	-6	167	166	-1	167	
	166	-1					
1596	AM Peak	2045	19478	19329	-149	1067	

	1059	-8	103	102	-1	103
	102	-1				
1597	AM Peak	2059	20145	19988	-157	1324
	1313	-10	64	64	-1	64
	64	-1				
1598	Inter Peak	2030	55393	55035	-358	2628
	2611	-17	526	522	-3	526
	522	-3				
1599	Inter Peak	2045	61964	61558	-406	3393
	3371	-22	327	324	-2	327
	324	-2				
1600	Inter Peak	2059	64617	64192	-425	4246
	4218	-28	206	205	-1	206
	205	-1				
1601	PM Peak	2030	16019	15891	-128	760
	754	-6	152	151	-1	152
	151	-1				
1602	PM Peak	2045	17662	17512	-150	967
	959	-8	93	92	-1	93
	92	-1				
1603	PM Peak	2059	18262	18103	-159	1200
	1189	-10	58	58	-1	58
	58	-1				
1604	AM Peak	Total	574452	570071	-4381	31847
	31603	-243	3243	3218	-25	3243
	3218	-25				
1605	Inter Peak	Total	1826246	1814310	-11935	101299
	100637	-662	10290	10223	-67	10290
	10223	-67				
1606	PM Peak	Total	521219	516821	-4398	28893
	28649	-244	2943	2919	-25	2943
	2919	-25				

1607

1608 NOTE: The cost of any EU Allowances (EUAs) purchased to cover traded emissions (i.e. emissions from sectors covered by the EU Emissions Trading System)

1609 will be reflected in the purchase price of traded sector goods (such as electricity).

1610 Since the purchase price is used in the costs, considered in transport appraisal,

1611 the cost of the relevant EUAs will be included in the cost benefit analysis,

1612 "internalising" the costs of emissions from traded sectors.

1613 The CO2 EMISSIONS BY TIME PERIOD TRADED reported in the table below are therefore provided for information purposes only - they are not included in the

1614 Economic Efficiency of the Transport System (TEE) table.

1615 For further information, please refer to TAG Unit A-3 para. 4.1.5 and 4.2.9

1615 CO2\_EMISSIONS\_BY\_TIME\_PERIOD\_TRADED

1616	Submode	Year	Emissions (tonnes)			cost	
			DM	DS	Increase	cost (£000s, high)	DM
1617	DS	Increase	DM	DS	Increase	DM	DM
1618	DS	Increase	DM	DS	Increase	DM	DM
	AM Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1619	AM Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1620	AM Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1621	Inter Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1622	Inter Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1623	Inter Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					

1624	PM Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1625	PM Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1626	PM Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1627	AM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1628	Inter Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1629	PM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					

1630	MODE						
1631	User benefits and changes in revenues by mode, all years. £000s.						
1632	Mode	Year	User	User_Charges	Vehicle_Operating_Cost		
1633	Operator_Rev	Indirect					
1634			Time	PT_fares_(pri	Fuel	Non_fuel	
			PT_fares_(pri	Taxes			
1635	Road	2030	1664	0	134	162	
	0	-73					
1636	Road	2031	1653	0	130	157	
	0	-71					
1637	Road	2032	1642	0	126	153	
	0	-69					
1638	Road	2033	1631	0	122	148	
	0	-67					
1639	Road	2034	1620	0	119	143	
	0	-65					
1640	Road	2035	1609	0	115	139	
	0	-63					
1641	Road	2036	1598	0	112	135	
	0	-61					
1642	Road	2037	1587	0	108	131	
	0	-59					
1643	Road	2038	1575	0	105	127	
	0	-57					
1644	Road	2039	1564	0	102	123	
	0	-55					
1645	Road	2040	1552	0	99	119	
	0	-54					
1646	Road	2041	1541	0	96	115	
	0	-52					
1647	Road	2042	1529	0	93	112	
	0	-50					
1648	Road	2043	1518	0	90	108	
	0	-49					
1649	Road	2044	1506	0	87	105	
	0	-47					
1650	Road	2045	1495	0	85	102	
	0	-46					
1651	Road	2046	1479	0	82	98	
	0	-44					
1652	Road	2047	1463	0	79	95	
	0	-43					
1653	Road	2048	1448	0	76	91	
	0	-41					
1654	Road	2049	1433	0	73	88	
	0	-40					
1655	Road	2050	1424	0	71	85	
	0	-39					
1656	Road	2051	1416	0	69	83	
	0	-37					

1657	Road	2052	1408	0	67	80
	0	-36				
1658	Road	2053	1399	0	65	78
	0	-35				
1659	Road	2054	1391	0	63	75
	0	-34				
1660	Road	2055	1383	0	61	73
	0	-33				
1661	Road	2056	1375	0	59	71
	0	-32				
1662	Road	2057	1366	0	57	69
	0	-31				
1663	Road	2058	1358	0	55	67
	0	-30				
1664	Road	2059	1350	0	54	65
	0	-29				
1665	Road	Total	44979	0	2654	3196
	0	-1439				

1666

1667 SUBMODE

1668 User benefits and changes in revenues by submode/vehicle type, modelled years and total. £000s.

1669 Submode Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1670 Time PT\_fares\_(pri PT\_fares\_(pri Fuel Non\_fuel  
Taxes

1671	Car	2030	1344	0	52	76
	0	-30				
1672	Car	2045	1185	0	30	44
	0	-18				
1673	Car	2059	1071	0	18	27
	0	-11				
1674	OGV2	2030	321	0	82	86
	0	-43				
1675	OGV2	2045	310	0	55	58
	0	-28				
1676	OGV2	2059	279	0	36	38
	0	-18				
1677	All	2030	1664	0	134	162
	0	-73				
1678	All	2045	1495	0	85	102
	0	-46				
1679	All	2059	1350	0	54	65
	0	-29				
1680	Car	Total	35846	0	960	1409
	0	-562				
1681	OGV2	Total	9132	0	1694	1787
	0	-877				
1682	All	Total	44979	0	2654	3196
	0	-1439				

1683

1684 PERSON\_TYPES

1685 User benefits and changes in revenues by person type, modelled years and total. £000s.

1686 Person\_type Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1687 Time PT\_fares\_(pri PT\_fares\_(pri Fuel Non\_fuel  
Taxes

1688	All	2030	1664	0	134	162
	0	-73				
1689	All	2045	1495	0	85	102
	0	-46				
1690	All	2059	1350	0	54	65
	0	-29				
1691	All	Total	44979	0	2654	3196
	0	-1439				

1692

1693 PURPOSE

1694 User benefits and changes in revenues by trip purpose, modelled years and total. £000s.

1695 Purpose Year User User\_Charges Vehicle\_Operating\_Cost



1696	Operator_Rev	Indirect	Time PT_fares_(pri PT_fares_(pri		Fuel	Non_fuel
1697	Business	2030	763	0	77	110
	0	-40				
1698	Business	2045	699	0	51	73
	0	-26				
1699	Business	2059	631	0	33	47
	0	-17				
1700	Commuting	2030	385	0	29	24
	0	-17				
1701	Commuting	2045	340	0	17	14
	0	-10				
1702	Commuting	2059	307	0	11	8
	0	-6				
1703	Other	2030	516	0	28	28
	0	-16				
1704	Other	2045	455	0	17	15
	0	-10				
1705	Other	2059	411	0	10	9
	0	-6				
1706	Business	Total	20920	0	1568	2256
	0	-813				
1707	Commuting	Total	10290	0	551	440
	0	-316				
1708	Other	Total	13768	0	534	500
	0	-310				
1709						
1710	PERIOD					
1711	User benefits and changes in revenues by time period, modelled years and total. £000s.					
1712	Period	Year	User	User_Charges	Vehicle_Operating_Cost	
	Operator_Rev	Indirect	Time PT_fares_(pri PT_fares_(pri		Fuel	Non_fuel
1713						
1714	AM Peak	2030	457	0	28	35
	0	-15				
1715	AM Peak	2045	417	0	18	22
	0	-10				
1716	AM Peak	2059	378	0	11	14
	0	-6				
1717	Inter Peak	2030	750	0	77	94
	0	-42				
1718	Inter Peak	2045	662	0	48	59
	0	-26				
1719	Inter Peak	2059	599	0	31	37
	0	-16				
1720	PM Peak	2030	457	0	28	33
	0	-16				
1721	PM Peak	2045	416	0	18	21
	0	-10				
1722	PM Peak	2059	373	0	12	13
	0	-6				
1723	AM Peak	Total	12509	0	561	686
	0	-305				
1724	Inter Peak	Total	20019	0	1521	1848
	0	-821				
1725	PM Peak	Total	12451	0	571	662
	0	-313				
1726						
1727	NON MONETISED TIME BENEFITS BY TIME SAVING					
1728	Time benefits (thousands of person hrs) by size of time saving					
1729	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins
	to 2 mins	2 to 5 mins	> 5 mins			
1730	Car	Business	2030	0		0
	-0	12	8	0		
1731	Car	Business	2045	0		0
	-0	13	9	0		
1732	Car	Business	2059	0		0
	-0	14	10	0		

1733	Car	Business	Total	0	0
	-12	384	264	0	
1734	Car	Commuting	2030	0	0
	-1	28	26	0	
1735	Car	Commuting	2045	0	0
	-1	31	30	0	
1736	Car	Commuting	2059	0	0
	-1	32	33	0	
1737	Car	Commuting	Total	0	0
	-28	915	886	0	
1738	Car	Other	2030	0	0
	-2	45	35	0	
1739	Car	Other	2045	0	0
	-1	50	41	0	
1740	Car	Other	2059	0	0
	-2	52	45	0	
1741	Car	Other	Total	0	0
	-46	1472	1212	0	
1742	OGV2	Business	2030	0	0
	-0	10	4	0	
1743	OGV2	Business	2045	0	0
	-0	12	5	0	
1744	OGV2	Business	2059	0	0
	-0	13	6	0	
1745	OGV2	Business	Total	0	0
	-2	347	150	0	
1746	OGV2	Commuting	2030	0	0
	-0	1	1	0	
1747	OGV2	Commuting	2045	0	0
	-0	1	1	0	
1748	OGV2	Commuting	2059	0	0
	-0	1	1	0	
1749	OGV2	Commuting	Total	0	0
	-0	38	24	0	
1750	OGV2	Other	2030	0	0
	-0	1	0	0	
1751	OGV2	Other	2045	0	0
	-0	1	0	0	
1752	OGV2	Other	2059	0	0
	-0	1	1	0	
1753	OGV2	Other	Total	0	0
	-0	24	13	0	

1754	MONETISED TIME BENEFITS BY TIME SAVING					
1755	Time benefits (£000s) by size of time saving					
1756	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins
1757	to 2 mins	2 to 5 mins	> 5 mins			0
1758	Car	Business	2030	0	0	
	-10	274	178	0		
1759	Car	Business	2045	0	0	
	-7	235	161	0		
1760	Car	Business	2059	0	0	
	-6	208	150	0		
1761	Car	Business	Total	0	0	
	-224	7135	4877	0		
1762	Car	Commuting	2030	0	0	
	-7	205	188	0		
1763	Car	Commuting	2045	0	0	
	-5	176	170	0		
1764	Car	Commuting	2059	0	0	
	-5	154	158	0		
1765	Car	Commuting	Total	0	0	
	-165	5322	5132	0		
1766	Car	Other	2030	0	0	
	-11	296	231	0		
1767	Car	Other	2045	0	0	
	-7	254	208	0		
1768	Car	Other	2059	0	0	
	-7	224	194	0		

1769	Car	Other	Total	0	0
	-241	7697	6311	0	
1770	OGV2	Business	2030	0	0
	-1	233	89	0	
1771	OGV2	Business	2045	0	0
	-1	216	94	0	
1772	OGV2	Business	2059	0	0
	-2	192	89	0	
1773	OGV2	Business	Total	0	0
	-37	6418	2751	0	
1774	OGV2	Commuting	2030	0	0
	0	0	0	0	
1775	OGV2	Commuting	2045	0	0
	0	0	0	0	
1776	OGV2	Commuting	2059	0	0
	0	0	0	0	
1777	OGV2	Commuting	Total	0	0
	0	0	0	0	
1778	OGV2	Other	2030	0	0
	0	0	0	0	
1779	OGV2	Other	2045	0	0
	0	0	0	0	
1780	OGV2	Other	2059	0	0
	0	0	0	0	
1781	OGV2	Other	Total	0	0
	0	0	0	0	
1782					
1783	TOTAL BENEFITS BY TIME SAVING				
1784	Total benefits (£000s) by size of time saving				
1785	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins
	to 2 mins	2 to 5 mins	> 5 mins		-2 to 0 mins
1786	Car	Business	2030	0	0
	-10	296	189	0	
1787	Car	Business	2045	0	0
	-7	248	168	0	
1788	Car	Business	2059	0	0
	-7	216	154	0	
1789	Car	Business	Total	0	0
	-235	7548	5083	0	
1790	Car	Commuting	2030	0	0
	-8	234	204	0	
1791	Car	Commuting	2045	0	0
	-5	193	178	0	
1792	Car	Commuting	2059	0	0
	-5	164	163	0	
1793	Car	Commuting	Total	0	0
	-177	5871	5423	0	
1794	Car	Other	2030	0	0
	-11	331	247	0	
1795	Car	Other	2045	0	0
	-8	275	217	0	
1796	Car	Other	2059	0	0
	-7	236	200	0	
1797	Car	Other	Total	0	0
	-256	8353	6605	0	
1798	OGV2	Business	2030	0	0
	-1	350	127	0	
1799	OGV2	Business	2045	0	0
	-1	292	122	0	
1800	OGV2	Business	2059	0	0
	-2	241	108	0	
1801	OGV2	Business	Total	0	0
	-38	8794	3593	0	
1802	OGV2	Commuting	2030	0	0
	0	5	3	0	
1803	OGV2	Commuting	2045	0	0
	0	3	2	0	
1804	OGV2	Commuting	2059	0	0
	-0	2	1	0	

1805	OGV2	Commuting	Total	0	0
	-0	108	57	0	
1806	OGV2	Other	2030	0	0
	0	3	1	0	
1807	OGV2	Other	2045	0	0
	0	2	1	0	
1808	OGV2	Other	2059	0	0
	-0	1	1	0	
1809	OGV2	Other	Total	0	0
	-0	69	30	0	

1810

1811 NON MONETISED TIME BENEFITS BY DISTANCE

1812 Time benefits (thousands of person hrs) by distance

1813 Vehicle type Purpose Year < 1 kms 1 to 5 kms 5 to 10 kms  
10 to 15 kms 15 to 20 kms 20 to 50 kms 50 to 100 kms >100 kms

1814	Car	Business	2030	19	0	0
	0	0	0	0	0	0
1815	Car	Business	2045	21	0	0
	0	0	0	0	0	0
1816	Car	Business	2059	23	0	0
	0	0	0	0	0	0
1817	Car	Business	Total	636	0	0
	0	0	0	0	0	0
1818	Car	Commuting	2030	53	0	0
	0	0	0	0	0	0
1819	Car	Commuting	2045	60	0	0
	0	0	0	0	0	0
1820	Car	Commuting	2059	65	0	0
	0	0	0	0	0	0
1821	Car	Commuting	Total	1774	0	0
	0	0	0	0	0	0
1822	Car	Other	2030	79	0	0
	0	0	0	0	0	0
1823	Car	Other	2045	89	0	0
	0	0	0	0	0	0
1824	Car	Other	2059	96	0	0
	0	0	0	0	0	0
1825	Car	Other	Total	2638	0	0
	0	0	0	0	0	0
1826	OGV2	Business	2030	0	0	0
	0	0	0	12	2	0
1827	OGV2	Business	2045	0	0	0
	-0	0	0	15	2	0
1828	OGV2	Business	2059	0	0	0
	-0	0	0	17	2	0
1829	OGV2	Business	Total	0	0	0
	-0	0	1	440	53	0
1830	OGV2	Commuting	2030	0	0	0
	0	0	0	1	0	0
1831	OGV2	Commuting	2045	0	0	0
	-0	0	0	2	0	0
1832	OGV2	Commuting	2059	0	0	0
	-0	0	0	2	0	0
1833	OGV2	Commuting	Total	0	0	0
	-0	0	0	55	6	0
1834	OGV2	Other	2030	0	0	0
	0	0	0	1	0	0
1835	OGV2	Other	2045	0	0	0
	-0	0	0	1	0	0
1836	OGV2	Other	2059	0	0	0
	-0	0	0	1	0	0
1837	OGV2	Other	Total	0	0	0
	-0	0	0	33	4	0

1838

1839 MONETISED TIME BENEFITS BY DISTANCE

1840 Time benefits (£000s) by distance

1841 Vehicle type Purpose Year < 1 kms 1 to 5 kms 5 to 10 kms  
10 to 15 kms 15 to 20 kms 20 to 50 kms 50 to 100 kms >100 kms

1842	Car	Business	2030	442	0	0
------	-----	----------	------	-----	---	---

1843	0	0	0	0	0	0	0
1843	Car	Business	2045	389	0	0	0
1844	0	0	0	0	0	0	0
1844	Car	Business	2059	352	0	0	0
1845	0	0	0	0	0	0	0
1845	Car	Business	Total	11788	0	0	0
1846	0	0	0	0	0	0	0
1846	Car	Commuting	2030	385	0	0	0
1847	0	0	0	0	0	0	0
1847	Car	Commuting	2045	340	0	0	0
1848	0	0	0	0	0	0	0
1848	Car	Commuting	2059	307	0	0	0
1849	0	0	0	0	0	0	0
1849	Car	Commuting	Total	10290	0	0	0
1850	0	0	0	0	0	0	0
1850	Car	Other	2030	516	0	0	0
1851	0	0	0	0	0	0	0
1851	Car	Other	2045	455	0	0	0
1852	0	0	0	0	0	0	0
1852	Car	Other	2059	411	0	0	0
1853	0	0	0	0	0	0	0
1853	Car	Other	Total	13768	0	0	0
1854	0	0	0	0	0	0	0
1854	OGV2	Business	2030	0	0	0	0
1855	0	0	0	280	40	0	0
1855	OGV2	Business	2045	0	0	0	0
1856	-0	0	0	276	33	0	0
1856	OGV2	Business	2059	0	0	0	0
1857	-0	0	0	251	28	0	0
1857	OGV2	Business	Total	0	0	0	0
1858	-0	2	11	8124	996	0	0
1858	OGV2	Commuting	2030	0	0	0	0
1859	0	0	0	0	0	0	0
1859	OGV2	Commuting	2045	0	0	0	0
1860	0	0	0	0	0	0	0
1860	OGV2	Commuting	2059	0	0	0	0
1861	0	0	0	0	0	0	0
1861	OGV2	Commuting	Total	0	0	0	0
1862	0	0	0	0	0	0	0
1862	OGV2	Other	2030	0	0	0	0
1863	0	0	0	0	0	0	0
1863	OGV2	Other	2045	0	0	0	0
1864	0	0	0	0	0	0	0
1864	OGV2	Other	2059	0	0	0	0
1865	0	0	0	0	0	0	0
1865	OGV2	Other	Total	0	0	0	0
1866	0	0	0	0	0	0	0

1866 1867 TOTAL BENEFITS BY DISTANCE

1868 Total benefits (£000s) by distance

1869 Vehicle type Purpose Year < 1 kms 1 to 5 kms 5 to 10 kms

	10 to 15 kms	15 to 20 kms	20 to 50 kms	< 1 kms	1 to 5 kms	5 to 10 kms	>100 kms
1870	Car	Business	2030	474	0	0	0
1871	0	0	0	0	0	0	0
1871	Car	Business	2045	408	0	0	0
1872	0	0	0	0	0	0	0
1872	Car	Business	2059	364	0	0	0
1873	0	0	0	0	0	0	0
1873	Car	Business	Total	12396	0	0	0
1874	0	0	0	0	0	0	0
1874	Car	Commuting	2030	430	0	0	0
1875	0	0	0	0	0	0	0
1875	Car	Commuting	2045	366	0	0	0
1876	0	0	0	0	0	0	0
1876	Car	Commuting	2059	323	0	0	0
1877	0	0	0	0	0	0	0
1877	Car	Commuting	Total	11116	0	0	0
1878	0	0	0	0	0	0	0
1878	Car	Other	2030	567	0	0	0

1879	Car	Other	2045	484	0	0
1880	Car	Other	2059	429	0	0
1881	Car	Other	Total	14703	0	0
1882	OGV2	Business	2030	0	0	0
1883	OGV2	Business	2045	0	59	0
1884	OGV2	Business	2059	0	0	0
1885	OGV2	Business	Total	0	0	0
1886	OGV2	Commuting	2030	0	0	0
1887	OGV2	Commuting	2045	0	0	0
1888	OGV2	Commuting	2059	0	-0	0
1889	OGV2	Commuting	Total	0	0	0
1890	OGV2	Other	2030	0	0	0
1891	OGV2	Other	2045	0	0	0
1892	OGV2	Other	2059	0	-0	0
1893	OGV2	Other	Total	0	0	0
1894				88	11	0

1894

1895 SENSITIVITY

1896 Total user benefits as a percentage of total DM user costs

1897 Modelled Years

1898	Mode	2030	2045	2059
1899	Road	1.35%	1.51%	1.65%

1900

1901 Economy:Economic Efficiency of the Transport System(TEE)

1902

1903	Consumer - Commuting user benefits		All Modes
1904	Road	Bus	
1904	Travel Time		10290
1905	Vehicle operating costs	0	991
1906	User charges	0	0
1907	During Construction & Maintenance	0	0
1908	NET CONSUMER - COMMUTING BENEFITS	0	11281
1909			
1910	Consumer - Other user benefits		All Modes
1911	Road	Bus	
1911	Travel Time		13768
1912	Vehicle operating costs	0	1034
1913	User charges	0	0
1914	During Construction & Maintenance	0	0
1915	NET CONSUMER - OTHER BENEFITS	0	14802
1916			
1917	Business		All Modes Road Personal Road Freight Bus
1918	Personal	Bus Freight	
1918	Travel Time		20920 11788

1919	9132	0	0		
	Vehicle operating costs			3824	608
	3216	0	0		
1920	User charges			0	0
	0	0	0		
1921	During Construction & Maintenance			0	0
	0	0	0		
1922	Subtotal			24745	12396
	12349	0	0		

1923					
1924	Private Sector Provider Impacts				
1925	Revenue			0	
	0		0		
1926	Operating costs			0	
	0		0		
1927	Investment costs			0	
	0		0		
1928	Grant/subsidy			0	
	0		0		
1929	Subtotal			0	
	0		0		
1930					
1931	Other business Impacts				
1932	Developer contributions			0	
	0		0		
1933	NET BUSINESS IMPACT			24745	

1934					
1935	TOTAL				
1936	Present Value of Transport Economic				
1937	Efficiency Benefits (TEE)			50828	

1938

1939 Note: Benefits appear as positive numbers, while costs appear as negative numbers.

1940 Note: All entries are present values discounted to 2011, in 2011 prices

1941					
1942	Public Accounts				
1943	Local Government Funding	ALL MODES		Road	
	Bus				
1944	Revenue	0		0	0
1945	Operating Costs	0		0	0
1946	Investment Costs	0		0	0
1947	Developer Contributions	0		0	0
1948	Grant/Subsidy Payments	0		0	0
1949	NET IMPACT	0		0	0

1950					
1951	Central Government Funding: Transport	ALL MODES		Road	
	Bus				
1952	Revenue	0		0	0
1953	Operating costs	3726		3726	0
1954	Investment costs	72644		72644	0
1955	Developer Contributions	0		0	0
1956	Grant/Subsidy Payments	0		0	0
1957	NET IMPACT	76370		76370	0

1958					
1959	Central Government Funding: Non-Transport				
1960					
1961	Indirect Tax Revenues	1439		1439	0
1962					
1963	TOTALS				
1964	Broad Transport Budget	76370		76370	0
1965	Wider Public Finances	1439		1439	0

1966

1967 Note: Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.

1968 Note: All entries are present values discounted to 2011, in 2011 prices

1969

1970 Analysis of Monetised Costs and Benefits

1971					
1972	Greenhouse Gases				116
1973					

1974	Economic Efficiency: Consumer Users (Commuting)	11281
1975	Economic Efficiency: Consumer Users (Other)	14802
1976	Economic Efficiency: Business Users and Providers	24745
1977	Wider Public Finances (Indirect Taxation Revenues)	-1439
1978	Present Value of Benefits (PVB)	49505
1979		
1980	Broad Transport Budget	76370
1981	Present Value of Costs (PVC)	76370
1982		
1983	OVERALL IMPACTS	
1984	Net Present Value (NPV)	-26865
1985	Benefit to Cost Ratio (BCR)	0.648
1986		
1987	Note: This table includes costs and benefits which are regularly or occasionally presented in monetised form in	
1988	transport appraisals, together with some where monetisation is in prospect. There may also be other significant	
1989	costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis	
1990	presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.	
1991		
1992		
1993	TUBA Run Information	
1994	- calculations completed	
1995		
1996	File Summary	
1997	- Scheme File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Lime_Green\SS\TUBA_Scheme_Input_LimeGreen_30year_v1.9.8_SPL_1_0.txt	
1998	- Economic File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Teal\Economics_Input_TUBAv1.9.8 (Oct2020).txt	
1999	- Output File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Lime_Green\TUBA_Scheme_Input_LimeGreen_30year_v1.9.8_SPL_1_0.out	
2000		
2001	Elapsed time : 0hrs 0mins 5sec	
2002		
2003		



1 Transport User Benefit Appraisal TUBA (64-BIT) 1.9.8(1xA) - Interim  
2 Program run on Mon Nov 16, 2020 at 18:21:40  
3

4 ERRORS AND WARNINGS  
5 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
year 2080 is ignored  
6 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
year 2080 is ignored  
7 528 Warnings found  
8  
9

10 Warning (none serious): Ratio of DM to DS travel time lower than limit for the  
following:  
11 Origin Destination Time\_slice Veh\_type Purpose Person\_type Year DM\_time  
DS\_time Ratio DM\_trips DS\_trips  
12 Displayed 0 warnings of a total of 138 of this type.  
13

14 Warning (none serious): Ratio of DM to DS travel distance lower than limit for the  
following:  
15 Origin Destination Time\_slice Veh\_type Purpose Person\_type Year DM\_dist  
DS\_dist Ratio DM\_trips DS\_trips  
16 Displayed 0 warnings of a total of 387 of this type.  
17

18 TUBA ECONOMICS FILE DIFFERENCES  
19

20 PARAMETERS - (used)  
21 TUBA\_version 1.9.8  
22 base\_year 2011  
23 pres\_val\_year 2011  
24 GDP\_base 100.00 0.00 0.00  
25 av\_ind\_tax 18.30 0.00 0.00  
26 nt\_carbdxvalues 20.00 20.00 20.00  
27

28 PARAMETERS - (std)  
29 TUBA\_version 1.9.8  
30 base\_year 2010  
31 pres\_val\_year 2010  
32 GDP\_base 100.00 0.00 0.00  
33 av\_ind\_tax 19.00 0.00 0.00  
34 nt\_carbdxvalues 26.60 79.80 53.20  
35 t\_carbdxvalues 11.80 11.80 11.80  
36

37 VEHICLE\_TYPE/SUBMODE - (used)  
38 \*no. mode new\_mode P&R type description  
39 1 1 N N per  
Car  
40 2 1 N N per  
LGV  
41 3 1 N N fre  
OGV1  
42 4 1 N N fre  
OGV2  
43 5 2 N N per  
Bus  
44 6 3 N N per Light  
Rail  
45 7 3 N N per Heavy  
Rail  
46

47 VEHICLE\_TYPE/SUBMODE - (std)  
48 \*no. mode new\_mode P&R type description  
49 1 1 N N per  
Car  
50 2 1 N N per LGV  
Personal  
51 3 1 N N fre LGV  
Freight  
52 4 1 N N fre  
OGV1

```

53      5      1      N      N      fre
      OGV2
54      6      2      N      N      per
      Bus
55      7      3      N      N      per      Light
      Rail
56      8      3      N      N      per      Heavy
      rail

```

57  
58 FUEL\_TYPE - (used)

```

59 *no.   name
60      1   petrol
61      2   diesel

```

62  
63 FUEL\_TYPE - (std)

```

64 *no.   name
65      1   Petrol
66      2   Diesel
67      3   Electric

```

68  
69 TIME\_PERIODS - (used)

```

70 *no.   description      comments
71      1   AM Peak        (8-9)
72      2   Inter Peak    (Avg
73      3   PM Peak        (17-1

```

74  
75 TIME\_PERIODS - (std)

```

76 *no.   description      comments
77      1   AM peak        (7-10 weekdays)
78      2   PM peak        (4-7 weekdays)
79      3   Inter-peak    (10-4 weekdays)
80      4   Off-peak       (7-7 weekdays)
81      5   Weekend        (weekend)

```

82  
83 BREAKPOINTS - (used)

```

84 *description breakpoint1 breakpoint2 ..
85   Distance      1.0      5.0      10.0      15.0
      20.0      50.0      100.0
86 TimeSaving     -5.0      -2.0      0.0      2.0
      5.0

```

87  
88 BREAKPOINTS - (std)

```

89 *description breakpoint1 breakpoint2 ..
90   Distance      1.0      5.0      10.0      25.0
      50.0      100.0      200.0
91 TimeSaving     -5.0      -2.0      0.0      2.0
      5.0

```

92  
93 DISCOUNT\_RATE - (used)

```

94 *% change p.a.
95 *Start_yr   End_yr   Rate
96      1      30      4.00
97      31      60      3.50
98      61      100     3.00

```

99  
100 DISCOUNT\_RATE - (std)

```

101 *% change p.a.
102 *Start_yr   End_yr   Rate
103      1      30      3.50
104      31      75      3.00
105      76      80      2.50

```

106  
107 VALUE\_OF\_TIME\_ALLOCATION - (used)

```

108 *Vtype/submode Purpose_type Person_type VOT_METHOD
109      1      1      1      3
110      1      2      1      3
111      1      3      1      3
112      1      1      2      3
113      1      2      2      3

```

```

114      1  3  2  3
115      3  1  1  3
116      3  2  1  3
117      3  3  1  3
118      3  1  2  3
119      3  2  2  3
120      3  3  2  3
121

```

122 VALUE\_OF\_TIME\_ALLOCATION - (std)

123 \*Vtype/submode Purpose\_type Person\_type VOT\_METHOD

```

124      1  1  1  1
125      1  1  2  1
126      8  1  2  1
127

```

128 VALUE\_OF\_TIME\_METHOD1 - (used)

129 \*pence per hour

130 \*Vtype/submode Person\_type U\_purpose1 U\_purpose2 U\_purpose3 .. xmid\_purpose1  
xmid\_purpose2 xmis\_purpose3 .. k\_purpose1 k\_purpose2 k\_purpose3 ..

131 VALUE\_OF\_TIME\_METHOD1 - (std)

132 \*pence per hour

133 \*Vtype/submode Person\_type U\_purpose1 U\_purpose2 U\_purpose3 .. xmid\_purpose1  
xmid\_purpose2 xmis\_purpose3 .. k\_purpose1 k\_purpose2 k\_purpose3 ..

```

135      1          1      2480.0      0.0      0.0
      67.0          0.0      0.0      67.0      0.0      0.0
136      1          2      2480.0      0.0      0.0
      67.0          0.0      0.0      67.0      0.0      0.0
137      2          1          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
138      2          2          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
139      3          1          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
140      3          2          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
141      4          1          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
142      4          2          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
143      5          1          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
144      5          2          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
145      6          1          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
146      6          2          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
147      7          1          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
148      7          2          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
149      8          1          0.0      0.0      0.0
      0.0          0.0      0.0      0.0      0.0      0.0
150      8          2      3647.0      0.0      0.0
      107.0          0.0      0.0      64.0      0.0      0.0
151

```

152 VALUE\_OF\_TIME\_METHOD2 - (used)

153 \*pence per hour

154 \*Vtype/submode Person\_type 0\_50km\_purpose1 0\_50km\_purpose2 0\_50km\_purpose3 ..  
50\_100km\_purpose1 50\_100km\_purpose2 50\_100km\_purpose3 .. 100\_200km\_purpose1  
100\_200km\_purpose2 100\_200km\_purpose3 .. 200+km\_purpose1 200+km\_purpose2  
200+km\_purpose3..

155 VALUE\_OF\_TIME\_METHOD2 - (std)

156 \*pence per hour

157 \*Vtype/submode Person\_type 0\_50km\_purpose1 0\_50km\_purpose2 0\_50km\_purpose3 ..  
50\_100km\_purpose1 50\_100km\_purpose2 50\_100km\_purpose3 .. 100\_200km\_purpose1  
100\_200km\_purpose2 100\_200km\_purpose3 .. 200+km\_purpose1 200+km\_purpose2  
200+km\_purpose3..

159	1	1	842.0	0.0	0.0	
	1362.0	0.0	0.0	1849.0	0.0	0.0
	2377.0	0.0	0.0			
160	1	2	842.0	0.0	0.0	
	1362.0	0.0	0.0	1849.0	0.0	0.0
	2377.0	0.0	0.0			
161	2	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
162	2	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
163	3	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
164	3	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
165	4	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
166	4	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
167	5	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
168	5	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
169	6	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
170	6	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
171	7	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
172	7	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
173	8	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
174	8	2	842.0	0.0	0.0	
	1362.0	0.0	0.0	2372.0	0.0	0.0
	3422.0	0.0	0.0			

175						
176	VALUE_OF_TIME_METHOD3 - (used)					
177	*pence per hour					
178	*Vtype/submode	Person_type	VOT_purpose1	VOT_purpose2	VOT_purpose3	..
179	1	1	2612.0	967.0	870.0	
180	1	2	2612.0	967.0	870.0	
181	2	1	2612.0	967.0	870.0	
182	2	2	2612.0	967.0	870.0	
183	3	1	2612.0	0.0	0.0	
184	3	2	2612.0	0.0	0.0	
185	4	1	2612.0	0.0	0.0	
186	4	2	2612.0	0.0	0.0	
187	5	1	2612.0	0.0	0.0	
188	5	2	2612.0	967.0	870.0	
189	6	1	2612.0	0.0	0.0	
190	6	2	2612.0	967.0	870.0	
191	7	1	2612.0	0.0	0.0	
192	7	2	2612.0	967.0	870.0	

193						
194	VALUE_OF_TIME_METHOD3 - (std)					
195	*pence per hour					

	*Vtype/submode	Person_type	VOT_purpose1	VOT_purpose2	VOT_purpose3	..
196						
197	1	1	1486.0	995.0	454.0	
198	1	2	1486.0	995.0	454.0	
199	2	1	1024.0	995.0	454.0	
200	2	2	1024.0	995.0	454.0	
201	3	1	1024.0	0.0	0.0	
202	3	2	1024.0	0.0	0.0	
203	4	1	1206.0	0.0	0.0	
204	4	2	1206.0	0.0	0.0	
205	5	1	1206.0	0.0	0.0	
206	5	2	1206.0	0.0	0.0	
207	6	1	1232.0	0.0	0.0	
208	6	2	842.0	995.0	454.0	
209	7	1	0.0	0.0	0.0	
210	7	2	842.0	995.0	454.0	
211	8	1	0.0	0.0	0.0	
212	8	2	2452.0	995.0	454.0	

213  
 214 VALUE\_OF\_TIME\_GROWTH - (used)

	*% change p.a.					
	*Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
215						
216						
217	2012	2014	1.40	1.40	1.40	
218	2015	2019	3.60	3.60	3.60	
219	2020	2024	2.20	2.20	2.20	
220	2025	2100	2.30	2.30	2.30	

221  
 222 VALUE\_OF\_TIME\_GROWTH - (std)

	*% change p.a.					
	*Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
223						
224						
225	2011	2011	0.67	0.67	0.67	
226	2012	2012	0.64	0.64	0.64	
227	2013	2013	1.27	1.27	1.27	
228	2014	2014	2.29	2.29	2.29	
229	2015	2015	1.44	1.44	1.44	
230	2016	2016	1.26	1.26	1.26	
231	2017	2017	1.49	1.49	1.49	
232	2018	2018	1.40	1.40	1.40	
233	2019	2019	1.43	1.43	1.43	
234	2020	2020	1.45	1.45	1.45	
235	2021	2021	1.76	1.76	1.76	
236	2022	2022	1.77	1.77	1.77	
237	2023	2023	1.78	1.78	1.78	
238	2024	2024	1.89	1.89	1.89	
239	2025	2025	1.91	1.91	1.91	
240	2026	2026	1.93	1.93	1.93	
241	2027	2027	1.94	1.94	1.94	
242	2028	2028	1.96	1.96	1.96	
243	2029	2029	1.98	1.98	1.98	
244	2030	2030	1.99	1.99	1.99	
245	2031	2031	2.01	2.01	2.01	
246	2032	2032	2.02	2.02	2.02	
247	2033	2033	2.04	2.04	2.04	
248	2034	2034	2.15	2.15	2.15	
249	2035	2035	2.06	2.06	2.06	
250	2036	2036	2.07	2.07	2.07	
251	2037	2037	2.08	2.08	2.08	
252	2038	2038	2.09	2.09	2.09	
253	2039	2039	2.09	2.09	2.09	
254	2040	2040	2.09	2.09	2.09	
255	2041	2041	2.09	2.09	2.09	
256	2042	2042	2.11	2.11	2.11	
257	2043	2043	2.11	2.11	2.11	
258	2044	2044	2.11	2.11	2.11	
259	2045	2045	2.11	2.11	2.11	
260	2046	2046	2.21	2.21	2.21	
261	2047	2047	2.14	2.14	2.14	
262	2048	2048	2.14	2.14	2.14	
263	2049	2049	2.14	2.14	2.14	
264	2050	2050	2.14	2.14	2.14	

265	2051	2051	2.04	2.04	2.04
266	2052	2052	2.07	2.07	2.07
267	2053	2053	2.07	2.07	2.07
268	2054	2054	2.07	2.07	2.07
269	2055	2055	2.07	2.07	2.07
270	2056	2056	2.07	2.07	2.07
271	2057	2057	2.09	2.09	2.09
272	2058	2058	2.19	2.19	2.19
273	2059	2059	2.19	2.19	2.19
274	2060	2060	2.29	2.29	2.29
275	2061	2061	2.29	2.29	2.29
276	2062	2062	2.30	2.30	2.30
277	2063	2063	2.30	2.30	2.30
278	2064	2064	2.20	2.20	2.20
279	2065	2065	2.20	2.20	2.20
280	2066	2066	2.20	2.20	2.20
281	2067	2067	2.18	2.18	2.18
282	2068	2068	2.18	2.18	2.18
283	2069	2069	2.18	2.18	2.18
284	2070	2070	2.18	2.18	2.18
285	2071	2071	2.18	2.18	2.18
286	2072	2072	2.17	2.17	2.17
287	2073	2073	2.17	2.17	2.17
288	2074	2074	2.17	2.17	2.17
289	2075	2075	2.17	2.17	2.17
290	2076	2076	2.17	2.17	2.17
291	2077	2077	2.16	2.16	2.16
292	2078	2078	2.16	2.16	2.16
293	2079	2079	2.16	2.16	2.16
294	2080	2080	2.16	2.16	2.16
295	2081	2081	2.16	2.16	2.16
296	2082	2082	2.17	2.17	2.17
297	2083	2083	2.17	2.17	2.17
298	2084	2084	2.17	2.17	2.17
299	2085	2085	2.17	2.17	2.17
300	2086	2086	2.17	2.17	2.17
301	2087	2087	2.18	2.18	2.18
302	2088	2088	2.18	2.18	2.18
303	2089	2089	2.18	2.18	2.18
304	2090	2090	2.18	2.18	2.18
305	2091	2091	2.18	2.18	2.18
306	2092	2092	2.18	2.18	2.18
307	2093	2093	2.18	2.18	2.18
308	2094	2094	2.18	2.18	2.18
309	2095	2095	2.18	2.18	2.18
310	2096	2096	2.18	2.18	2.18
311	2097	2097	2.18	2.18	2.18
312	2098	2098	2.18	2.18	2.18
313	2099	2099	2.18	2.18	2.18
314	2100	2100	2.18	2.18	2.18

315  
316 AV\_IND\_TAX\_CHANGES - (used)

317 \*% change p.a.  
318 \*Start\_yr      End\_yr      Growth  
319 2012            2080            0.00

320  
321 AV\_IND\_TAX\_CHANGES - (std)

322 \*% change p.a.  
323 \*Start\_yr      End\_yr      Growth  
324 2011            2050            0.00

325  
326 CHARGE\_TAX\_RATES - (used)

327 \*%  
328 \*charge            final            intermediate  
329 1                    0.0            0.0  
330 2                    0.0            0.0  
331 3                    0.0            0.0  
332 4                    0.0            0.0  
333 5                    0.0            0.0

334 6 0.0 0.0  
 335 7 0.0 0.0  
 336

337 CHARGE\_TAX\_RATES - (std)

338 \*%  
 339 \*charge final intermediate  
 340 1 0.0 0.0  
 341 2 0.0 0.0  
 342 3 0.0 0.0  
 343 4 0.0 0.0  
 344 5 17.5 0.0  
 345 6 0.0 0.0  
 346 7 17.5 0.0  
 347 8 17.5 0.0  
 348

349 CHARGE\_TAX\_RATES\_CHANGES - (used)

350 \*% change p.a.  
 351 \*Start\_yr End\_yr charge final intermediate  
 352 2012 2080 1 0.00 0.00  
 353 2012 2080 2 0.00 0.00  
 354 2012 2080 3 0.00 0.00  
 355 2012 2080 4 0.00 0.00  
 356 2012 2080 5 0.00 0.00  
 357 2012 2080 6 0.00 0.00  
 358 2012 2080 7 0.00 0.00  
 359

360 CHARGE\_TAX\_RATES\_CHANGES - (std)

361 \*% change p.a.  
 362 \*Start\_yr End\_yr charge final intermediate  
 363 2011 2011 1 0.00 0.00  
 364 2011 2011 2 0.00 0.00  
 365 2011 2011 3 0.00 0.00  
 366 2011 2011 4 0.00 0.00  
 367 2011 2011 5 14.29 0.00  
 368 2011 2011 6 0.00 0.00  
 369 2011 2011 7 14.29 0.00  
 370 2011 2011 8 14.29 0.00  
 371 2012 2100 1 0.00 0.00  
 372 2012 2100 2 0.00 0.00  
 373 2012 2100 3 0.00 0.00  
 374 2012 2100 4 0.00 0.00  
 375 2012 2100 5 0.00 0.00  
 376 2012 2100 6 0.00 0.00  
 377 2012 2100 7 0.00 0.00  
 378 2012 2100 8 0.00 0.00  
 379

380 FUEL\_COST - (used)

381 \*type resource (p/unit) duty (p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)  
 382 1 63.0 57.6 21.0 2230.00  
 383 2 70.0 46.6 21.0 2562.00  
 384

385 FUEL\_COST - (std)

386 \*type resource (p/unit) duty (p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)  
 387 1 42.5 57.0 17.5 2230.00  
 388 2 44.2 57.0 17.5 2562.00  
 389 3 11.5 0.0 5.0 372.00  
 390

391 FUEL\_COST\_CHANGES - (used)

392 \*% change p.a.  
 393 \*Start\_yr End\_yr fuel\_type resource duty VAT  
 CO2\_Den\_change  
 394 2012 2012 1 10.70 0.00  
 2.00 0.00  
 395 2012 2012 2 3.90 0.00  
 0.00 0.00  
 396 2013 2013 1 -5.70 0.00  
 0.00 0.00

397	2013	2013	2	-5.20	0.00
	0.00	0.00			
398	2014	2014	1	0.00	0.00
	0.00	0.00			
399	2014	2014	2	-3.30	0.00
	0.00	0.00			
400	2015	2015	1	-30.60	2.00
	0.00	0.00			
401	2015	2015	2	-32.60	2.90
	0.00	0.00			
402	2016	2080	1	0.00	0.00
	0.00	0.00			
403	2016	2080	2	0.00	0.00
	0.00	0.00			

404						
405	FUEL_COST_CHANGES - (std)					
406	*% change p.a.					
407	*Start_yr	End_yr	fuel_type	resource	duty	VAT
	CO2_Den_change					
408	2011	2011	1	22.14	-0.37	
	14.29	-0.84				
409	2012	2012	1	1.99	-2.09	
	0.00	-0.02				
410	2013	2013	1	-3.44	-1.74	
	0.00	-0.44				
411	2014	2014	1	-11.68	-1.62	
	0.00	-0.54				
412	2015	2015	1	-29.94	-1.09	
	0.00	0.00				
413	2016	2016	1	7.91	-0.89	
	0.00	0.00				
414	2017	2017	1	2.98	-0.08	
	0.00	-1.35				
415	2018	2018	1	2.03	0.67	
	0.00	-1.37				
416	2019	2019	1	2.08	1.05	
	0.00	-1.39				
417	2020	2020	1	6.76	0.71	
	0.00	-1.41				
418	2021	2021	1	6.33	0.78	
	0.00	0.00				
419	2022	2022	1	5.95	0.72	
	0.00	0.00				
420	2023	2023	1	5.62	0.68	
	0.00	0.00				
421	2024	2024	1	5.32	0.68	
	0.00	0.00				
422	2025	2025	1	5.05	0.68	
	0.00	0.00				
423	2026	2026	1	0.00	0.68	
	0.00	0.00				
424	2027	2027	1	0.00	0.68	
	0.00	0.00				
425	2028	2028	1	0.00	0.68	
	0.00	0.00				
426	2029	2029	1	0.00	0.68	
	0.00	0.00				
427	2030	2030	1	0.00	0.68	
	0.00	0.00				
428	2031	2031	1	0.00	0.68	
	0.00	0.00				
429	2032	2032	1	0.00	0.68	
	0.00	0.00				
430	2033	2033	1	0.00	0.68	
	0.00	0.00				
431	2034	2034	1	0.00	0.68	
	0.00	0.00				
432	2035	2035	1	0.00	0.68	
	0.00	0.00				



433	2036	2036	1	0.00	0.68
	0.00	0.00			
434	2037	2037	1	0.00	0.68
	0.00	0.00			
435	2038	2038	1	0.00	0.68
	0.00	0.00			
436	2039	2039	1	0.00	0.68
	0.00	0.00			
437	2040	2040	1	0.00	0.68
	0.00	0.00			
438	2041	2041	1	0.00	0.68
	0.00	0.00			
439	2042	2042	1	0.00	0.68
	0.00	0.00			
440	2043	2043	1	0.00	0.68
	0.00	0.00			
441	2044	2044	1	0.00	0.68
	0.00	0.00			
442	2045	2045	1	0.00	0.68
	0.00	0.00			
443	2046	2046	1	0.00	0.68
	0.00	0.00			
444	2047	2047	1	0.00	0.68
	0.00	0.00			
445	2048	2048	1	0.00	0.68
	0.00	0.00			
446	2049	2049	1	0.00	0.68
	0.00	0.00			
447	2050	2050	1	0.00	0.68
	0.00	0.00			
448	2051	2051	1	0.00	0.68
	0.00	0.00			
449	2052	2052	1	0.00	0.68
	0.00	0.00			
450	2053	2053	1	0.00	0.68
	0.00	0.00			
451	2054	2054	1	0.00	0.68
	0.00	0.00			
452	2055	2055	1	0.00	0.68
	0.00	0.00			
453	2056	2056	1	0.00	0.68
	0.00	0.00			
454	2057	2057	1	0.00	0.68
	0.00	0.00			
455	2058	2058	1	0.00	0.68
	0.00	0.00			
456	2059	2059	1	0.00	0.68
	0.00	0.00			
457	2060	2060	1	0.00	0.68
	0.00	0.00			
458	2061	2061	1	0.00	0.68
	0.00	0.00			
459	2062	2062	1	0.00	0.68
	0.00	0.00			
460	2063	2063	1	0.00	0.68
	0.00	0.00			
461	2064	2064	1	0.00	0.68
	0.00	0.00			
462	2065	2065	1	0.00	0.68
	0.00	0.00			
463	2066	2066	1	0.00	0.68
	0.00	0.00			
464	2067	2067	1	0.00	0.68
	0.00	0.00			
465	2068	2068	1	0.00	0.68
	0.00	0.00			
466	2069	2069	1	0.00	0.68
	0.00	0.00			
467	2070	2070	1	0.00	0.68

	0.00	0.00			
468	2071	2071	1	0.00	0.68
	0.00	0.00			
469	2072	2072	1	0.00	0.68
	0.00	0.00			
470	2073	2073	1	0.00	0.68
	0.00	0.00			
471	2074	2074	1	0.00	0.68
	0.00	0.00			
472	2075	2075	1	0.00	0.68
	0.00	0.00			
473	2076	2076	1	0.00	0.68
	0.00	0.00			
474	2077	2077	1	0.00	0.68
	0.00	0.00			
475	2078	2078	1	0.00	0.68
	0.00	0.00			
476	2079	2079	1	0.00	0.68
	0.00	0.00			
477	2080	2080	1	0.00	0.68
	0.00	0.00			
478	2081	2081	1	0.00	0.68
	0.00	0.00			
479	2082	2082	1	0.00	0.68
	0.00	0.00			
480	2083	2083	1	0.00	0.68
	0.00	0.00			
481	2084	2084	1	0.00	0.68
	0.00	0.00			
482	2085	2085	1	0.00	0.68
	0.00	0.00			
483	2086	2086	1	0.00	0.68
	0.00	0.00			
484	2087	2087	1	0.00	0.68
	0.00	0.00			
485	2088	2088	1	0.00	0.68
	0.00	0.00			
486	2089	2089	1	0.00	0.68
	0.00	0.00			
487	2090	2090	1	0.00	0.68
	0.00	0.00			
488	2091	2091	1	0.00	0.68
	0.00	0.00			
489	2092	2092	1	0.00	0.68
	0.00	0.00			
490	2093	2093	1	0.00	0.68
	0.00	0.00			
491	2094	2094	1	0.00	0.68
	0.00	0.00			
492	2095	2095	1	0.00	0.68
	0.00	0.00			
493	2096	2096	1	0.00	0.68
	0.00	0.00			
494	2097	2097	1	0.00	0.68
	0.00	0.00			
495	2098	2098	1	0.00	0.68
	0.00	0.00			
496	2099	2099	1	0.00	0.68
	0.00	0.00			
497	2100	2100	1	0.00	0.68
	0.00	0.00			
498	2011	2011	2	26.82	-0.37
	14.29	0.19			
499	2012	2012	2	3.20	-2.09
	0.00	1.64			
500	2013	2013	2	-3.67	-1.74
	0.00	-0.44			
501	2014	2014	2	-11.26	-1.62
	0.00	0.15			

502	2015 0.00	2015 0.00	2	-30.27	-1.09
503	2016 0.00	2016 0.00	2	8.32	-0.89
504	2017 0.00	2017 -1.74	2	3.12	-0.08
505	2018 0.00	2018 -1.77	2	2.12	0.67
506	2019 0.00	2019 -1.81	2	2.17	1.05
507	2020 0.00	2020 -1.84	2	7.06	0.71
508	2021 0.00	2021 0.00	2	6.59	0.78
509	2022 0.00	2022 0.00	2	6.18	0.72
510	2023 0.00	2023 0.00	2	5.82	0.68
511	2024 0.00	2024 0.00	2	5.50	0.68
512	2025 0.00	2025 0.00	2	5.22	0.68
513	2026 0.00	2026 0.00	2	0.00	0.68
514	2027 0.00	2027 0.00	2	0.00	0.68
515	2028 0.00	2028 0.00	2	0.00	0.68
516	2029 0.00	2029 0.00	2	0.00	0.68
517	2030 0.00	2030 0.00	2	0.00	0.68
518	2031 0.00	2031 0.00	2	0.00	0.68
519	2032 0.00	2032 0.00	2	0.00	0.68
520	2033 0.00	2033 0.00	2	0.00	0.68
521	2034 0.00	2034 0.00	2	0.00	0.68
522	2035 0.00	2035 0.00	2	0.00	0.68
523	2036 0.00	2036 0.00	2	0.00	0.68
524	2037 0.00	2037 0.00	2	0.00	0.68
525	2038 0.00	2038 0.00	2	0.00	0.68
526	2039 0.00	2039 0.00	2	0.00	0.68
527	2040 0.00	2040 0.00	2	0.00	0.68
528	2041 0.00	2041 0.00	2	0.00	0.68
529	2042 0.00	2042 0.00	2	0.00	0.68
530	2043 0.00	2043 0.00	2	0.00	0.68
531	2044 0.00	2044 0.00	2	0.00	0.68
532	2045 0.00	2045 0.00	2	0.00	0.68
533	2046 0.00	2046 0.00	2	0.00	0.68
534	2047 0.00	2047 0.00	2	0.00	0.68
535	2048 0.00	2048 0.00	2	0.00	0.68
536	2049	2049	2	0.00	0.68

	0.00	0.00			
537	2050	2050	2	0.00	0.68
	0.00	0.00			
538	2051	2051	2	0.00	0.68
	0.00	0.00			
539	2052	2052	2	0.00	0.68
	0.00	0.00			
540	2053	2053	2	0.00	0.68
	0.00	0.00			
541	2054	2054	2	0.00	0.68
	0.00	0.00			
542	2055	2055	2	0.00	0.68
	0.00	0.00			
543	2056	2056	2	0.00	0.68
	0.00	0.00			
544	2057	2057	2	0.00	0.68
	0.00	0.00			
545	2058	2058	2	0.00	0.68
	0.00	0.00			
546	2059	2059	2	0.00	0.68
	0.00	0.00			
547	2060	2060	2	0.00	0.68
	0.00	0.00			
548	2061	2061	2	0.00	0.68
	0.00	0.00			
549	2062	2062	2	0.00	0.68
	0.00	0.00			
550	2063	2063	2	0.00	0.68
	0.00	0.00			
551	2064	2064	2	0.00	0.68
	0.00	0.00			
552	2065	2065	2	0.00	0.68
	0.00	0.00			
553	2066	2066	2	0.00	0.68
	0.00	0.00			
554	2067	2067	2	0.00	0.68
	0.00	0.00			
555	2068	2068	2	0.00	0.68
	0.00	0.00			
556	2069	2069	2	0.00	0.68
	0.00	0.00			
557	2070	2070	2	0.00	0.68
	0.00	0.00			
558	2071	2071	2	0.00	0.68
	0.00	0.00			
559	2072	2072	2	0.00	0.68
	0.00	0.00			
560	2073	2073	2	0.00	0.68
	0.00	0.00			
561	2074	2074	2	0.00	0.68
	0.00	0.00			
562	2075	2075	2	0.00	0.68
	0.00	0.00			
563	2076	2076	2	0.00	0.68
	0.00	0.00			
564	2077	2077	2	0.00	0.68
	0.00	0.00			
565	2078	2078	2	0.00	0.68
	0.00	0.00			
566	2079	2079	2	0.00	0.68
	0.00	0.00			
567	2080	2080	2	0.00	0.68
	0.00	0.00			
568	2081	2081	2	0.00	0.68
	0.00	0.00			
569	2082	2082	2	0.00	0.68
	0.00	0.00			
570	2083	2083	2	0.00	0.68
	0.00	0.00			

571	2084	2084	2	0.00	0.68
	0.00	0.00			
572	2085	2085	2	0.00	0.68
	0.00	0.00			
573	2086	2086	2	0.00	0.68
	0.00	0.00			
574	2087	2087	2	0.00	0.68
	0.00	0.00			
575	2088	2088	2	0.00	0.68
	0.00	0.00			
576	2089	2089	2	0.00	0.68
	0.00	0.00			
577	2090	2090	2	0.00	0.68
	0.00	0.00			
578	2091	2091	2	0.00	0.68
	0.00	0.00			
579	2092	2092	2	0.00	0.68
	0.00	0.00			
580	2093	2093	2	0.00	0.68
	0.00	0.00			
581	2094	2094	2	0.00	0.68
	0.00	0.00			
582	2095	2095	2	0.00	0.68
	0.00	0.00			
583	2096	2096	2	0.00	0.68
	0.00	0.00			
584	2097	2097	2	0.00	0.68
	0.00	0.00			
585	2098	2098	2	0.00	0.68
	0.00	0.00			
586	2099	2099	2	0.00	0.68
	0.00	0.00			
587	2100	2100	2	0.00	0.68
	0.00	0.00			
588	2011	2011	3	4.95	0.00
	0.00	-1.89			
589	2012	2012	3	4.01	0.00
	0.00	-2.03			
590	2013	2013	3	5.45	0.00
	0.00	-2.18			
591	2014	2014	3	3.88	0.00
	0.00	-2.35			
592	2015	2015	3	-5.82	0.00
	0.00	-2.54			
593	2016	2016	3	3.17	0.00
	0.00	-2.74			
594	2017	2017	3	6.71	0.00
	0.00	-2.98			
595	2018	2018	3	4.60	0.00
	0.00	-3.23			
596	2019	2019	3	2.96	0.00
	0.00	-3.52			
597	2020	2020	3	1.91	0.00
	0.00	-3.85			
598	2021	2021	3	0.52	0.00
	0.00	-4.22			
599	2022	2022	3	2.13	0.00
	0.00	-4.65			
600	2023	2023	3	-0.64	0.00
	0.00	-5.14			
601	2024	2024	3	2.55	0.00
	0.00	-5.71			
602	2025	2025	3	4.49	0.00
	0.00	-6.39			
603	2026	2026	3	0.01	0.00
	0.00	-7.19			
604	2027	2027	3	2.37	0.00
	0.00	-8.17			
605	2028	2028	3	-1.49	0.00

	0.00	-9.38				
606	2029	2029	3	-1.58	0.00	0.00
	-10.92					
607	2030	2030	3	0.32	0.00	0.00
	-12.92					
608	2031	2031	3	0.00	0.00	
	0.00	-8.85				
609	2032	2032	3	0.00	0.00	
	0.00	-8.85				
610	2033	2033	3	0.00	0.00	
	0.00	-8.85				
611	2034	2034	3	0.00	0.00	
	0.00	-8.85				
612	2035	2035	3	0.00	0.00	
	0.00	-8.85				
613	2036	2036	3	0.00	0.00	
	0.00	-8.85				
614	2037	2037	3	0.00	0.00	
	0.00	-8.85				
615	2038	2038	3	0.00	0.00	
	0.00	-8.85				
616	2039	2039	3	0.00	0.00	
	0.00	-8.85				
617	2040	2040	3	0.00	0.00	
	0.00	-8.85				
618	2041	2041	3	0.00	0.00	0.00
	-11.07					
619	2042	2042	3	0.00	0.00	
	0.00	-0.85				
620	2043	2043	3	0.00	0.00	0.00
	-11.10					
621	2044	2044	3	0.00	0.00	0.00
	-11.60					
622	2045	2045	3	0.00	0.00	
	0.00	1.50				
623	2046	2046	3	0.00	0.00	
	0.00	-8.95				
624	2047	2047	3	0.00	0.00	
	0.00	-7.43				
625	2048	2048	3	0.00	0.00	
	0.00	1.12				
626	2049	2049	3	0.00	0.00	
	0.00	-9.46				
627	2050	2050	3	0.00	0.00	
	0.00	-0.90				
628	2051	2100	3	0.00	0.00	
	0.00	0.00				

629

630 CARBDX\_VALUE\_CHANGES - (used)

631 \*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be defined, not both

632 \*same growth applies to low, central and high CO2 values

633 \*Start\_yr End\_yr Rel.(%) Abs.(£/tonne/year)

634 2012 2019 0.000 0.000

635 2020 2020 60.000 0.000

636 2021 2021 21.900 0.000

637 2022 2022 17.900 0.000

638 2023 2023 13.000 0.000

639 2024 2024 13.500 0.000

640 2025 2025 11.900 0.000

641 2026 2026 10.600 0.000

642 2027 2027 9.600 0.000

643 2028 2028 7.500 0.000

644 2029 2029 8.100 0.000

645 2030 2030 7.500 0.000

646 2031 2100 5.000 0.000

647

648 CARBDX\_VALUE\_CHANGES - (std)

649 \*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be

defined, not both

650 \*same growth applies to low, central and high CO2 values

651	*Start_yr	End_yr	Rel. (%)	Abs. (£/tonne/year)
652	2011	2011	1.500	0.000
653	2012	2012	1.500	0.000
654	2013	2013	1.500	0.000
655	2014	2014	1.500	0.000
656	2015	2015	1.500	0.000
657	2016	2016	1.500	0.000
658	2017	2017	1.500	0.000
659	2018	2018	1.500	0.000
660	2019	2019	1.500	0.000
661	2020	2020	1.500	0.000
662	2021	2021	1.667	0.000
663	2022	2022	1.639	0.000
664	2023	2023	1.613	0.000
665	2024	2024	1.587	0.000
666	2025	2025	1.563	0.000
667	2026	2026	1.538	0.000
668	2027	2027	1.515	0.000
669	2028	2028	1.493	0.000
670	2029	2029	1.471	0.000
671	2030	2030	1.449	0.000
672	2031	2031	9.286	0.000
673	2032	2032	8.497	0.000
674	2033	2033	7.831	0.000
675	2034	2034	7.263	0.000
676	2035	2035	6.771	0.000
677	2036	2036	6.341	0.000
678	2037	2037	5.963	0.000
679	2038	2038	5.628	0.000
680	2039	2039	5.328	0.000
681	2040	2040	5.058	0.000
682	2041	2041	4.815	0.000
683	2042	2042	4.594	0.000
684	2043	2043	4.392	0.000
685	2044	2044	4.207	0.000
686	2045	2045	4.037	0.000
687	2046	2046	3.881	0.000
688	2047	2047	3.736	0.000
689	2048	2048	3.601	0.000
690	2049	2049	3.476	0.000
691	2050	2050	3.359	0.000
692	2051	2051	2.501	0.000
693	2052	2052	2.265	0.000
694	2053	2053	2.165	0.000
695	2054	2054	2.056	0.000
696	2055	2055	1.856	0.000
697	2056	2056	1.779	0.000
698	2057	2057	1.589	0.000
699	2058	2058	1.446	0.000
700	2059	2059	1.330	0.000
701	2060	2060	1.201	0.000
702	2061	2061	0.673	0.000
703	2062	2062	0.618	0.000
704	2063	2063	0.401	0.000
705	2064	2064	0.283	0.000
706	2065	2065	0.079	0.000
707	2066	2066	0.033	0.000
708	2067	2067	-0.193	0.000
709	2068	2068	-0.302	0.000
710	2069	2069	-0.461	0.000
711	2070	2070	-0.585	0.000
712	2071	2071	-0.609	0.000
713	2072	2072	-0.738	0.000
714	2073	2073	-0.837	0.000
715	2074	2074	-1.033	0.000
716	2075	2075	-1.037	0.000
717	2076	2076	-1.310	0.000

718	2077	2077	-1.316	0.000
719	2078	2078	-1.493	0.000
720	2079	2079	-1.571	0.000
721	2080	2080	-1.769	0.000
722	2081	2081	-1.478	0.000
723	2082	2082	-1.672	0.000
724	2083	2083	-1.769	0.000
725	2084	2084	-1.854	0.000
726	2085	2085	-1.834	0.000
727	2086	2086	-2.050	0.000
728	2087	2087	-2.154	0.000
729	2088	2088	-2.198	0.000
730	2089	2089	-2.321	0.000
731	2090	2090	-2.359	0.000
732	2091	2091	-2.279	0.000
733	2092	2092	-2.328	0.000
734	2093	2093	-2.521	0.000
735	2094	2094	-2.577	0.000
736	2095	2095	-2.649	0.000
737	2096	2096	-2.712	0.000
738	2097	2097	-2.715	0.000
739	2098	2098	-2.915	0.000
740	2099	2099	-2.865	0.000
741	2100	2100	-3.011	0.000

742

743 FLEET - (used)

744	*veh_type	%petrol	%diesel
745	1	69.90	30.10
746	2	0.30	99.70
747	3	0.00	100.00
748	4	0.00	100.00
749	5	0.00	100.00
750	6	0.00	100.00
751	7	0.00	100.00

752

753 FLEET - (std)

754	*veh_type	%Petrol	%Diesel	%Electric
755	1	59.27	40.73	0.01
756	2	5.86	94.14	0.00
757	3	5.86	94.14	0.00
758	4	0.00	100.00	0.00
759	5	0.00	100.00	0.00
760	6	0.00	100.00	0.00
761	7	0.00	100.00	0.00
762	8	0.00	100.00	0.00

763

764 FLEET\_CHANGES - (used)

765 \*% p.a.

766	*Start_yr	End_yr	Veh_type	%Change_petrol	%Change_diesel
767	2012	2015	1	-2.642	5.437
768	2016	2020	1	0.473	-0.820
769	2021	2025	1	-0.662	1.150
770	2026	2030	1	-0.884	1.389
771	2012	2015	2	-9.640	0.025
772	2016	2020	2	-60.000	0.040
773	2021	2025	2	0.000	0.000
774	2026	2030	2	0.000	0.000

775

776 FLEET\_CHANGES - (std)

777 \*% p.a.

778	*Start_yr	End_yr	Veh_type	%Change_Petrol	%Change_Diesel	%Change_Electric
779	2011	2011	1	-3.810	5.477	502.540
780	2012	2012	1	-3.966	5.188	100.000
781	2013	2013	1	-4.130	4.932	50.000
782	2014	2014	1	-4.308	4.700	33.333
783	2015	2015	1	-4.502	4.489	25.000
784	2016	2016	1	-1.777	1.335	97.788
785	2017	2017	1	-1.809	1.317	49.441



786	2018	2018	1	-1.842	1.300	33.084
787	2019	2019	1	-1.877	1.283	24.859
788	2020	2020	1	-1.913	1.267	19.910
789	2021	2021	1	0.323	-0.826	32.794
790	2022	2022	1	0.322	-0.833	24.695
791	2023	2023	1	0.321	-0.840	19.804
792	2024	2024	1	0.320	-0.847	16.531
793	2025	2025	1	0.319	-0.854	14.186
794	2026	2026	1	0.021	-1.060	21.755
795	2027	2027	1	0.021	-1.071	17.868
796	2028	2028	1	0.021	-1.083	15.159
797	2029	2029	1	0.021	-1.095	13.164
798	2030	2030	1	0.021	-1.107	11.632
799	2011	2011	2	-7.579	0.472	0.000
800	2012	2012	2	-8.200	0.470	0.000
801	2013	2013	2	-8.932	0.468	0.000
802	2014	2014	2	-9.809	0.465	0.000
803	2015	2015	2	-10.875	0.463	0.000
804	2016	2016	2	-9.634	0.364	0.000
805	2017	2017	2	-10.661	0.363	0.000
806	2018	2018	2	-11.933	0.361	0.000
807	2019	2019	2	-13.550	0.360	0.000
808	2020	2020	2	-15.674	0.359	0.000
809	2021	2021	2	-8.979	0.173	0.000
810	2022	2022	2	-9.865	0.172	0.000
811	2023	2023	2	-10.945	0.172	0.000
812	2024	2024	2	-12.290	0.172	0.000
813	2025	2025	2	-14.012	0.171	0.000
814	2026	2026	2	-4.888	0.051	0.000
815	2027	2027	2	-5.139	0.051	0.000
816	2028	2028	2	-5.418	0.051	0.000
817	2029	2029	2	-5.728	0.051	0.000
818	2030	2030	2	-6.076	0.051	0.000
819	2011	2011	3	-7.579	0.472	0.000
820	2012	2012	3	-8.200	0.470	0.000
821	2013	2013	3	-8.932	0.468	0.000
822	2014	2014	3	-9.809	0.465	0.000
823	2015	2015	3	-10.875	0.463	0.000
824	2016	2016	3	-9.634	0.364	0.000
825	2017	2017	3	-10.661	0.363	0.000
826	2018	2018	3	-11.933	0.361	0.000
827	2019	2019	3	-13.550	0.360	0.000
828	2020	2020	3	-15.674	0.359	0.000
829	2021	2021	3	-8.979	0.173	0.000
830	2022	2022	3	-9.865	0.172	0.000
831	2023	2023	3	-10.945	0.172	0.000
832	2024	2024	3	-12.290	0.172	0.000
833	2025	2025	3	-14.012	0.171	0.000
834	2026	2026	3	-4.888	0.051	0.000
835	2027	2027	3	-5.139	0.051	0.000
836	2028	2028	3	-5.418	0.051	0.000
837	2029	2029	3	-5.728	0.051	0.000
838	2030	2030	3	-6.076	0.051	0.000

839							
840	FUEL_CONSUMPTION - (used)						
841	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel	
	cut-off_speed(km/h)						
842	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140
843	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140
844	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140
845	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140
846	3	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96
847	4	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96
848	5	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96
849							
850	FUEL_CONSUMPTION - (std)						
851	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel	
	cut-off_speed(km/h)						
852	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140

853	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140
854	1	3	0.0000	0.12564	0.00000E+00	0.00000E+00	140
855	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140
856	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140
857	3	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140
858	3	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140
859	4	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96
860	5	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96
861	6	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96

862

863 FUEL\_EFFICIENCY - (used)

864 \*% p.a.

865	*Start_yr	End_yr	veh_type	fuel_type	change
866	2012	2012	1	1	-0.46
867	2012	2012	1	2	0.09
868	2013	2013	1	1	-0.42
869	2013	2013	1	2	0.07
870	2014	2020	1	1	2.48
871	2014	2020	1	2	2.92
872	2021	2025	1	1	2.37
873	2021	2025	1	2	1.62
874	2026	2030	1	1	0.92
875	2026	2030	1	2	0.77
876	2012	2012	2	2	0.20
877	2013	2013	2	2	0.18
878	2014	2020	2	2	3.25
879	2021	2025	2	2	0.67
880	2026	2030	2	2	0.27
881	2012	2012	3	2	0.43
882	2013	2013	3	2	0.38
883	2014	2020	3	2	-1.67
884	2021	2025	3	2	0.07
885	2026	2030	3	2	0.01
886	2012	2012	4	2	0.43
887	2013	2013	4	2	0.38
888	2014	2020	4	2	-1.67
889	2021	2025	4	2	0.07
890	2026	2030	4	2	0.01
891	2012	2012	5	2	0.32
892	2013	2013	5	2	0.34
893	2014	2020	5	2	-0.64
894	2021	2025	5	2	0.03
895	2026	2030	5	2	-0.02
896	2012	2012	6	2	0.00
897	2013	2013	6	2	0.00
898	2014	2020	6	2	0.00
899	2021	2025	6	2	0.00
900	2026	2030	6	2	0.00
901	2012	2012	7	2	0.00
902	2013	2013	7	2	0.00
903	2014	2020	7	2	0.00
904	2021	2025	7	2	0.00
905	2026	2030	7	2	0.00

906

907 FUEL\_EFFICIENCY - (std)

908 \*% p.a.

909	*Start_yr	End_yr	veh_type	fuel_type	change
910	2011	2015	1	1	1.81
911	2011	2015	1	2	2.23
912	2011	2015	1	3	-0.10
913	2011	2015	2	1	0.11
914	2011	2015	2	2	2.71
915	2011	2015	3	1	0.11
916	2011	2015	3	2	2.71
917	2016	2020	1	1	3.32
918	2016	2020	1	2	2.22
919	2016	2020	1	3	0.02
920	2016	2020	2	1	2.35
921	2016	2020	2	2	2.35

922	2016	2020	3	1	2.35
923	2016	2020	3	2	2.35
924	2021	2025	1	1	3.16
925	2021	2025	1	2	2.02
926	2021	2025	1	3	0.12
927	2021	2025	2	1	2.85
928	2021	2025	2	2	1.65
929	2021	2025	3	1	2.85
930	2021	2025	3	2	1.65
931	2026	2030	1	1	1.56
932	2026	2030	1	2	1.19
933	2026	2030	1	3	0.00
934	2026	2030	2	1	2.40
935	2026	2030	2	2	0.74
936	2026	2030	3	1	2.40
937	2026	2030	3	2	0.74
938	2031	2035	1	1	0.57
939	2031	2035	1	2	0.52
940	2031	2035	1	3	-0.08
941	2031	2035	2	1	0.54
942	2031	2035	2	2	0.22
943	2031	2035	3	1	0.54
944	2031	2035	3	2	0.22
945	2036	2100	1	1	0.00
946	2036	2100	1	2	0.00
947	2036	2100	1	3	0.00
948	2036	2100	2	1	0.00
949	2036	2100	2	2	0.00
950	2036	2100	3	1	0.00
951	2036	2100	3	2	0.00

NON\_FUEL\_VOC - (used)

*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw	
955	1	6.265	171.493	5.507	0.000
956	1	6.265	171.493	5.507	0.000
957	2	9.099	70.308	10.327	0.000
958	3	10.020	393.702	0.000	0.000
959	3	10.020	393.702	0.000	0.000
960	4	19.491	758.888	0.000	0.000
961	5	45.458	1036.494	0.000	0.000
962	6	0.000	0.000	0.000	0.000
963	7	0.000	0.000	0.000	0.000

NON\_FUEL\_VOC - (std)

*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw	
966	1	4.966	135.946	3.846	0.000
967	1	4.966	135.946	3.846	0.000
968	1	1.157	135.946	1.157	0.000
969	2	7.213	47.113	7.213	0.000
970	2	7.213	47.113	7.213	0.000
971	3	7.213	47.113	7.213	0.000
972	3	7.213	47.113	7.213	0.000
973	4	6.714	263.817	0.000	0.000
974	5	13.061	508.525	0.000	0.000
975	6	30.461	694.547	0.000	0.000

NON\_FUEL\_VOC\_CHANGES - (used)

*% p.a.	*Start_yr	End_yr	veh_type	gnf
978	2012	2080	1	0.000
979	2012	2080	2	0.000
980	2012	2080	3	0.000
981	2012	2080	4	0.000
982	2012	2080	5	0.000

NON\_FUEL\_VOC\_CHANGES - (std)

*% p.a.	*Start_yr	End_yr	veh_type	gnf
983	2011	2100	1	0.000

991	2011	2100	2	0.000
992	2011	2100	3	0.000
993	2011	2100	4	0.000
994	2011	2100	5	0.000
995	2011	2100	6	0.000
996	2011	2100	7	0.000
997	2011	2100	8	0.000

998  
999 NON\_FUEL\_TAX\_RATES - (used)  
1000 \*%

	*submode	final	intermediate
1001			
1002	1	21.0	0.0
1003	2	21.0	0.0
1004	3	21.0	0.0
1005	4	21.0	0.0
1006	5	21.0	0.0
1007	6	21.0	0.0
1008	7	21.0	0.0

1009  
1010 NON\_FUEL\_TAX\_RATES - (std)  
1011 \*%

	*submode	final	intermediate
1012			
1013	1	17.5	0.0
1014	2	17.5	0.0
1015	3	17.5	0.0
1016	4	17.5	0.0
1017	5	17.5	0.0
1018	6	17.5	0.0
1019	7	0.0	0.0
1020	8	0.0	0.0

1021  
1022 NON\_FUEL\_TAX\_RATES\_CHANGES - (used)  
1023 \*% change p.a.

	*Start_yr	End_yr	Submode	final	intermediate
1024					
1025	2012	2012	1	5.7	7.9
1026	2013	2080	1	0.0	0.0
1027	2012	2012	2	7.9	10.3
1028	2013	2080	2	0.0	0.0
1029	2012	2012	3	7.9	10.3
1030	2013	2080	3	0.0	0.0
1031	2012	2012	4	7.9	10.3
1032	2013	2080	4	0.0	0.0
1033	2012	2012	5	7.9	10.3
1034	2013	2080	5	0.0	0.0
1035	2012	2012	6	7.9	10.3
1036	2013	2080	6	0.0	0.0
1037	2012	2012	7	0.0	0.0
1038	2013	2080	7	0.0	0.0

1039  
1040 NON\_FUEL\_TAX\_RATES\_CHANGES - (std)  
1041 \*% change p.a.

	*Start_yr	End_yr	Submode	final	intermediate
1042					
1043	2011	2011	1	14.3	0.0
1044	2011	2011	2	14.3	0.0
1045	2011	2011	3	14.3	0.0
1046	2011	2011	4	14.3	0.0
1047	2011	2011	5	14.3	0.0
1048	2011	2011	6	14.3	0.0
1049	2011	2011	7	0.0	0.0
1050	2011	2011	8	0.0	0.0
1051	2012	2100	1	0.0	0.0
1052	2012	2100	2	0.0	0.0
1053	2012	2100	3	0.0	0.0
1054	2012	2100	4	0.0	0.0
1055	2012	2100	5	0.0	0.0
1056	2012	2100	6	0.0	0.0
1057	2012	2100	7	0.0	0.0
1058	2012	2100	8	0.0	0.0

1059

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1060 DEFAULT_PURPOSE_SPLIT - (used)
1061 *Vtype/submode purpose Period1 Period2 Period3 Period4 Period5
1062 1 1 13.3 16.9 12.0
1063 1 2 44.2 36.7 42.9
1064 1 3 42.5 46.4 45.1
1065 2 1 41.3 50.3 40.2
1066 2 2 45.2 35.1 45.1
1067 2 3 13.5 14.6 14.7
1068 3 1 76.7 81.4 75.6
1069 3 2 16.1 11.1 17.0
1070 3 3 7.2 7.5 7.4
1071 4 1 82.5 86.9 79.7
1072 4 2 11.7 7.8 13.2
1073 4 3 5.8 5.3 7.1
1074 5 1 10.2 10.2 10.2
1075 5 2 18.9 18.9 18.9
1076 5 3 70.8 70.8 70.9
1077 6 1 10.2 10.2 10.2
1078 6 2 18.9 18.9 18.9
1079 6 3 70.8 70.8 70.9
1080 7 1 10.2 10.2 10.2
1081 7 2 18.9 18.9 18.9
1082 7 3 70.8 70.8 70.9

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1083
1084 DEFAULT_PURPOSE_SPLIT - (std)
1085 *Vtype/submode purpose Period1 Period2 Period3 Period4 Period5
1086 1 1 16.5 11.8 16.5 12.9 3.5
1087 1 2 44.0 41.3 11.8 38.5 7.9
1088 1 3 39.5 46.9 71.7 48.6 88.6
1089 2 1 0.0 0.0 0.0 0.0 0.0
1090 2 2 0.0 0.0 0.0 0.0 0.0
1091 2 3 100.0 100.0 100.0 100.0 100.0
1092 3 1 100.0 100.0 100.0 100.0 100.0
1093 3 2 0.0 0.0 0.0 0.0 0.0
1094 3 3 0.0 0.0 0.0 0.0 0.0
1095 4 1 100.0 100.0 100.0 100.0 100.0
1096 4 2 0.0 0.0 0.0 0.0 0.0
1097 4 3 0.0 0.0 0.0 0.0 0.0
1098 5 1 100.0 100.0 100.0 100.0 100.0
1099 5 2 0.0 0.0 0.0 0.0 0.0
1100 5 3 0.0 0.0 0.0 0.0 0.0
1101 6 1 1.4 2.3 1.7 2.3 0.5
1102 6 2 18.4 25.9 6.5 35.4 6.1
1103 6 3 80.2 71.8 91.8 62.3 93.4
1104 7 1 4.5 5.2 3.2 2.5 0.7
1105 7 2 50.1 45.9 10.7 54.7 7.6
1106 7 3 45.4 48.9 86.1 42.8 91.7
1107 8 1 17.1 15.7 15.8 17.7 1.8
1108 8 2 31.2 38.1 5.5 38.6 2.8
1109 8 3 51.7 46.2 78.7 43.7 95.4

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1110
1111 DEFAULT_PERSON_FACTORS - (used)
1112 *Vtype/submode purpose person_type FactorPer1 FactorPer2..
1113 1 1 1 1.00 1.00 1.00
1114 1 1 2 0.26 0.25 0.26
1115 1 2 1 1.00 1.00 1.00
1116 1 2 2 0.23 0.22 0.23
1117 1 3 1 1.00 1.00 1.00
1118 1 3 2 0.66 0.65 0.68
1119 2 1 1 1.00 1.00 1.00
1120 2 1 2 0.37 0.32 0.38
1121 2 2 1 1.00 1.00 1.00
1122 2 2 2 0.40 0.41 0.40
1123 2 3 1 1.00 1.00 1.00
1124 2 3 2 0.49 0.45 0.48
1125 3 1 1 1.00 1.00 1.00
1126 3 1 2 0.09 0.09 0.09
1127 3 2 1 1.00 1.00 1.00
1128 3 2 2 0.24 0.28 0.24

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1129	3	3	1	1.00	1.00	1.00
1130	3	3	2	0.26	0.33	0.27
1131	4	1	1	1.00	1.00	1.00
1132	4	1	2	0.03	0.03	0.03
1133	4	2	1	1.00	1.00	1.00
1134	4	2	2	0.11	0.14	0.08
1135	4	3	1	1.00	1.00	1.00
1136	4	3	2	0.11	0.12	0.16
1137	5	1	1	1.00	1.00	1.00
1138	5	1	2	0.35	0.35	0.35
1139	5	2	1	1.00	1.00	1.00
1140	5	2	2	1.50	1.50	1.50
1141	5	3	1	1.00	1.00	1.00
1142	5	3	2	8.35	8.35	8.35

1144 DEFAULT\_PERSON\_FACTORS - (std)

1145	*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2..
1146	1	1	1	1.00	1.00
1147	1	1	2	0.13	0.15
1148	1	2	1	1.00	1.00
1149	1	2	2	0.13	0.14
1150	1	3	1	1.00	1.00
1151	1	3	2	0.71	0.79
1152	2	2	1	1.00	1.00
1153	2	2	2	0.46	0.46
1154	2	3	1	1.00	1.00
1155	2	3	2	0.46	0.46
1156	3	1	1	1.00	1.00
1157	3	1	2	0.20	0.20
1158	4	1	1	1.00	1.00
1159	5	1	1	1.00	1.00

1160

1161 DEFAULT\_PERSON\_FACTORS\_CHANGE - (used)

1162 \*% change p.a.

1163	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3
	ChangePer4	ChangePer5						
1164	2011	2080	1	1	2	0.00	0.00	0.00
1165	2011	2080	1	2	2	0.00	0.00	0.00

1166

1167 DEFAULT\_PERSON\_FACTORS\_CHANGE - (std)

1168 \*% change p.a.

1169	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3
	ChangePer4	ChangePer5						
1170	2011	2036	1	1	2	0.00	0.00	
1171	2011	2036	1	2	2	0.00	0.00	
1172	2011	2036	1	3	2	0.00	0.00	

1173

1174 INPUT\_SUMMARY

1175 Run name N25 Waterford to Glenmore - Mage

1176 DM scheme Do **Min**

1177 DS scheme Magenta

1178

1179 Economic parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Teal\Economics\_Input\_TUBAv1.9.8  
 (Oct2020).txt

1180 Scheme parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Magenta\TUBA\_Scheme\_Input\_Magenta\_30year\_v1.9.8\_SPL\_1\_0.txt

1181  
 1182 First year of scheme costs 2020  
 1183 First Appraisal Year 2030  
 1184 Last Appraisal Year 2059  
 1185 Modelled years 2030 2045 2059  
 1186

1187 Time period Total hours  
 1188 AM Peak 646  
 1189 Inter Peak 2424  
 1190 PM Peak 640  
 1191 Total 3710  
 1192  
 1193

1194 Note: All monetary values are in 2011 market prices. All monetary values discounted to 2011 unless otherwise stated.

1195  
 1196 DM\_SCHEME\_COSTS

1197 Do minimum scheme costs. Undiscounted £000s

1198 Mode	Year	Prep.	Superv.	Constr.	Land
Maint.	Oper.	Grant/Sub.	Dev._Cont		
1199 Road	2020	0	0	0	0
0	0	0	0		
1200 Road	2021	0	0	0	0
0	0	0	0		
1201 Road	2022	0	0	0	0
0	0	0	0		
1202 Road	2023	0	0	0	0
0	0	0	0		
1203 Road	2024	0	0	0	0
0	0	0	0		
1204 Road	2025	0	0	0	0
0	0	0	0		
1205 Road	2026	0	0	0	0
0	0	0	0		
1206 Road	2027	0	0	0	0
0	0	0	0		
1207 Road	2028	0	0	0	0
0	0	0	0		
1208 Road	2029	0	0	0	0
0	0	0	0		
1209 Road	2030	0	0	0	0
0	0	0	0		
1210 Road	2031	0	0	0	0
0	0	0	0		
1211 Road	2032	0	0	0	0
0	0	0	0		
1212 Road	2033	0	0	0	0
0	0	0	0		
1213 Road	2034	0	0	0	0
0	0	0	0		
1214 Road	2035	0	0	0	0
0	0	0	0		
1215 Road	2036	0	0	0	0
0	0	0	0		
1216 Road	2037	0	0	0	0
0	0	0	0		
1217 Road	2038	0	0	0	0
0	0	0	0		
1218 Road	2039	0	0	0	0
0	0	0	0		

1219	Road 0	2040 0	0	0	0	0	0	0
1220	Road 0	2041 0	0	0	0	0	0	0
1221	Road 0	2042 0	0	0	0	0	0	0
1222	Road 0	2043 0	0	0	0	0	0	0
1223	Road 0	2044 0	0	0	0	0	0	0
1224	Road 0	2045 0	0	0	0	0	0	0
1225	Road 0	2046 0	0	0	0	0	0	0
1226	Road 0	2047 0	0	0	0	0	0	0
1227	Road 0	2048 0	0	0	0	0	0	0
1228	Road 0	2049 0	0	0	0	0	0	0
1229	Road 0	2050 0	0	0	0	0	0	0
1230	Road 0	2051 0	0	0	0	0	0	0
1231	Road 0	2052 0	0	0	0	0	0	0
1232	Road 0	2053 0	0	0	0	0	0	0
1233	Road 0	2054 0	0	0	0	0	0	0
1234	Road 0	2055 0	0	0	0	0	0	0
1235	Road 0	2056 0	0	0	0	0	0	0
1236	Road 0	2057 0	0	0	0	0	0	0
1237	Road 0	2058 0	0	0	0	0	0	0
1238	Road 0	2059 0	0	0	0	0	0	0
1239	Bus 0	2020 0	0	0	0	0	0	0
1240	Bus 0	2021 0	0	0	0	0	0	0
1241	Bus 0	2022 0	0	0	0	0	0	0
1242	Bus 0	2023 0	0	0	0	0	0	0
1243	Bus 0	2024 0	0	0	0	0	0	0
1244	Bus 0	2025 0	0	0	0	0	0	0
1245	Bus 0	2026 0	0	0	0	0	0	0
1246	Bus 0	2027 0	0	0	0	0	0	0
1247	Bus 0	2028 0	0	0	0	0	0	0
1248	Bus 0	2029 0	0	0	0	0	0	0
1249	Bus 0	2030 0	0	0	0	0	0	0
1250	Bus 0	2031 0	0	0	0	0	0	0
1251	Bus 0	2032 0	0	0	0	0	0	0
1252	Bus 0	2033 0	0	0	0	0	0	0
1253	Bus	2034	0	0	0	0	0	0



1254	0	0	0	0	0	0	0
	Bus	2035					
	0	0	0	0	0	0	0
1255	Bus	2036					
	0	0	0	0	0	0	0
1256	Bus	2037					
	0	0	0	0	0	0	0
1257	Bus	2038					
	0	0	0	0	0	0	0
1258	Bus	2039					
	0	0	0	0	0	0	0
1259	Bus	2040					
	0	0	0	0	0	0	0
1260	Bus	2041					
	0	0	0	0	0	0	0
1261	Bus	2042					
	0	0	0	0	0	0	0
1262	Bus	2043					
	0	0	0	0	0	0	0
1263	Bus	2044					
	0	0	0	0	0	0	0
1264	Bus	2045					
	0	0	0	0	0	0	0
1265	Bus	2046					
	0	0	0	0	0	0	0
1266	Bus	2047					
	0	0	0	0	0	0	0
1267	Bus	2048					
	0	0	0	0	0	0	0
1268	Bus	2049					
	0	0	0	0	0	0	0
1269	Bus	2050					
	0	0	0	0	0	0	0
1270	Bus	2051					
	0	0	0	0	0	0	0
1271	Bus	2052					
	0	0	0	0	0	0	0
1272	Bus	2053					
	0	0	0	0	0	0	0
1273	Bus	2054					
	0	0	0	0	0	0	0
1274	Bus	2055					
	0	0	0	0	0	0	0
1275	Bus	2056					
	0	0	0	0	0	0	0
1276	Bus	2057					
	0	0	0	0	0	0	0
1277	Bus	2058					
	0	0	0	0	0	0	0
1278	Bus	2059					
	0	0	0	0	0	0	0
1279							
1280	DS_SCHEME_COSTS						
1281	Do something scheme costs. Undiscounted £000s						
1282	Mode	Year	Prep.	Superv.	Constr.	Land	
	Maint.	Oper.	Grant/Sub.	Dev._Cont			
1283	Road	2020	0	0	0	0	0
	0	0	0	0	0	0	0
1284	Road	2021	0	0	0	0	0
	0	0	0	0	0	0	0
1285	Road	2022	0	0	0	0	0
	0	0	0	0	0	0	0
1286	Road	2023	0	0	0	0	0
	0	0	0	0	0	0	0
1287	Road	2024	0	0	0	0	0
	0	0	0	0	0	0	0
1288	Road	2025	0	0	0	0	0
	0	0	0	0	0	0	0
1289	Road	2026	0	0	0	0	0

1290	Road 0	0 2027	0 3654	0 0	27052	4662
1291	Road 0	0 2028	0 731	0 5537	57060	4662
1292	Road 0	0 2029	0 487	0 5537	29553	0
1293	Road 461	0 2030	0 0	0 0	0	0
1294	Road 461	0 2031	0 0	0 0	0	0
1295	Road 461	0 2032	0 0	0 0	0	0
1296	Road 461	0 2033	0 0	0 0	0	0
1297	Road 461	0 2034	0 0	0 0	0	0
1298	Road 461	0 2035	0 0	0 0	0	0
1299	Road 461	0 2036	0 0	0 0	0	0
1300	Road 461	0 2037	0 0	0 0	0	0
1301	Road 461	0 2038	0 0	0 0	0	0
1302	Road 461	0 2039	0 0	0 0	0	0
1303	Road 461	0 2040	0 0	0 0	0	0
1304	Road 461	0 2041	0 0	0 0	0	0
1305	Road 461	0 2042	0 0	0 0	0	0
1306	Road 461	0 2043	0 0	0 0	0	0
1307	Road 461	0 2044	0 0	0 0	0	0
1308	Road 461	0 2045	0 0	0 0	0	0
1309	Road 461	0 2046	0 0	0 0	0	0
1310	Road 461	0 2047	0 0	0 0	0	0
1311	Road 461	0 2048	0 0	0 0	0	0
1312	Road 461	0 2049	0 0	0 0	0	0
1313	Road 461	0 2050	0 0	0 0	0	0
1314	Road 461	0 2051	0 0	0 0	0	0
1315	Road 461	0 2052	0 0	0 0	0	0
1316	Road 461	0 2053	0 0	0 0	0	0
1317	Road 461	0 2054	0 0	0 0	0	0
1318	Road 461	0 2055	0 0	0 0	0	0
1319	Road 461	0 2056	0 0	0 0	0	0
1320	Road 461	0 2057	0 0	0 0	0	0
1321	Road 461	0 2058	0 0	0 0	0	0
1322	Road 601	0 2059	0 0	0 0	0	0
1323	Bus 0	0 2020	0 0	0 0	0	0

1324	Bus 0	2021 0	0	0	0	0	0	0
1325	Bus 0	2022 0	0	0	0	0	0	0
1326	Bus 0	2023 0	0	0	0	0	0	0
1327	Bus 0	2024 0	0	0	0	0	0	0
1328	Bus 0	2025 0	0	0	0	0	0	0
1329	Bus 0	2026 0	0	0	0	0	0	0
1330	Bus 0	2027 0	0	0	0	0	0	0
1331	Bus 0	2028 0	0	0	0	0	0	0
1332	Bus 0	2029 0	0	0	0	0	0	0
1333	Bus 0	2030 0	0	0	0	0	0	0
1334	Bus 0	2031 0	0	0	0	0	0	0
1335	Bus 0	2032 0	0	0	0	0	0	0
1336	Bus 0	2033 0	0	0	0	0	0	0
1337	Bus 0	2034 0	0	0	0	0	0	0
1338	Bus 0	2035 0	0	0	0	0	0	0
1339	Bus 0	2036 0	0	0	0	0	0	0
1340	Bus 0	2037 0	0	0	0	0	0	0
1341	Bus 0	2038 0	0	0	0	0	0	0
1342	Bus 0	2039 0	0	0	0	0	0	0
1343	Bus 0	2040 0	0	0	0	0	0	0
1344	Bus 0	2041 0	0	0	0	0	0	0
1345	Bus 0	2042 0	0	0	0	0	0	0
1346	Bus 0	2043 0	0	0	0	0	0	0
1347	Bus 0	2044 0	0	0	0	0	0	0
1348	Bus 0	2045 0	0	0	0	0	0	0
1349	Bus 0	2046 0	0	0	0	0	0	0
1350	Bus 0	2047 0	0	0	0	0	0	0
1351	Bus 0	2048 0	0	0	0	0	0	0
1352	Bus 0	2049 0	0	0	0	0	0	0
1353	Bus 0	2050 0	0	0	0	0	0	0
1354	Bus 0	2051 0	0	0	0	0	0	0
1355	Bus 0	2052 0	0	0	0	0	0	0
1356	Bus 0	2053 0	0	0	0	0	0	0
1357	Bus 0	2054 0	0	0	0	0	0	0
1358	Bus	2055	0	0	0	0	0	0

1359	0	0	0	0	0	0	0
	Bus	2056	0	0	0	0	0
	0	0	0	0	0	0	0
1360	Bus	2057	0	0	0	0	0
	0	0	0	0	0	0	0
1361	Bus	2058	0	0	0	0	0
	0	0	0	0	0	0	0
1362	Bus	2059	0	0	0	0	0
	0	0	0	0	0	0	0

1363

1364 PRESENT\_VALUE\_COSTS

1365 Scheme investment and operating costs (i.e. excluding grant/subsidy, developer contributions and delays) and differences. £000s.

1366	Mode	Year	DM_scheme_costs	DS_scheme_costs	Difference
1367	Road	2020	0	0	0
1368	Road	2021	0	0	0
1369	Road	2022	0	0	0
1370	Road	2023	0	0	0
1371	Road	2024	0	0	0
1372	Road	2025	0	0	0
1373	Road	2026	0	0	0
1374	Road	2027	0	18883	18883
1375	Road	2028	0	34904	34904
1376	Road	2029	0	17562	17562
1377	Road	2030	0	219	219
1378	Road	2031	0	211	211
1379	Road	2032	0	203	203
1380	Road	2033	0	195	195
1381	Road	2034	0	187	187
1382	Road	2035	0	180	180
1383	Road	2036	0	173	173
1384	Road	2037	0	166	166
1385	Road	2038	0	160	160
1386	Road	2039	0	154	154
1387	Road	2040	0	148	148
1388	Road	2041	0	142	142
1389	Road	2042	0	137	137
1390	Road	2043	0	132	132
1391	Road	2044	0	126	126
1392	Road	2045	0	122	122
1393	Road	2046	0	117	117
1394	Road	2047	0	112	112
1395	Road	2048	0	108	108
1396	Road	2049	0	104	104
1397	Road	2050	0	100	100
1398	Road	2051	0	97	97
1399	Road	2052	0	94	94
1400	Road	2053	0	91	91
1401	Road	2054	0	88	88
1402	Road	2055	0	85	85
1403	Road	2056	0	82	82
1404	Road	2057	0	79	79
1405	Road	2058	0	76	76
1406	Road	2059	0	96	96
1407	Bus	2020	0	0	0
1408	Bus	2021	0	0	0
1409	Bus	2022	0	0	0
1410	Bus	2023	0	0	0
1411	Bus	2024	0	0	0
1412	Bus	2025	0	0	0
1413	Bus	2026	0	0	0
1414	Bus	2027	0	0	0
1415	Bus	2028	0	0	0
1416	Bus	2029	0	0	0
1417	Bus	2030	0	0	0
1418	Bus	2031	0	0	0
1419	Bus	2032	0	0	0
1420	Bus	2033	0	0	0
1421	Bus	2034	0	0	0

1422	Bus	2035	0	0	0
1423	Bus	2036	0	0	0
1424	Bus	2037	0	0	0
1425	Bus	2038	0	0	0
1426	Bus	2039	0	0	0
1427	Bus	2040	0	0	0
1428	Bus	2041	0	0	0
1429	Bus	2042	0	0	0
1430	Bus	2043	0	0	0
1431	Bus	2044	0	0	0
1432	Bus	2045	0	0	0
1433	Bus	2046	0	0	0
1434	Bus	2047	0	0	0
1435	Bus	2048	0	0	0
1436	Bus	2049	0	0	0
1437	Bus	2050	0	0	0
1438	Bus	2051	0	0	0
1439	Bus	2052	0	0	0
1440	Bus	2053	0	0	0
1441	Bus	2054	0	0	0
1442	Bus	2055	0	0	0
1443	Bus	2056	0	0	0
1444	Bus	2057	0	0	0
1445	Bus	2058	0	0	0
1446	Bus	2059	0	0	0
1447	Road	Total	0	75332	75332
1448	Bus	Total	0	0	0

1449

1450 TRIP\_MATRIX\_TOTALS

1451 Annualised total trip numbers (thousands)

1452	Submode	Year	Time period	DO MIN	DO SOM
1453	Car	2030	AM Peak	4719	4719
1454	Car	2030	Inter Peak	15931	15931
1455	Car	2030	PM Peak	4822	4822
1456	Car	2030	All	25472	25472
1457	Car	2045	AM Peak	4859	4859
1458	Car	2045	Inter Peak	16387	16387
1459	Car	2045	PM Peak	4962	4962
1460	Car	2045	All	26208	26208
1461	Car	2059	AM Peak	4861	4861
1462	Car	2059	Inter Peak	16428	16428
1463	Car	2059	PM Peak	4963	4963
1464	Car	2059	All	26252	26252
1465	OGV2	2030	AM Peak	287	287
1466	OGV2	2030	Inter Peak	1018	1018
1467	OGV2	2030	PM Peak	236	236
1468	OGV2	2030	All	1541	1541
1469	OGV2	2045	AM Peak	339	339
1470	OGV2	2045	Inter Peak	1209	1209
1471	OGV2	2045	PM Peak	279	279
1472	OGV2	2045	All	1828	1828
1473	OGV2	2059	AM Peak	361	361
1474	OGV2	2059	Inter Peak	1292	1292
1475	OGV2	2059	PM Peak	297	297
1476	OGV2	2059	All	1950	1950
1477	All	2030	AM Peak	5006	5006
1478	All	2030	Inter Peak	16948	16948
1479	All	2030	PM Peak	5059	5059
1480	All	2030	All	27013	27013
1481	All	2045	AM Peak	5198	5198
1482	All	2045	Inter Peak	17596	17596
1483	All	2045	PM Peak	5241	5241
1484	All	2045	All	28035	28035
1485	All	2059	AM Peak	5221	5221
1486	All	2059	Inter Peak	17721	17721
1487	All	2059	PM Peak	5260	5260
1488	All	2059	All	28202	28202

1489

1490 DM&DS\_USER\_COSTS

1491	Total value of user costs, DM and DS. £000s.					
1492	Mode	Year	DMtot_time	DMtot_charge	DMtot_fuel	DMtot_nonfuel
	DStot_time	DStot_charge	DStot_fuel	DStot_nonfuel		
1493	Road	2030	104727	0	19837	20654
	103557	0	19829	20626		
1494	Road	2045	86732	0	12186	12416
	85653	0	12178	12394		
1495	Road	2059	73347	0	7656	7725
	72340	0	7650	7710		

1496

1497 FUEL\_CONSUMPTION

1498 Total fuel consumption, DM and DS. kilounits.

1499			Do minimum		Do something	
1500	Submode	Year	petrol	diesel	petrol	diesel
1501	Car	2030	11160	5939	11183	5943
1502	Car	2045	11511	6130	11534	6133
1503	Car	2059	11549	6151	11572	6153
1504	OGV2	2030	0	19097	0	19050
1505	OGV2	2045	0	22533	0	22475
1506	OGV2	2059	0	24009	0	23945
1507	All	2030	11160	25035	11183	24993
1508	All	2045	11511	28663	11534	28608
1509	All	2059	11549	30160	11572	30098
1510	Car	Total	342809	182521	343505	182613
1511	OGV2	Total	0	659576	0	657875
1512	All	Total	342809	842097	343505	840489

1513

1514 CO2\_EMISSIONS\_UNTRADED

1515

			Emissions (tonnes)			cost	
			(£000s, low)			cost (£000s, high)	
			central)				
1516	Submode	Year	DM	DS	Increase	DM	
	DS	Increase	DM	DS	Increase	DM	
1517	Car	2030	40102	40163	61	1902	
	1905	3	381	381	1	381	
	381	1					
1518	Car	2045	41374	41434	60	2266	
	2269	3	218	218	0	218	
	218	0					
1519	Car	2059	41512	41570	58	2728	
	2731	4	133	133	0	133	
	133	0					
1520	OGV2	2030	48926	48807	-119	2321	
	2315	-6	464	463	-1	464	
	463	-1					
1521	OGV2	2045	57730	57580	-150	3161	
	3153	-8	304	304	-1	304	
	304	-1					
1522	OGV2	2059	61512	61347	-165	4042	
	4031	-11	196	196	-1	196	
	196	-1					
1523	All	2030	89027	88970	-58	4223	
	4221	-3	845	845	-1	845	
	845	-1					
1524	All	2031	89699	89640	-60	4296	
	4293	-3	819	818	-1	819	
	818	-1					
1525	All	2032	90371	90309	-62	4370	
	4367	-3	793	793	-1	793	
	793	-1					
1526	All	2033	91043	90979	-64	4445	
	4442	-3	768	768	-1	768	
	768	-1					
1527	All	2034	91715	91649	-66	4521	
	4517	-3	744	744	-1	744	
	744	-1					
1528	All	2035	92387	92318	-68	4598	
	4594	-3	721	720	-1	721	

	720	-1				
1529	All	2036	93058	92988	-71	4676
	4672	-4	698	698	-1	698
	698	-1				
1530	All	2037	93730	93657	-73	4755
	4751	-4	676	676	-1	676
	676	-1				
1531	All	2038	94402	94327	-75	4835
	4831	-4	655	654	-1	655
	654	-1				
1532	All	2039	95074	94997	-77	4916
	4912	-4	634	634	-1	634
	634	-1				
1533	All	2040	95746	95666	-79	4998
	4994	-4	614	614	-1	614
	614	-1				
1534	All	2041	96417	96336	-81	5082
	5078	-4	595	594	-1	595
	594	-1				
1535	All	2042	97089	97006	-84	5166
	5162	-4	576	575	-0	576
	575	-0				
1536	All	2043	97761	97675	-86	5252
	5248	-5	557	557	-0	557
	557	-0				
1537	All	2044	98433	98345	-88	5339
	5334	-5	540	539	-0	540
	539	-0				
1538	All	2045	99105	99014	-90	5427
	5422	-5	522	522	-0	522
	522	-0				
1539	All	2046	99385	99293	-91	5495
	5490	-5	504	503	-0	504
	503	-0				
1540	All	2047	99665	99572	-93	5563
	5558	-5	486	485	-0	486
	485	-0				
1541	All	2048	99944	99851	-94	5633
	5627	-5	468	468	-0	468
	468	-0				
1542	All	2049	100224	100130	-95	5703
	5697	-5	452	451	-0	452
	451	-0				
1543	All	2050	100504	100408	-96	5802
	5796	-6	438	437	-0	438
	437	-0				
1544	All	2051	100784	100687	-97	5902
	5896	-6	424	424	-0	424
	424	-0				
1545	All	2052	101064	100966	-99	6004
	5998	-6	411	410	-0	411
	410	-0				
1546	All	2053	101344	101245	-100	6108
	6102	-6	398	398	-0	398
	398	-0				
1547	All	2054	101624	101523	-101	6214
	6208	-6	386	385	-0	386
	385	-0				
1548	All	2055	101904	101802	-102	6321
	6315	-6	374	373	-0	374
	373	-0				
1549	All	2056	102184	102081	-103	6430
	6424	-6	362	362	-0	362
	362	-0				
1550	All	2057	102464	102360	-104	6541
	6535	-7	351	350	-0	351
	350	-0				
1551	All	2058	102744	102638	-106	6654
	6648	-7	340	339	-0	340

1552	339	-0					
	All	2059	103024	102917	-107	6769	
	6762	-7	329	329	-0	329	
	329	-0					
1553	Car	Total	1232082	1233872	1790	68119	
	68217	99	7024	7035	10	7024	
	7035	10					
1554	OGV2	Total	1689834	1685476	-4358	93921	
	93678	-243	9453	9429	-24	9453	
	9429	-24					
1555	All	Total	2921917	2919348	-2569	162039	
	161895	-144	16477	16463	-14	16477	
	16463	-14					

1556

1557 CO2\_EMISSIONS\_TRADED

1558

		Emissions (tonnes)				cost	
		(£000s, low)				cost (£000s, high)	
		central)				cost (£000s, high)	
Submode	Year	DM	DS	Increase	DM	DM	DM
DS	Increase	DM	DS	Increase	DM	DM	DM
DS	Increase	DM	DS	Increase	DM	DM	DM
1560	Car	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1561	Car	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1562	Car	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1563	OGV2	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1564	OGV2	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1565	OGV2	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1566	All	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1567	All	2031	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1568	All	2032	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1569	All	2033	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1570	All	2034	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1571	All	2035	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1572	All	2036	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1573	All	2037	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1574	All	2038	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1575	All	2039	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0





1599

## 1600 CO2\_EMISSIONS\_BY\_TIME\_PERIOD\_UNTRADED

		Emissions (tonnes) (£000s, low central)				cost cost (£000s, high)	
Submode	Year	DM	DS	Increase	DM	DM	
DS	Increase	DM	DS	Increase	DM	DM	
DS	Increase						
1603	AM Peak	2030	17616	17583	-33	836	
	834	-2	167	167	-0	167	
	167	-0					
1604	AM Peak	2045	19478	19435	-44	1067	
	1064	-2	103	102	-0	103	
	102	-0					
1605	AM Peak	2059	20145	20096	-49	1324	
	1320	-3	64	64	-0	64	
	64	-0					
1606	Inter Peak	2030	55393	55368	-25	2628	
	2627	-1	526	526	-0	526	
	526	-0					
1607	Inter Peak	2045	61964	61927	-37	3393	
	3391	-2	327	326	-0	327	
	326	-0					
1608	Inter Peak	2059	64617	64573	-44	4246	
	4243	-3	206	206	-0	206	
	206	-0					
1609	PM Peak	2030	16019	16019	1	760	
	760	0	152	152	0	152	
	152	0					
1610	PM Peak	2045	17662	17653	-9	967	
	967	-0	93	93	-0	93	
	93	-0					
1611	PM Peak	2059	18262	18248	-14	1200	
	1199	-1	58	58	-0	58	
	58	-0					
1612	AM Peak	Total	574452	573189	-1263	31847	
	31776	-70	3243	3236	-7	3243	
	3236	-7					
1613	Inter Peak	Total	1826246	1825174	-1072	101299	
	101239	-60	10290	10285	-6	10290	
	10285	-6					
1614	PM Peak	Total	521219	520985	-234	28893	
	28880	-14	2943	2942	-1	2943	
	2942	-1					

1615

1616 NOTE: The cost of any EU Allowances (EUAs) purchased to cover traded emissions (i.e. emissions from sectors covered by the EU Emissions Trading System)

1617 will be reflected in the purchase price of traded sector goods (such as electricity).

1618 Since the purchase price is used in the costs, considered in transport appraisal, the cost of the relevant EUAs will be included in the cost benefit analysis, "internalising" the costs of emissions from traded sectors.

1619 The CO2 EMISSIONS BY TIME PERIOD TRADED reported in the table below are therefore provided for information purposes only - they are not included in the

1620 Economic Efficiency of the Transport System (TEE) table.

1621 For further information, please refer to TAG Unit A-3 para. 4.1.5 and 4.2.9

1622

## 1623 CO2\_EMISSIONS\_BY\_TIME\_PERIOD\_TRADED

		Emissions (tonnes) (£000s, low central)				cost cost (£000s, high)	
Submode	Year	DM	DS	Increase	DM	DM	
DS	Increase	DM	DS	Increase	DM	DM	
DS	Increase						
1626	AM Peak	2030	0	0	0	0	
	0	0	0	0	0	0	
	0	0					
1627	AM Peak	2045	0	0	0	0	
	0	0	0	0	0	0	
	0	0					

1628	AM Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1629	Inter Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1630	Inter Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1631	Inter Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1632	PM Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1633	PM Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1634	PM Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1635	AM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1636	Inter Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1637	PM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					

1638							
1639	MODE						
1640	User benefits and changes in revenues by mode, all years. £000s.						
1641	Mode	Year	User	User_Charges	Vehicle_Operating_Cost		
	Operator_Rev	Indirect					
1642			Time	PT_fares_(pri	Fuel	Non_fuel	
			PT_fares_(pri	Taxes			
1643	Road	2030	1171	0	8	28	
	0	-3					
1644	Road	2031	1165	0	9	28	
	0	-3					
1645	Road	2032	1160	0	9	28	
	0	-3					
1646	Road	2033	1154	0	9	27	
	0	-3					
1647	Road	2034	1149	0	9	27	
	0	-3					
1648	Road	2035	1143	0	9	26	
	0	-3					
1649	Road	2036	1137	0	9	26	
	0	-3					
1650	Road	2037	1131	0	9	25	
	0	-3					
1651	Road	2038	1125	0	9	25	
	0	-3					
1652	Road	2039	1119	0	9	24	
	0	-3					
1653	Road	2040	1112	0	9	24	
	0	-3					
1654	Road	2041	1106	0	9	23	
	0	-3					
1655	Road	2042	1100	0	9	23	
	0	-3					
1656	Road	2043	1093	0	9	22	
	0	-3					
1657	Road	2044	1086	0	8	22	
	0	-3					
1658	Road	2045	1080	0	8	22	
	0	-3					

1659	Road	2046	1071	0	8	21
	0	-3				
1660	Road	2047	1062	0	8	20
	0	-3				
1661	Road	2048	1054	0	8	20
	0	-3				
1662	Road	2049	1045	0	8	19
	0	-3				
1663	Road	2050	1041	0	7	19
	0	-3				
1664	Road	2051	1038	0	7	18
	0	-3				
1665	Road	2052	1034	0	7	18
	0	-3				
1666	Road	2053	1030	0	7	17
	0	-3				
1667	Road	2054	1026	0	7	17
	0	-3				
1668	Road	2055	1022	0	7	17
	0	-3				
1669	Road	2056	1018	0	7	16
	0	-3				
1670	Road	2057	1014	0	6	16
	0	-3				
1671	Road	2058	1010	0	6	15
	0	-3				
1672	Road	2059	1006	0	6	15
	0	-3				
1673	Road	Total	32503	0	237	649
	0	-95				

1674

1675 SUBMODE

1676 User benefits and changes in revenues by submode/vehicle type, modelled years and total. £000s.

1677 Submode Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1678 Time PT\_fares\_(pri Fuel Non\_fuel  
PT\_fares\_(pri Taxes

1679 Car 2030 927 0 -16 -18  
0 10

1680 Car 2045 842 0 -9 -10  
0 5

1681 Car 2059 791 0 -5 -6  
0 3

1682 OGV2 2030 244 0 24 46  
0 -13

1683 OGV2 2045 238 0 17 32  
0 -9

1684 OGV2 2059 216 0 11 21  
0 -6

1685 All 2030 1171 0 8 28  
0 -3

1686 All 2045 1080 0 8 22  
0 -3

1687 All 2059 1006 0 6 15  
0 -3

1688 Car Total 25498 0 -282 -325  
0 174

1689 OGV2 Total 7005 0 520 974  
0 -269

1690 All Total 32503 0 237 649  
0 -95

1691

1692 PERSON\_TYPES

1693 User benefits and changes in revenues by person type, modelled years and total. £000s.

1694 Person\_type Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1695 Time PT\_fares\_(pri Fuel Non\_fuel  
PT\_fares\_(pri Taxes

1696	All	2030	1171	0	8	28
	0	-3				
1697	All	2045	1080	0	8	22
	0	-3				
1698	All	2059	1006	0	6	15
	0	-3				
1699	All	Total	32503	0	237	649
	0	-95				
1700						
1701	PURPOSE					
1702	User benefits and changes in revenues by trip purpose, modelled years and total. £000s.					
1703	Purpose	Year	User	User_Charges	Vehicle_Operating_Cost	
	Operator_Rev	Indirect				
1704			Time PT_fares_(pri		Fuel	Non_fuel
			PT_fares_(pri		Taxes	
1705	Business	2030	545	0	18	51
	0	-9				
1706	Business	2045	511	0	13	35
	0	-7				
1707	Business	2059	473	0	9	24
	0	-4				
1708	Commuting	2030	270	0	-4	-11
	0	3				
1709	Commuting	2045	245	0	-2	-6
	0	1				
1710	Commuting	2059	229	0	-1	-4
	0	1				
1711	Other	2030	356	0	-6	-12
	0	4				
1712	Other	2045	323	0	-3	-7
	0	2				
1713	Other	2059	304	0	-2	-5
	0	1				
1714	Business	Total	15298	0	394	1091
	0	-202				
1715	Commuting	Total	7409	0	-57	-204
	0	41				
1716	Other	Total	9797	0	-100	-237
	0	66				
1717						
1718	PERIOD					
1719	User benefits and changes in revenues by time period, modelled years and total. £000s.					
1720	Period	Year	User	User_Charges	Vehicle_Operating_Cost	
	Operator_Rev	Indirect				
1721			Time PT_fares_(pri		Fuel	Non_fuel
			PT_fares_(pri		Taxes	
1722	AM Peak	2030	356	0	7	12
	0	-3				
1723	AM Peak	2045	328	0	5	8
	0	-2				
1724	AM Peak	2059	301	0	3	5
	0	-2				
1725	Inter Peak	2030	469	0	3	16
	0	-1				
1726	Inter Peak	2045	434	0	3	12
	0	-1				
1727	Inter Peak	2059	411	0	2	8
	0	-1				
1728	PM Peak	2030	345	0	-1	1
	0	1				
1729	PM Peak	2045	317	0	0	2
	0	0				
1730	PM Peak	2059	294	0	1	1
	0	-0				
1731	AM Peak	Total	9837	0	147	249
	0	-75				
1732	Inter Peak	Total	13117	0	87	359
	0	-28				
1733	PM Peak	Total	9550	0	3	42

	0	8							
1734									
1735	NON MONETISED TIME BENEFITS BY TIME SAVING								
1736	Time benefits (thousands of person hrs) by size of time saving								
1737	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins	0		
	to 2 mins	2 to 5 mins	> 5 mins						
1738	Car	Business	2030	-1		-0			
	-0	8	6	0					
1739	Car	Business	2045	-1		-0			
	-0	10	7	0					
1740	Car	Business	2059	-1		-0			
	-0	11	8	0					
1741	Car	Business	Total	-33		-13			
	-9	290	214	0					
1742	Car	Commuting	2030	-3		-1			
	-1	20	21	0					
1743	Car	Commuting	2045	-3		-1			
	-1	24	24	0					
1744	Car	Commuting	2059	-3		-1			
	-1	26	27	0					
1745	Car	Commuting	Total	-86		-33			
	-21	699	721	0					
1746	Car	Other	2030	-4		-2			
	-2	32	29	0					
1747	Car	Other	2045	-5		-2			
	-1	37	33	0					
1748	Car	Other	2059	-5		-2			
	-1	42	37	0					
1749	Car	Other	Total	-135		-53			
	-34	1115	988	0					
1750	OGV2	Business	2030	-0		-0			
	-0	9	2	0					
1751	OGV2	Business	2045	-0		-0			
	-0	9	4	0					
1752	OGV2	Business	2059	-0		-0			
	-0	9	5	0					
1753	OGV2	Business	Total	-3		-0			
	-1	270	113	0					
1754	OGV2	Commuting	2030	-0		-0			
	-0	1	0	0					
1755	OGV2	Commuting	2045	-0		-0			
	-0	1	1	0					
1756	OGV2	Commuting	2059	-0		-0			
	-0	1	1	0					
1757	OGV2	Commuting	Total	-0		-0			
	-0	30	19	0					
1758	OGV2	Other	2030	-0		-0			
	-0	1	0	0					
1759	OGV2	Other	2045	-0		-0			
	-0	1	0	0					
1760	OGV2	Other	2059	-0		-0			
	-0	1	0	0					
1761	OGV2	Other	Total	-0		-0			
	-0	19	10	0					
1762									
1763	MONETISED TIME BENEFITS BY TIME SAVING								
1764	Time benefits (£000s) by size of time saving								
1765	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins	0		
	to 2 mins	2 to 5 mins	> 5 mins						
1766	Car	Business	2030	-25		-10			
	-9	197	148	0					
1767	Car	Business	2045	-20		-8			
	-5	177	130	0					
1768	Car	Business	2059	-17		-7			
	-4	164	120	0					
1769	Car	Business	Total	-615		-245			
	-170	5361	3963	0					
1770	Car	Commuting	2030	-20		-8			
	-7	148	156	0					

1771	Car	Commuting	2045	-17	-6			
	-4	134	137	0				
1772	Car	Commuting	2059	-14	-5			
	-3	124	127	0				
1773	Car	Commuting	Total	-501	-194			
	-123	4048	4178	0				
1774	Car	Other	2030	-29	-11			
	-10	213	193	0				
1775	Car	Other	2045	-23	-9			
	-5	192	169	0				
1776	Car	Other	2059	-19	-7			
	-4	178	156	0				
1777	Car	Other	Total	-707	-279			
	-181	5810	5153	0				
1778	OGV2	Business	2030	-2	-0			
	-0	208	38	0				
1779	OGV2	Business	2045	-2	-0			
	-0	161	79	0				
1780	OGV2	Business	2059	-2	-0			
	-0	143	75	0				
1781	OGV2	Business	Total	-56	-2			
	-11	5041	2033	0				
1782	OGV2	Commuting	2030	0	0			
	0	0	0	0				
1783	OGV2	Commuting	2045	0	0			
	0	0	0	0				
1784	OGV2	Commuting	2059	0	0			
	0	0	0	0				
1785	OGV2	Commuting	Total	0	0			
	0	0	0	0				
1786	OGV2	Other	2030	0	0			
	0	0	0	0				
1787	OGV2	Other	2045	0	0			
	0	0	0	0				
1788	OGV2	Other	2059	0	0			
	0	0	0	0				
1789	OGV2	Other	Total	0	0			
	0	0	0	0				
1790								
1791	TOTAL BENEFITS BY TIME SAVING							
1792	Total benefits (£000s) by size of time saving							
1793	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins	0	0
	to 2 mins	2 to 5 mins	> 5 mins					
1794	Car	Business	2030	-31	-13			
	-10	204	154	0				
1795	Car	Business	2045	-24	-10			
	-6	181	134	0				
1796	Car	Business	2059	-19	-8			
	-4	167	123	0				
1797	Car	Business	Total	-724	-299			
	-189	5503	4077	0				
1798	Car	Commuting	2030	-33	-14			
	-9	149	159	0				
1799	Car	Commuting	2045	-24	-10			
	-5	134	139	0				
1800	Car	Commuting	2059	-18	-7			
	-3	124	128	0				
1801	Car	Commuting	Total	-741	-314			
	-154	4064	4240	0				
1802	Car	Other	2030	-43	-19			
	-12	215	196	0				
1803	Car	Other	2045	-32	-14			
	-6	193	171	0				
1804	Car	Other	2059	-25	-10			
	-4	178	158	0				
1805	Car	Other	Total	-984	-419			
	-219	5836	5215	0				
1806	OGV2	Business	2030	-5	-0			
	-1	266	50	0				

1807	OGV2	Business	2045	-4	-0
	-1	193	95	0	
1808	OGV2	Business	2059	-3	-0
	-0	164	86	0	
1809	OGV2	Business	Total	-115	-3
	-17	6100	2451	0	
1810	OGV2	Commuting	2030	-0	-0
	-0	2	1	0	
1811	OGV2	Commuting	2045	-0	-0
	-0	1	1	0	
1812	OGV2	Commuting	2059	-0	-0
	-0	1	1	0	
1813	OGV2	Commuting	Total	-5	-0
	-0	35	23	0	
1814	OGV2	Other	2030	-0	-0
	-0	1	0	0	
1815	OGV2	Other	2045	-0	-0
	-0	1	0	0	
1816	OGV2	Other	2059	-0	-0
	-0	0	0	0	
1817	OGV2	Other	Total	-3	-0
	-0	21	12	0	

1818									
1819	NON MONETISED TIME BENEFITS BY DISTANCE								
1820	Time benefits (thousands of person hrs) by distance								
1821	Vehicle type	Purpose	Year	< 1 kms	1 to 5 kms	5 to 10 kms	>100 kms		
	10 to 15 kms	15 to 20 kms	20 to 50 kms	50 to 100 kms					
1822	Car	Business	2030	13	0	0	0		
	0	0	0	0	0	0	0		
1823	Car	Business	2045	15	0	0	0		
	0	0	0	0	0	0	0		
1824	Car	Business	2059	17	0	0	0		
	0	0	0	0	0	0	0		
1825	Car	Business	Total	449	0	0	0		
	0	0	0	0	0	0	0		
1826	Car	Commuting	2030	37	0	0	0		
	0	0	0	0	0	0	0		
1827	Car	Commuting	2045	43	0	0	0		
	0	0	0	0	0	0	0		
1828	Car	Commuting	2059	48	0	0	0		
	0	0	0	0	0	0	0		
1829	Car	Commuting	Total	1280	0	0	0		
	0	0	0	0	0	0	0		
1830	Car	Other	2030	54	0	0	0		
	0	0	0	0	0	0	0		
1831	Car	Other	2045	63	0	0	0		
	0	0	0	0	0	0	0		
1832	Car	Other	2059	71	0	0	0		
	0	0	0	0	0	0	0		
1833	Car	Other	Total	1882	0	0	0		
	0	0	0	0	0	0	0		
1834	OGV2	Business	2030	0	0	0	0		
	0	-0	-0	9	1	0	0		
1835	OGV2	Business	2045	0	0	0	0		
	-0	-0	-0	12	1	0	0		
1836	OGV2	Business	2059	0	0	0	0		
	0	-0	-0	13	1	0	0		
1837	OGV2	Business	Total	0	0	0	0		
	0	-0	-2	341	41	0	0		
1838	OGV2	Commuting	2030	0	0	0	0		
	0	-0	-0	1	0	0	0		
1839	OGV2	Commuting	2045	0	0	0	0		
	-0	-0	-0	1	0	0	0		
1840	OGV2	Commuting	2059	0	0	0	0		
	-0	0	-0	2	0	0	0		
1841	OGV2	Commuting	Total	0	0	0	0		
	-0	-0	-0	43	5	0	0		
1842	OGV2	Other	2030	0	0	0	0		
	0	-0	-0	1	0	0	0		



1843	OGV2	Other	2045	0	0	0
	-0	-0	-0	1	0	0
1844	OGV2	Other	2059	0	0	0
	0	-0	-0	1	0	0
1845	OGV2	Other	Total	0	0	0
	-0	-0	-0	26	3	0

1846  
1847 MONETISED TIME BENEFITS BY DISTANCE

1848	Time benefits (£000s) by distance						
1849	Vehicle type	Purpose	Year	< 1 kms	1 to 5 kms	5 to 10 kms	
	10 to 15 kms	15 to 20 kms	20 to 50 kms	50 to 100 kms		>100 kms	
1850	Car	Business	2030	301	0	0	0
	0	0	0	0	0	0	0
1851	Car	Business	2045	274	0	0	0
	0	0	0	0	0	0	0
1852	Car	Business	2059	258	0	0	0
	0	0	0	0	0	0	0
1853	Car	Business	Total	8293	0	0	0
	0	0	0	0	0	0	0
1854	Car	Commuting	2030	270	0	0	0
	0	0	0	0	0	0	0
1855	Car	Commuting	2045	245	0	0	0
	0	0	0	0	0	0	0
1856	Car	Commuting	2059	229	0	0	0
	0	0	0	0	0	0	0
1857	Car	Commuting	Total	7409	0	0	0
	0	0	0	0	0	0	0
1858	Car	Other	2030	356	0	0	0
	0	0	0	0	0	0	0
1859	Car	Other	2045	323	0	0	0
	0	0	0	0	0	0	0
1860	Car	Other	2059	304	0	0	0
	0	0	0	0	0	0	0
1861	Car	Other	Total	9797	0	0	0
	0	0	0	0	0	0	0
1862	OGV2	Business	2030	0	0	0	0
	0	-0	-2	215	31	0	0
1863	OGV2	Business	2045	0	0	0	0
	-0	-0	-1	214	25	0	0
1864	OGV2	Business	2059	0	0	0	0
	0	-0	-1	195	21	0	0
1865	OGV2	Business	Total	0	0	0	0
	0	-1	-44	6283	767	0	0
1866	OGV2	Commuting	2030	0	0	0	0
	0	0	0	0	0	0	0
1867	OGV2	Commuting	2045	0	0	0	0
	0	0	0	0	0	0	0
1868	OGV2	Commuting	2059	0	0	0	0
	0	0	0	0	0	0	0
1869	OGV2	Commuting	Total	0	0	0	0
	0	0	0	0	0	0	0
1870	OGV2	Other	2030	0	0	0	0
	0	0	0	0	0	0	0
1871	OGV2	Other	2045	0	0	0	0
	0	0	0	0	0	0	0
1872	OGV2	Other	2059	0	0	0	0
	0	0	0	0	0	0	0
1873	OGV2	Other	Total	0	0	0	0
	0	0	0	0	0	0	0

1874  
1875 TOTAL BENEFITS BY DISTANCE

1876	Total benefits (£000s) by distance						
1877	Vehicle type	Purpose	Year	< 1 kms	1 to 5 kms	5 to 10 kms	
	10 to 15 kms	15 to 20 kms	20 to 50 kms	50 to 100 kms		>100 kms	
1878	Car	Business	2030	304	0	0	0
	0	0	0	0	0	0	0
1879	Car	Business	2045	276	0	0	0
	0	0	0	0	0	0	0
1880	Car	Business	2059	260	0	0	0

1881	0	0	0	0	0	0
1881	Car	Business	Total	8367	0	0
	0	0	0	0	0	0
1882	Car	Commuting	2030	253	0	0
	0	0	0	0	0	0
1883	Car	Commuting	2045	235	0	0
	0	0	0	0	0	0
1884	Car	Commuting	2059	223	0	0
	0	0	0	0	0	0
1885	Car	Commuting	Total	7095	0	0
	0	0	0	0	0	0
1886	Car	Other	2030	336	0	0
	0	0	0	0	0	0
1887	Car	Other	2045	312	0	0
	0	0	0	0	0	0
1888	Car	Other	2059	297	0	0
	0	0	0	0	0	0
1889	Car	Other	Total	9429	0	0
	0	0	0	0	0	0
1890	OGV2	Business	2030	0	0	0
	0	-0	-5	276	39	0
1891	OGV2	Business	2045	0	0	0
	-0	-0	-3	257	30	0
1892	OGV2	Business	2059	0	0	0
	0	-0	-2	224	25	0
1893	OGV2	Business	Total	0	0	0
	0	-5	-104	7595	929	0
1894	OGV2	Commuting	2030	0	0	0
	0	-0	-0	2	0	0
1895	OGV2	Commuting	2045	0	0	0
	-0	-0	-0	2	0	0
1896	OGV2	Commuting	2059	0	0	0
	0	-0	-0	1	0	0
1897	OGV2	Commuting	Total	0	0	0
	-0	-0	-5	52	6	0
1898	OGV2	Other	2030	0	0	0
	0	-0	-0	1	0	0
1899	OGV2	Other	2045	0	0	0
	-0	-0	-0	1	0	0
1900	OGV2	Other	2059	0	0	0
	0	-0	-0	1	0	0
1901	OGV2	Other	Total	0	0	0
	-0	-0	-3	30	3	0

1902  
1903 SENSITIVITY  
1904 Total user benefits as a percentage of total DM user costs  
1905 Modelled Years

1906 Mode	2030	2045	2059
1907 Road	0.83%	1.00%	1.16%

1908  
1909 Economy:Economic Efficiency of the Transport System(TEE)  
1910

1911	Consumer - Commuting user benefits		All Modes
	Road	Bus	
1912	Travel Time		7409
	7409	0	
1913	Vehicle operating costs		-261
	-261	0	
1914	User charges		0
	0	0	
1915	During Construction & Maintenance		0
	0	0	
1916	NET CONSUMER - COMMUTING BENEFITS		7147
	7147	0	
1917			
1918	Consumer - Other user benefits		All Modes
	Road	Bus	
1919	Travel Time		9797
	9797	0	



1971	TOTALS			
1972	Broad Transport Budget	75332	75332	0
1973	Wider Public Finances	95	95	0
1974				
1975	Note: Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.			
1976	Note: All entries are present values discounted to 2011, in 2011 prices			
1977				
1978	Analysis of Monetised Costs and Benefits			
1979				
1980	Greenhouse Gases			14
1981				
1982	Economic Efficiency: Consumer Users (Commuting)			7147
1983	Economic Efficiency: Consumer Users (Other)			9460
1984	Economic Efficiency: Business Users and Providers			16783
1985	Wider Public Finances (Indirect Taxation Revenues)			-95
1986	Present Value of Benefits (PVB)			33309
1987				
1988	Broad Transport Budget			75332
1989	Present Value of Costs (PVC)			75332
1990				
1991	OVERALL IMPACTS			
1992	Net Present Value (NPV)			-42023
1993	Benefit to Cost Ratio (BCR)			0.442
1994				
1995	Note: This table includes costs and benefits which are regularly or occasionally presented in monetised form in			
1996	transport appraisals, together with some where monetisation is in prospect. There may also be other significant			
1997	costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis			
1998	presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.			
1999				
2000				
2001	TUBA Run Information			
2002	- calculations completed			
2003				
2004	File Summary			
2005	- Scheme File	:	G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Magenta\TUBA_Scheme_Input_Magenta_30year_v1.9.8_SPL_1_0.txt	
2006	- Economic File	:	G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Teal\Economics_Input_TUBAv1.9.8 (Oct2020).txt	
2007	- Output File	:	G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Magenta\TUBA_Scheme_Input_Magenta_30year_v1.9.8_SPL_1_0.out	
2008				
2009	Elapsed time	:	0hrs 0mins 5sec	
2010				
2011				

1 Transport User Benefit Appraisal TUBA (64-BIT) 1.9.8(1xA) - Interim  
2 Program run on Mon Nov 16, 2020 at 18:13:48  
3

4 ERRORS AND WARNINGS

5 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
year 2080 is ignored  
6 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
year 2080 is ignored  
7 3 Warnings found  
8  
9

10 TUBA ECONOMICS FILE DIFFERENCES

11 PARAMETERS - (used)

12 TUBA\_version 1.9.8  
13 base\_year 2011  
14 pres\_val\_year 2011  
15 GDP\_base 100.00 0.00 0.00  
16 av\_ind\_tax 18.30 0.00 0.00  
17 nt\_carbdxvalues 20.00 20.00 20.00  
18  
19

20 PARAMETERS - (std)

21 TUBA\_version 1.9.8  
22 base\_year 2010  
23 pres\_val\_year 2010  
24 GDP\_base 100.00 0.00 0.00  
25 av\_ind\_tax 19.00 0.00 0.00  
26 nt\_carbdxvalues 26.60 79.80 53.20  
27 t\_carbdxvalues 11.80 11.80 11.80  
28

29 VEHICLE\_TYPE/SUBMODE - (used)

*no.	mode	new_mode	P&R	type	description
1	1	N	N	per	
	Car				
2	1	N	N	per	
	LGV				
3	1	N	N	fre	
	OGV1				
4	1	N	N	fre	
	OGV2				
5	2	N	N	per	
	Bus				
6	3	N	N	per	Light
	Rail				
7	3	N	N	per	Heavy
	Rail				

38 VEHICLE\_TYPE/SUBMODE - (std)

*no.	mode	new_mode	P&R	type	description
1	1	N	N	per	
	Car				
2	1	N	N	per	LGV
	Personal				
3	1	N	N	fre	LGV
	Freight				
4	1	N	N	fre	
	OGV1				
5	1	N	N	fre	
	OGV2				
6	2	N	N	per	
	Bus				
7	3	N	N	per	Light
	Rail				
8	3	N	N	per	Heavy
	rail				

49 FUEL\_TYPE - (used)

*no.	name
1	petrol

```

53         2      diesel
54
55 FUEL_TYPE - (std)
56 *no.      name
57     1      Petrol
58     2      Diesel
59     3      Electric
60
61 TIME_PERIODS - (used)
62 *no.      description      comments
63     1      AM Peak          (8-9)
64     2      Inter Peak       (Avg
65     3      PM Peak          (17-1
66
67 TIME_PERIODS - (std)
68 *no.      description      comments
69     1      AM peak          (7-10 weekdays)
70     2      PM peak          (4-7 weekdays)
71     3      Inter-peak      (10-4 weekdays)
72     4      Off-peak        (7-7 weekdays)
73     5      Weekend         (weekend)
74
75 BREAKPOINTS - (used)
76 *description breakpoint1 breakpoint2 ..
77     Distance      1.0      5.0      10.0      15.0
78     20.0          50.0      100.0
79     TimeSaving    -5.0      -2.0      0.0      2.0
80     5.0
81
82 BREAKPOINTS - (std)
83 *description breakpoint1 breakpoint2 ..
84     Distance      1.0      5.0      10.0      25.0
85     50.0          100.0      200.0
86     TimeSaving    -5.0      -2.0      0.0      2.0
87     5.0
88
89 DISCOUNT_RATE - (used)
90 *% change p.a.
91 *Start_yr      End_yr      Rate
92     1           30      4.00
93     31          60      3.50
94     61          100     3.00
95
96 DISCOUNT_RATE - (std)
97 *% change p.a.
98 *Start_yr      End_yr      Rate
99     1           30      3.50
100    31          75      3.00
101    76          80      2.50
102
103 VALUE_OF_TIME_ALLOCATION - (used)
104 *Vtype/submode Purpose_type Person_type VOT_METHOD
105     1 1 1 3
106     1 2 1 3
107     1 3 1 3
108     1 1 2 3
109     1 2 2 3
110     1 3 2 3
111     3 1 1 3
112     3 2 1 3
113     3 3 1 3
114     3 1 2 3
115     3 2 2 3
116     3 3 2 3
117
118 VALUE_OF_TIME_ALLOCATION - (std)
119 *Vtype/submode Purpose_type Person_type VOT_METHOD
120     1 1 1 1
121     1 1 2 1

```

```

118         8   1   2   1
119
120 VALUE_OF_TIME_METHOD1 - (used)
121 *pence per hour
122 *Vtype/submode Person_type U_purpose1 U_purpose2 U_purpose3 .. xmid_purpose1
xmid_purpose2 xmis_purpose3 .. k_purpose1 k_purpose2 k_purpose3 ..
123
124 VALUE_OF_TIME_METHOD1 - (std)
125 *pence per hour
126 *Vtype/submode Person_type U_purpose1 U_purpose2 U_purpose3 .. xmid_purpose1
xmid_purpose2 xmis_purpose3 .. k_purpose1 k_purpose2 k_purpose3 ..
127     1           1           2480.0           0.0           0.0
128     67.0         0.0           0.0           67.0           0.0           0.0
129     1           2           2480.0           0.0           0.0           0.0
130     67.0         0.0           0.0           67.0           0.0           0.0
131     2           1           0.0           0.0           0.0           0.0
132     0.0          0.0           0.0           0.0           0.0           0.0
133     2           2           0.0           0.0           0.0           0.0
134     0.0          0.0           0.0           0.0           0.0           0.0
135     3           1           0.0           0.0           0.0           0.0
136     0.0          0.0           0.0           0.0           0.0           0.0
137     3           2           0.0           0.0           0.0           0.0
138     0.0          0.0           0.0           0.0           0.0           0.0
139     4           1           0.0           0.0           0.0           0.0
140     0.0          0.0           0.0           0.0           0.0           0.0
141     4           2           0.0           0.0           0.0           0.0
142     0.0          0.0           0.0           0.0           0.0           0.0
143     5           1           0.0           0.0           0.0           0.0
144     0.0          0.0           0.0           0.0           0.0           0.0
145     5           2           0.0           0.0           0.0           0.0
146     0.0          0.0           0.0           0.0           0.0           0.0
147     6           1           0.0           0.0           0.0           0.0
148     0.0          0.0           0.0           0.0           0.0           0.0
149     6           2           0.0           0.0           0.0           0.0
150     0.0          0.0           0.0           0.0           0.0           0.0
151     7           1           0.0           0.0           0.0           0.0
152     0.0          0.0           0.0           0.0           0.0           0.0
153     7           2           0.0           0.0           0.0           0.0
154     0.0          0.0           0.0           0.0           0.0           0.0
155     8           1           0.0           0.0           0.0           0.0
156     0.0          0.0           0.0           0.0           0.0           0.0
157     8           2           3647.0          0.0           0.0           0.0
158     107.0        0.0           0.0           64.0           0.0           0.0
159
160 VALUE_OF_TIME_METHOD2 - (used)
161 *pence per hour
162 *Vtype/submode Person_type 0_50km_purpose1 0_50km_purpose2 0_50km_purpose3 ..
50_100km_purpose1 50_100km_purpose2 50_100km_purpose3 .. 100_200km_purpose1
100_200km_purpose2 100_200km_purpose3 .. 200+km_purpose1 200+km_purpose2
200+km_purpose3..
163
164 VALUE_OF_TIME_METHOD2 - (std)
165 *pence per hour
166 *Vtype/submode Person_type 0_50km_purpose1 0_50km_purpose2 0_50km_purpose3 ..
50_100km_purpose1 50_100km_purpose2 50_100km_purpose3 .. 100_200km_purpose1
100_200km_purpose2 100_200km_purpose3 .. 200+km_purpose1 200+km_purpose2
200+km_purpose3..
167     1           1           842.0           0.0           0.0
168     1362.0       0.0           0.0           1849.0         0.0           0.0
169     2377.0       0.0           0.0           0.0            0.0           0.0
170     1           2           842.0           0.0           0.0
171     1362.0       0.0           0.0           1849.0         0.0           0.0
172     2377.0       0.0           0.0           0.0            0.0           0.0
173     2           1           0.0           0.0           0.0
174     0.0          0.0           0.0           0.0           0.0           0.0
175     0.0          0.0           0.0           0.0           0.0           0.0
176     2           2           0.0           0.0           0.0
177     0.0          0.0           0.0           0.0           0.0           0.0
178     0.0          0.0           0.0           0.0           0.0           0.0

```

155	3	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
156	3	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
157	4	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
158	4	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
159	5	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
160	5	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
161	6	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
162	6	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
163	7	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
164	7	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
165	8	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
166	8	2	842.0	0.0	0.0	
	1362.0	0.0	0.0	2372.0	0.0	0.0
	3422.0	0.0	0.0			

167  
168 VALUE\_OF\_TIME\_METHOD3 - (used)  
169 \*pence per hour  
170 \*Vtype/submode Person\_type VOT\_purpose1 VOT\_purpose2 VOT\_purpose3 ..

171	1	1	2612.0	967.0	870.0	
172	1	2	2612.0	967.0	870.0	
173	2	1	2612.0	967.0	870.0	
174	2	2	2612.0	967.0	870.0	
175	3	1	2612.0	0.0	0.0	
176	3	2	2612.0	0.0	0.0	
177	4	1	2612.0	0.0	0.0	
178	4	2	2612.0	0.0	0.0	
179	5	1	2612.0	0.0	0.0	
180	5	2	2612.0	967.0	870.0	
181	6	1	2612.0	0.0	0.0	
182	6	2	2612.0	967.0	870.0	
183	7	1	2612.0	0.0	0.0	
184	7	2	2612.0	967.0	870.0	

185  
186 VALUE\_OF\_TIME\_METHOD3 - (std)  
187 \*pence per hour  
188 \*Vtype/submode Person\_type VOT\_purpose1 VOT\_purpose2 VOT\_purpose3 ..

189	1	1	1486.0	995.0	454.0	
190	1	2	1486.0	995.0	454.0	
191	2	1	1024.0	995.0	454.0	
192	2	2	1024.0	995.0	454.0	
193	3	1	1024.0	0.0	0.0	
194	3	2	1024.0	0.0	0.0	
195	4	1	1206.0	0.0	0.0	
196	4	2	1206.0	0.0	0.0	
197	5	1	1206.0	0.0	0.0	
198	5	2	1206.0	0.0	0.0	
199	6	1	1232.0	0.0	0.0	



200	6	2	842.0	995.0	454.0
201	7	1	0.0	0.0	0.0
202	7	2	842.0	995.0	454.0
203	8	1	0.0	0.0	0.0
204	8	2	2452.0	995.0	454.0

205  
206 VALUE\_OF\_TIME\_GROWTH - (used)

207 \*% change p.a.

208 *Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
209 2012	2014	1.40	1.40	1.40	
210 2015	2019	3.60	3.60	3.60	
211 2020	2024	2.20	2.20	2.20	
212 2025	2100	2.30	2.30	2.30	

213  
214 VALUE\_OF\_TIME\_GROWTH - (std)

215 \*% change p.a.

216 *Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
217 2011	2011	0.67	0.67	0.67	
218 2012	2012	0.64	0.64	0.64	
219 2013	2013	1.27	1.27	1.27	
220 2014	2014	2.29	2.29	2.29	
221 2015	2015	1.44	1.44	1.44	
222 2016	2016	1.26	1.26	1.26	
223 2017	2017	1.49	1.49	1.49	
224 2018	2018	1.40	1.40	1.40	
225 2019	2019	1.43	1.43	1.43	
226 2020	2020	1.45	1.45	1.45	
227 2021	2021	1.76	1.76	1.76	
228 2022	2022	1.77	1.77	1.77	
229 2023	2023	1.78	1.78	1.78	
230 2024	2024	1.89	1.89	1.89	
231 2025	2025	1.91	1.91	1.91	
232 2026	2026	1.93	1.93	1.93	
233 2027	2027	1.94	1.94	1.94	
234 2028	2028	1.96	1.96	1.96	
235 2029	2029	1.98	1.98	1.98	
236 2030	2030	1.99	1.99	1.99	
237 2031	2031	2.01	2.01	2.01	
238 2032	2032	2.02	2.02	2.02	
239 2033	2033	2.04	2.04	2.04	
240 2034	2034	2.15	2.15	2.15	
241 2035	2035	2.06	2.06	2.06	
242 2036	2036	2.07	2.07	2.07	
243 2037	2037	2.08	2.08	2.08	
244 2038	2038	2.09	2.09	2.09	
245 2039	2039	2.09	2.09	2.09	
246 2040	2040	2.09	2.09	2.09	
247 2041	2041	2.09	2.09	2.09	
248 2042	2042	2.11	2.11	2.11	
249 2043	2043	2.11	2.11	2.11	
250 2044	2044	2.11	2.11	2.11	
251 2045	2045	2.11	2.11	2.11	
252 2046	2046	2.21	2.21	2.21	
253 2047	2047	2.14	2.14	2.14	
254 2048	2048	2.14	2.14	2.14	
255 2049	2049	2.14	2.14	2.14	
256 2050	2050	2.14	2.14	2.14	
257 2051	2051	2.04	2.04	2.04	
258 2052	2052	2.07	2.07	2.07	
259 2053	2053	2.07	2.07	2.07	
260 2054	2054	2.07	2.07	2.07	
261 2055	2055	2.07	2.07	2.07	
262 2056	2056	2.07	2.07	2.07	
263 2057	2057	2.09	2.09	2.09	
264 2058	2058	2.19	2.19	2.19	
265 2059	2059	2.19	2.19	2.19	
266 2060	2060	2.29	2.29	2.29	
267 2061	2061	2.29	2.29	2.29	
268 2062	2062	2.30	2.30	2.30	

269	2063	2063	2.30	2.30	2.30
270	2064	2064	2.20	2.20	2.20
271	2065	2065	2.20	2.20	2.20
272	2066	2066	2.20	2.20	2.20
273	2067	2067	2.18	2.18	2.18
274	2068	2068	2.18	2.18	2.18
275	2069	2069	2.18	2.18	2.18
276	2070	2070	2.18	2.18	2.18
277	2071	2071	2.18	2.18	2.18
278	2072	2072	2.17	2.17	2.17
279	2073	2073	2.17	2.17	2.17
280	2074	2074	2.17	2.17	2.17
281	2075	2075	2.17	2.17	2.17
282	2076	2076	2.17	2.17	2.17
283	2077	2077	2.16	2.16	2.16
284	2078	2078	2.16	2.16	2.16
285	2079	2079	2.16	2.16	2.16
286	2080	2080	2.16	2.16	2.16
287	2081	2081	2.16	2.16	2.16
288	2082	2082	2.17	2.17	2.17
289	2083	2083	2.17	2.17	2.17
290	2084	2084	2.17	2.17	2.17
291	2085	2085	2.17	2.17	2.17
292	2086	2086	2.17	2.17	2.17
293	2087	2087	2.18	2.18	2.18
294	2088	2088	2.18	2.18	2.18
295	2089	2089	2.18	2.18	2.18
296	2090	2090	2.18	2.18	2.18
297	2091	2091	2.18	2.18	2.18
298	2092	2092	2.18	2.18	2.18
299	2093	2093	2.18	2.18	2.18
300	2094	2094	2.18	2.18	2.18
301	2095	2095	2.18	2.18	2.18
302	2096	2096	2.18	2.18	2.18
303	2097	2097	2.18	2.18	2.18
304	2098	2098	2.18	2.18	2.18
305	2099	2099	2.18	2.18	2.18
306	2100	2100	2.18	2.18	2.18

307  
308 AV\_IND\_TAX\_CHANGES - (used)

309 \*% change p.a.  
310 \*Start\_yr      End\_yr      Growth  
311 2012            2080            0.00

312  
313 AV\_IND\_TAX\_CHANGES - (std)

314 \*% change p.a.  
315 \*Start\_yr      End\_yr      Growth  
316 2011            2050            0.00

317  
318 CHARGE\_TAX\_RATES - (used)

319 \*%  
320 \*charge            final            intermediate  
321 1                    0.0            0.0  
322 2                    0.0            0.0  
323 3                    0.0            0.0  
324 4                    0.0            0.0  
325 5                    0.0            0.0  
326 6                    0.0            0.0  
327 7                    0.0            0.0

328  
329 CHARGE\_TAX\_RATES - (std)

330 \*%  
331 \*charge            final            intermediate  
332 1                    0.0            0.0  
333 2                    0.0            0.0  
334 3                    0.0            0.0  
335 4                    0.0            0.0  
336 5                    17.5           0.0  
337 6                    0.0            0.0

338 7 17.5 0.0  
 339 8 17.5 0.0

340

341 CHARGE\_TAX\_RATES\_CHANGES - (used)

342 \*% change p.a.

343 *Start_yr	End_yr	charge	final	intermediate
344 2012	2080	1	0.00	0.00
345 2012	2080	2	0.00	0.00
346 2012	2080	3	0.00	0.00
347 2012	2080	4	0.00	0.00
348 2012	2080	5	0.00	0.00
349 2012	2080	6	0.00	0.00
350 2012	2080	7	0.00	0.00

351

352 CHARGE\_TAX\_RATES\_CHANGES - (std)

353 \*% change p.a.

354 *Start_yr	End_yr	charge	final	intermediate
355 2011	2011	1	0.00	0.00
356 2011	2011	2	0.00	0.00
357 2011	2011	3	0.00	0.00
358 2011	2011	4	0.00	0.00
359 2011	2011	5	14.29	0.00
360 2011	2011	6	0.00	0.00
361 2011	2011	7	14.29	0.00
362 2011	2011	8	14.29	0.00
363 2012	2100	1	0.00	0.00
364 2012	2100	2	0.00	0.00
365 2012	2100	3	0.00	0.00
366 2012	2100	4	0.00	0.00
367 2012	2100	5	0.00	0.00
368 2012	2100	6	0.00	0.00
369 2012	2100	7	0.00	0.00
370 2012	2100	8	0.00	0.00

371

372 FUEL\_COST - (used)

373 \*type resource (p/unit) duty (p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)

374 1	63.0	57.6	21.0	2230.00
375 2	70.0	46.6	21.0	2562.00

376

377 FUEL\_COST - (std)

378 \*type resource (p/unit) duty (p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)

379 1	42.5	57.0	17.5	2230.00
380 2	44.2	57.0	17.5	2562.00
381 3	11.5	0.0	5.0	372.00

382

383 FUEL\_COST\_CHANGES - (used)

384 \*% change p.a.

385 *Start_yr	End_yr	fuel_type	resource	duty	VAT
386 2012	2012	1	10.70	0.00	
2.00	0.00				
387 2012	2012	2	3.90	0.00	
0.00	0.00				
388 2013	2013	1	-5.70	0.00	
0.00	0.00				
389 2013	2013	2	-5.20	0.00	
0.00	0.00				
390 2014	2014	1	0.00	0.00	
0.00	0.00				
391 2014	2014	2	-3.30	0.00	
0.00	0.00				
392 2015	2015	1	-30.60	2.00	
0.00	0.00				
393 2015	2015	2	-32.60	2.90	
0.00	0.00				
394 2016	2080	1	0.00	0.00	
0.00	0.00				

395 2016 2080 2 0.00 0.00  
0.00 0.00

396

397 FUEL\_COST\_CHANGES - (std)

398 \*% change p.a.

399 \*Start\_yr End\_yr fuel\_type resource duty VAT  
CO2\_Den\_change

400 2011 2011 1 22.14 -0.37  
14.29 -0.84

401 2012 2012 1 1.99 -2.09  
0.00 -0.02

402 2013 2013 1 -3.44 -1.74  
0.00 -0.44

403 2014 2014 1 -11.68 -1.62  
0.00 -0.54

404 2015 2015 1 -29.94 -1.09  
0.00 0.00

405 2016 2016 1 7.91 -0.89  
0.00 0.00

406 2017 2017 1 2.98 -0.08  
0.00 -1.35

407 2018 2018 1 2.03 0.67  
0.00 -1.37

408 2019 2019 1 2.08 1.05  
0.00 -1.39

409 2020 2020 1 6.76 0.71  
0.00 -1.41

410 2021 2021 1 6.33 0.78  
0.00 0.00

411 2022 2022 1 5.95 0.72  
0.00 0.00

412 2023 2023 1 5.62 0.68  
0.00 0.00

413 2024 2024 1 5.32 0.68  
0.00 0.00

414 2025 2025 1 5.05 0.68  
0.00 0.00

415 2026 2026 1 0.00 0.68  
0.00 0.00

416 2027 2027 1 0.00 0.68  
0.00 0.00

417 2028 2028 1 0.00 0.68  
0.00 0.00

418 2029 2029 1 0.00 0.68  
0.00 0.00

419 2030 2030 1 0.00 0.68  
0.00 0.00

420 2031 2031 1 0.00 0.68  
0.00 0.00

421 2032 2032 1 0.00 0.68  
0.00 0.00

422 2033 2033 1 0.00 0.68  
0.00 0.00

423 2034 2034 1 0.00 0.68  
0.00 0.00

424 2035 2035 1 0.00 0.68  
0.00 0.00

425 2036 2036 1 0.00 0.68  
0.00 0.00

426 2037 2037 1 0.00 0.68  
0.00 0.00

427 2038 2038 1 0.00 0.68  
0.00 0.00

428 2039 2039 1 0.00 0.68  
0.00 0.00

429 2040 2040 1 0.00 0.68  
0.00 0.00

430 2041 2041 1 0.00 0.68  
0.00 0.00

431	2042	2042	1	0.00	0.68
	0.00	0.00			
432	2043	2043	1	0.00	0.68
	0.00	0.00			
433	2044	2044	1	0.00	0.68
	0.00	0.00			
434	2045	2045	1	0.00	0.68
	0.00	0.00			
435	2046	2046	1	0.00	0.68
	0.00	0.00			
436	2047	2047	1	0.00	0.68
	0.00	0.00			
437	2048	2048	1	0.00	0.68
	0.00	0.00			
438	2049	2049	1	0.00	0.68
	0.00	0.00			
439	2050	2050	1	0.00	0.68
	0.00	0.00			
440	2051	2051	1	0.00	0.68
	0.00	0.00			
441	2052	2052	1	0.00	0.68
	0.00	0.00			
442	2053	2053	1	0.00	0.68
	0.00	0.00			
443	2054	2054	1	0.00	0.68
	0.00	0.00			
444	2055	2055	1	0.00	0.68
	0.00	0.00			
445	2056	2056	1	0.00	0.68
	0.00	0.00			
446	2057	2057	1	0.00	0.68
	0.00	0.00			
447	2058	2058	1	0.00	0.68
	0.00	0.00			
448	2059	2059	1	0.00	0.68
	0.00	0.00			
449	2060	2060	1	0.00	0.68
	0.00	0.00			
450	2061	2061	1	0.00	0.68
	0.00	0.00			
451	2062	2062	1	0.00	0.68
	0.00	0.00			
452	2063	2063	1	0.00	0.68
	0.00	0.00			
453	2064	2064	1	0.00	0.68
	0.00	0.00			
454	2065	2065	1	0.00	0.68
	0.00	0.00			
455	2066	2066	1	0.00	0.68
	0.00	0.00			
456	2067	2067	1	0.00	0.68
	0.00	0.00			
457	2068	2068	1	0.00	0.68
	0.00	0.00			
458	2069	2069	1	0.00	0.68
	0.00	0.00			
459	2070	2070	1	0.00	0.68
	0.00	0.00			
460	2071	2071	1	0.00	0.68
	0.00	0.00			
461	2072	2072	1	0.00	0.68
	0.00	0.00			
462	2073	2073	1	0.00	0.68
	0.00	0.00			
463	2074	2074	1	0.00	0.68
	0.00	0.00			
464	2075	2075	1	0.00	0.68
	0.00	0.00			
465	2076	2076	1	0.00	0.68

	0.00	0.00			
466	2077	2077	1	0.00	0.68
	0.00	0.00			
467	2078	2078	1	0.00	0.68
	0.00	0.00			
468	2079	2079	1	0.00	0.68
	0.00	0.00			
469	2080	2080	1	0.00	0.68
	0.00	0.00			
470	2081	2081	1	0.00	0.68
	0.00	0.00			
471	2082	2082	1	0.00	0.68
	0.00	0.00			
472	2083	2083	1	0.00	0.68
	0.00	0.00			
473	2084	2084	1	0.00	0.68
	0.00	0.00			
474	2085	2085	1	0.00	0.68
	0.00	0.00			
475	2086	2086	1	0.00	0.68
	0.00	0.00			
476	2087	2087	1	0.00	0.68
	0.00	0.00			
477	2088	2088	1	0.00	0.68
	0.00	0.00			
478	2089	2089	1	0.00	0.68
	0.00	0.00			
479	2090	2090	1	0.00	0.68
	0.00	0.00			
480	2091	2091	1	0.00	0.68
	0.00	0.00			
481	2092	2092	1	0.00	0.68
	0.00	0.00			
482	2093	2093	1	0.00	0.68
	0.00	0.00			
483	2094	2094	1	0.00	0.68
	0.00	0.00			
484	2095	2095	1	0.00	0.68
	0.00	0.00			
485	2096	2096	1	0.00	0.68
	0.00	0.00			
486	2097	2097	1	0.00	0.68
	0.00	0.00			
487	2098	2098	1	0.00	0.68
	0.00	0.00			
488	2099	2099	1	0.00	0.68
	0.00	0.00			
489	2100	2100	1	0.00	0.68
	0.00	0.00			
490	2011	2011	2	26.82	-0.37
	14.29	0.19			
491	2012	2012	2	3.20	-2.09
	0.00	1.64			
492	2013	2013	2	-3.67	-1.74
	0.00	-0.44			
493	2014	2014	2	-11.26	-1.62
	0.00	0.15			
494	2015	2015	2	-30.27	-1.09
	0.00	0.00			
495	2016	2016	2	8.32	-0.89
	0.00	0.00			
496	2017	2017	2	3.12	-0.08
	0.00	-1.74			
497	2018	2018	2	2.12	0.67
	0.00	-1.77			
498	2019	2019	2	2.17	1.05
	0.00	-1.81			
499	2020	2020	2	7.06	0.71
	0.00	-1.84			

500	2021 0.00	2021 0.00	2	6.59	0.78
501	2022 0.00	2022 0.00	2	6.18	0.72
502	2023 0.00	2023 0.00	2	5.82	0.68
503	2024 0.00	2024 0.00	2	5.50	0.68
504	2025 0.00	2025 0.00	2	5.22	0.68
505	2026 0.00	2026 0.00	2	0.00	0.68
506	2027 0.00	2027 0.00	2	0.00	0.68
507	2028 0.00	2028 0.00	2	0.00	0.68
508	2029 0.00	2029 0.00	2	0.00	0.68
509	2030 0.00	2030 0.00	2	0.00	0.68
510	2031 0.00	2031 0.00	2	0.00	0.68
511	2032 0.00	2032 0.00	2	0.00	0.68
512	2033 0.00	2033 0.00	2	0.00	0.68
513	2034 0.00	2034 0.00	2	0.00	0.68
514	2035 0.00	2035 0.00	2	0.00	0.68
515	2036 0.00	2036 0.00	2	0.00	0.68
516	2037 0.00	2037 0.00	2	0.00	0.68
517	2038 0.00	2038 0.00	2	0.00	0.68
518	2039 0.00	2039 0.00	2	0.00	0.68
519	2040 0.00	2040 0.00	2	0.00	0.68
520	2041 0.00	2041 0.00	2	0.00	0.68
521	2042 0.00	2042 0.00	2	0.00	0.68
522	2043 0.00	2043 0.00	2	0.00	0.68
523	2044 0.00	2044 0.00	2	0.00	0.68
524	2045 0.00	2045 0.00	2	0.00	0.68
525	2046 0.00	2046 0.00	2	0.00	0.68
526	2047 0.00	2047 0.00	2	0.00	0.68
527	2048 0.00	2048 0.00	2	0.00	0.68
528	2049 0.00	2049 0.00	2	0.00	0.68
529	2050 0.00	2050 0.00	2	0.00	0.68
530	2051 0.00	2051 0.00	2	0.00	0.68
531	2052 0.00	2052 0.00	2	0.00	0.68
532	2053 0.00	2053 0.00	2	0.00	0.68
533	2054 0.00	2054 0.00	2	0.00	0.68
534	2055	2055	2	0.00	0.68

	0.00	0.00			
535	2056	2056	2	0.00	0.68
	0.00	0.00			
536	2057	2057	2	0.00	0.68
	0.00	0.00			
537	2058	2058	2	0.00	0.68
	0.00	0.00			
538	2059	2059	2	0.00	0.68
	0.00	0.00			
539	2060	2060	2	0.00	0.68
	0.00	0.00			
540	2061	2061	2	0.00	0.68
	0.00	0.00			
541	2062	2062	2	0.00	0.68
	0.00	0.00			
542	2063	2063	2	0.00	0.68
	0.00	0.00			
543	2064	2064	2	0.00	0.68
	0.00	0.00			
544	2065	2065	2	0.00	0.68
	0.00	0.00			
545	2066	2066	2	0.00	0.68
	0.00	0.00			
546	2067	2067	2	0.00	0.68
	0.00	0.00			
547	2068	2068	2	0.00	0.68
	0.00	0.00			
548	2069	2069	2	0.00	0.68
	0.00	0.00			
549	2070	2070	2	0.00	0.68
	0.00	0.00			
550	2071	2071	2	0.00	0.68
	0.00	0.00			
551	2072	2072	2	0.00	0.68
	0.00	0.00			
552	2073	2073	2	0.00	0.68
	0.00	0.00			
553	2074	2074	2	0.00	0.68
	0.00	0.00			
554	2075	2075	2	0.00	0.68
	0.00	0.00			
555	2076	2076	2	0.00	0.68
	0.00	0.00			
556	2077	2077	2	0.00	0.68
	0.00	0.00			
557	2078	2078	2	0.00	0.68
	0.00	0.00			
558	2079	2079	2	0.00	0.68
	0.00	0.00			
559	2080	2080	2	0.00	0.68
	0.00	0.00			
560	2081	2081	2	0.00	0.68
	0.00	0.00			
561	2082	2082	2	0.00	0.68
	0.00	0.00			
562	2083	2083	2	0.00	0.68
	0.00	0.00			
563	2084	2084	2	0.00	0.68
	0.00	0.00			
564	2085	2085	2	0.00	0.68
	0.00	0.00			
565	2086	2086	2	0.00	0.68
	0.00	0.00			
566	2087	2087	2	0.00	0.68
	0.00	0.00			
567	2088	2088	2	0.00	0.68
	0.00	0.00			
568	2089	2089	2	0.00	0.68
	0.00	0.00			



569	2090	2090	2	0.00	0.68	
	0.00	0.00				
570	2091	2091	2	0.00	0.68	
	0.00	0.00				
571	2092	2092	2	0.00	0.68	
	0.00	0.00				
572	2093	2093	2	0.00	0.68	
	0.00	0.00				
573	2094	2094	2	0.00	0.68	
	0.00	0.00				
574	2095	2095	2	0.00	0.68	
	0.00	0.00				
575	2096	2096	2	0.00	0.68	
	0.00	0.00				
576	2097	2097	2	0.00	0.68	
	0.00	0.00				
577	2098	2098	2	0.00	0.68	
	0.00	0.00				
578	2099	2099	2	0.00	0.68	
	0.00	0.00				
579	2100	2100	2	0.00	0.68	
	0.00	0.00				
580	2011	2011	3	4.95	0.00	
	0.00	-1.89				
581	2012	2012	3	4.01	0.00	
	0.00	-2.03				
582	2013	2013	3	5.45	0.00	
	0.00	-2.18				
583	2014	2014	3	3.88	0.00	
	0.00	-2.35				
584	2015	2015	3	-5.82	0.00	
	0.00	-2.54				
585	2016	2016	3	3.17	0.00	
	0.00	-2.74				
586	2017	2017	3	6.71	0.00	
	0.00	-2.98				
587	2018	2018	3	4.60	0.00	
	0.00	-3.23				
588	2019	2019	3	2.96	0.00	
	0.00	-3.52				
589	2020	2020	3	1.91	0.00	
	0.00	-3.85				
590	2021	2021	3	0.52	0.00	
	0.00	-4.22				
591	2022	2022	3	2.13	0.00	
	0.00	-4.65				
592	2023	2023	3	-0.64	0.00	
	0.00	-5.14				
593	2024	2024	3	2.55	0.00	
	0.00	-5.71				
594	2025	2025	3	4.49	0.00	
	0.00	-6.39				
595	2026	2026	3	0.01	0.00	
	0.00	-7.19				
596	2027	2027	3	2.37	0.00	
	0.00	-8.17				
597	2028	2028	3	-1.49	0.00	
	0.00	-9.38				
598	2029	2029	3	-1.58	0.00	0.00
	-10.92					
599	2030	2030	3	0.32	0.00	0.00
	-12.92					
600	2031	2031	3	0.00	0.00	
	0.00	-8.85				
601	2032	2032	3	0.00	0.00	
	0.00	-8.85				
602	2033	2033	3	0.00	0.00	
	0.00	-8.85				
603	2034	2034	3	0.00	0.00	

604	0.00	-8.85				
	2035	2035	3	0.00	0.00	
	0.00	-8.85				
605	2036	2036	3	0.00	0.00	
	0.00	-8.85				
606	2037	2037	3	0.00	0.00	
	0.00	-8.85				
607	2038	2038	3	0.00	0.00	
	0.00	-8.85				
608	2039	2039	3	0.00	0.00	
	0.00	-8.85				
609	2040	2040	3	0.00	0.00	
	0.00	-8.85				
610	2041	2041	3	0.00	0.00	0.00
	-11.07					
611	2042	2042	3	0.00	0.00	
	0.00	-0.85				
612	2043	2043	3	0.00	0.00	0.00
	-11.10					
613	2044	2044	3	0.00	0.00	0.00
	-11.60					
614	2045	2045	3	0.00	0.00	
	0.00	1.50				
615	2046	2046	3	0.00	0.00	
	0.00	-8.95				
616	2047	2047	3	0.00	0.00	
	0.00	-7.43				
617	2048	2048	3	0.00	0.00	
	0.00	1.12				
618	2049	2049	3	0.00	0.00	
	0.00	-9.46				
619	2050	2050	3	0.00	0.00	
	0.00	-0.90				
620	2051	2100	3	0.00	0.00	
	0.00	0.00				

621  
622 CARBDX\_VALUE\_CHANGES - (used)  
623 \*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be defined, not both

624 \*same growth applies to low, central and high CO2 values

625	*Start_yr	End_yr	Rel. (%)	Abs. (£/tonne/year)
626	2012	2019	0.000	0.000
627	2020	2020	60.000	0.000
628	2021	2021	21.900	0.000
629	2022	2022	17.900	0.000
630	2023	2023	13.000	0.000
631	2024	2024	13.500	0.000
632	2025	2025	11.900	0.000
633	2026	2026	10.600	0.000
634	2027	2027	9.600	0.000
635	2028	2028	7.500	0.000
636	2029	2029	8.100	0.000
637	2030	2030	7.500	0.000
638	2031	2100	5.000	0.000

639  
640 CARBDX\_VALUE\_CHANGES - (std)  
641 \*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be defined, not both

642 \*same growth applies to low, central and high CO2 values

643	*Start_yr	End_yr	Rel. (%)	Abs. (£/tonne/year)
644	2011	2011	1.500	0.000
645	2012	2012	1.500	0.000
646	2013	2013	1.500	0.000
647	2014	2014	1.500	0.000
648	2015	2015	1.500	0.000
649	2016	2016	1.500	0.000
650	2017	2017	1.500	0.000
651	2018	2018	1.500	0.000
652	2019	2019	1.500	0.000

653	2020	2020	1.500	0.000
654	2021	2021	1.667	0.000
655	2022	2022	1.639	0.000
656	2023	2023	1.613	0.000
657	2024	2024	1.587	0.000
658	2025	2025	1.563	0.000
659	2026	2026	1.538	0.000
660	2027	2027	1.515	0.000
661	2028	2028	1.493	0.000
662	2029	2029	1.471	0.000
663	2030	2030	1.449	0.000
664	2031	2031	9.286	0.000
665	2032	2032	8.497	0.000
666	2033	2033	7.831	0.000
667	2034	2034	7.263	0.000
668	2035	2035	6.771	0.000
669	2036	2036	6.341	0.000
670	2037	2037	5.963	0.000
671	2038	2038	5.628	0.000
672	2039	2039	5.328	0.000
673	2040	2040	5.058	0.000
674	2041	2041	4.815	0.000
675	2042	2042	4.594	0.000
676	2043	2043	4.392	0.000
677	2044	2044	4.207	0.000
678	2045	2045	4.037	0.000
679	2046	2046	3.881	0.000
680	2047	2047	3.736	0.000
681	2048	2048	3.601	0.000
682	2049	2049	3.476	0.000
683	2050	2050	3.359	0.000
684	2051	2051	2.501	0.000
685	2052	2052	2.265	0.000
686	2053	2053	2.165	0.000
687	2054	2054	2.056	0.000
688	2055	2055	1.856	0.000
689	2056	2056	1.779	0.000
690	2057	2057	1.589	0.000
691	2058	2058	1.446	0.000
692	2059	2059	1.330	0.000
693	2060	2060	1.201	0.000
694	2061	2061	0.673	0.000
695	2062	2062	0.618	0.000
696	2063	2063	0.401	0.000
697	2064	2064	0.283	0.000
698	2065	2065	0.079	0.000
699	2066	2066	0.033	0.000
700	2067	2067	-0.193	0.000
701	2068	2068	-0.302	0.000
702	2069	2069	-0.461	0.000
703	2070	2070	-0.585	0.000
704	2071	2071	-0.609	0.000
705	2072	2072	-0.738	0.000
706	2073	2073	-0.837	0.000
707	2074	2074	-1.033	0.000
708	2075	2075	-1.037	0.000
709	2076	2076	-1.310	0.000
710	2077	2077	-1.316	0.000
711	2078	2078	-1.493	0.000
712	2079	2079	-1.571	0.000
713	2080	2080	-1.769	0.000
714	2081	2081	-1.478	0.000
715	2082	2082	-1.672	0.000
716	2083	2083	-1.769	0.000
717	2084	2084	-1.854	0.000
718	2085	2085	-1.834	0.000
719	2086	2086	-2.050	0.000
720	2087	2087	-2.154	0.000
721	2088	2088	-2.198	0.000

722	2089	2089	-2.321	0.000
723	2090	2090	-2.359	0.000
724	2091	2091	-2.279	0.000
725	2092	2092	-2.328	0.000
726	2093	2093	-2.521	0.000
727	2094	2094	-2.577	0.000
728	2095	2095	-2.649	0.000
729	2096	2096	-2.712	0.000
730	2097	2097	-2.715	0.000
731	2098	2098	-2.915	0.000
732	2099	2099	-2.865	0.000
733	2100	2100	-3.011	0.000

734

735 FLEET - (used)

736	*veh_type	%petrol	%diesel
737	1	69.90	30.10
738	2	0.30	99.70
739	3	0.00	100.00
740	4	0.00	100.00
741	5	0.00	100.00
742	6	0.00	100.00
743	7	0.00	100.00

744

745 FLEET - (std)

746	*veh_type	%Petrol	%Diesel	%Electric
747	1	59.27	40.73	0.01
748	2	5.86	94.14	0.00
749	3	5.86	94.14	0.00
750	4	0.00	100.00	0.00
751	5	0.00	100.00	0.00
752	6	0.00	100.00	0.00
753	7	0.00	100.00	0.00
754	8	0.00	100.00	0.00

755

756 FLEET\_CHANGES - (used)

757 \*% p.a.

758	*Start_yr	End_yr	Veh_type	%Change_petrol	%Change_diesel
759	2012	2015	1	-2.642	5.437
760	2016	2020	1	0.473	-0.820
761	2021	2025	1	-0.662	1.150
762	2026	2030	1	-0.884	1.389
763	2012	2015	2	-9.640	0.025
764	2016	2020	2	-60.000	0.040
765	2021	2025	2	0.000	0.000
766	2026	2030	2	0.000	0.000

767

768 FLEET\_CHANGES - (std)

769 \*% p.a.

770	*Start_yr	End_yr	Veh_type	%Change_Petrol	%Change_Diesel	%Change_Electric
771	2011	2011	1	-3.810	5.477	502.540
772	2012	2012	1	-3.966	5.188	100.000
773	2013	2013	1	-4.130	4.932	50.000
774	2014	2014	1	-4.308	4.700	33.333
775	2015	2015	1	-4.502	4.489	25.000
776	2016	2016	1	-1.777	1.335	97.788
777	2017	2017	1	-1.809	1.317	49.441
778	2018	2018	1	-1.842	1.300	33.084
779	2019	2019	1	-1.877	1.283	24.859
780	2020	2020	1	-1.913	1.267	19.910
781	2021	2021	1	0.323	-0.826	32.794
782	2022	2022	1	0.322	-0.833	24.695
783	2023	2023	1	0.321	-0.840	19.804
784	2024	2024	1	0.320	-0.847	16.531
785	2025	2025	1	0.319	-0.854	14.186
786	2026	2026	1	0.021	-1.060	21.755
787	2027	2027	1	0.021	-1.071	17.868
788	2028	2028	1	0.021	-1.083	15.159
789	2029	2029	1	0.021	-1.095	13.164

790	2030	2030	1	0.021	-1.107	11.632
791	2011	2011	2	-7.579	0.472	0.000
792	2012	2012	2	-8.200	0.470	0.000
793	2013	2013	2	-8.932	0.468	0.000
794	2014	2014	2	-9.809	0.465	0.000
795	2015	2015	2	-10.875	0.463	0.000
796	2016	2016	2	-9.634	0.364	0.000
797	2017	2017	2	-10.661	0.363	0.000
798	2018	2018	2	-11.933	0.361	0.000
799	2019	2019	2	-13.550	0.360	0.000
800	2020	2020	2	-15.674	0.359	0.000
801	2021	2021	2	-8.979	0.173	0.000
802	2022	2022	2	-9.865	0.172	0.000
803	2023	2023	2	-10.945	0.172	0.000
804	2024	2024	2	-12.290	0.172	0.000
805	2025	2025	2	-14.012	0.171	0.000
806	2026	2026	2	-4.888	0.051	0.000
807	2027	2027	2	-5.139	0.051	0.000
808	2028	2028	2	-5.418	0.051	0.000
809	2029	2029	2	-5.728	0.051	0.000
810	2030	2030	2	-6.076	0.051	0.000
811	2011	2011	3	-7.579	0.472	0.000
812	2012	2012	3	-8.200	0.470	0.000
813	2013	2013	3	-8.932	0.468	0.000
814	2014	2014	3	-9.809	0.465	0.000
815	2015	2015	3	-10.875	0.463	0.000
816	2016	2016	3	-9.634	0.364	0.000
817	2017	2017	3	-10.661	0.363	0.000
818	2018	2018	3	-11.933	0.361	0.000
819	2019	2019	3	-13.550	0.360	0.000
820	2020	2020	3	-15.674	0.359	0.000
821	2021	2021	3	-8.979	0.173	0.000
822	2022	2022	3	-9.865	0.172	0.000
823	2023	2023	3	-10.945	0.172	0.000
824	2024	2024	3	-12.290	0.172	0.000
825	2025	2025	3	-14.012	0.171	0.000
826	2026	2026	3	-4.888	0.051	0.000
827	2027	2027	3	-5.139	0.051	0.000
828	2028	2028	3	-5.418	0.051	0.000
829	2029	2029	3	-5.728	0.051	0.000
830	2030	2030	3	-6.076	0.051	0.000

831								
832	FUEL_CONSUMPTION - (used)							
833	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel		
	cut-off_speed(km/h)							
834	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140	
835	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140	
836	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
837	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
838	3	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96	
839	4	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96	
840	5	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96	

841								
842	FUEL_CONSUMPTION - (std)							
843	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel		
	cut-off_speed(km/h)							
844	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140	
845	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140	
846	1	3	0.0000	0.12564	0.00000E+00	0.00000E+00	140	
847	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
848	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
849	3	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
850	3	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
851	4	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96	
852	5	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96	
853	6	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96	

854								
855	FUEL EFFICIENCY - (used)							
856	*%	p.a.						

	*Start_yr	End_yr	veh_type	fuel_type	change
857	2012	2012	1	1	-0.46
858	2012	2012	1	2	0.09
859	2013	2013	1	1	-0.42
860	2013	2013	1	2	0.07
861	2014	2020	1	1	2.48
862	2014	2020	1	2	2.92
863	2021	2025	1	1	2.37
864	2021	2025	1	2	1.62
865	2026	2030	1	1	0.92
866	2026	2030	1	2	0.77
867	2012	2012	2	2	0.20
868	2013	2013	2	2	0.18
869	2014	2020	2	2	3.25
870	2021	2025	2	2	0.67
871	2026	2030	2	2	0.27
872	2012	2012	3	2	0.43
873	2013	2013	3	2	0.38
874	2014	2020	3	2	-1.67
875	2021	2025	3	2	0.07
876	2026	2030	3	2	0.01
877	2012	2012	4	2	0.43
878	2013	2013	4	2	0.38
879	2014	2020	4	2	-1.67
880	2021	2025	4	2	0.07
881	2026	2030	4	2	0.01
882	2012	2012	5	2	0.32
883	2013	2013	5	2	0.34
884	2014	2020	5	2	-0.64
885	2021	2025	5	2	0.03
886	2026	2030	5	2	-0.02
887	2012	2012	6	2	0.00
888	2013	2013	6	2	0.00
889	2014	2020	6	2	0.00
890	2021	2025	6	2	0.00
891	2026	2030	6	2	0.00
892	2012	2012	7	2	0.00
893	2013	2013	7	2	0.00
894	2014	2020	7	2	0.00
895	2021	2025	7	2	0.00
896	2026	2030	7	2	0.00

FUEL EFFICIENCY - (std)					
*% p.a.					
	*Start_yr	End_yr	veh_type	fuel_type	change
898	2011	2015	1	1	1.81
899	2011	2015	1	2	2.23
900	2011	2015	1	3	-0.10
901	2011	2015	2	1	0.11
902	2011	2015	2	2	2.71
903	2011	2015	3	1	0.11
904	2011	2015	3	2	2.71
905	2016	2020	1	1	3.32
906	2016	2020	1	2	2.22
907	2016	2020	1	3	0.02
908	2016	2020	2	1	2.35
909	2016	2020	2	2	2.35
910	2016	2020	3	1	2.35
911	2016	2020	3	2	2.35
912	2021	2025	1	1	3.16
913	2021	2025	1	2	2.02
914	2021	2025	1	3	0.12
915	2021	2025	2	1	2.85
916	2021	2025	2	2	1.65
917	2021	2025	3	1	2.85
918	2021	2025	3	2	1.65
919	2026	2030	1	1	1.56
920	2026	2030	1	2	1.19
921	2026	2030	1	3	0.00

926	2026	2030	2	1	2.40
927	2026	2030	2	2	0.74
928	2026	2030	3	1	2.40
929	2026	2030	3	2	0.74
930	2031	2035	1	1	0.57
931	2031	2035	1	2	0.52
932	2031	2035	1	3	-0.08
933	2031	2035	2	1	0.54
934	2031	2035	2	2	0.22
935	2031	2035	3	1	0.54
936	2031	2035	3	2	0.22
937	2036	2100	1	1	0.00
938	2036	2100	1	2	0.00
939	2036	2100	1	3	0.00
940	2036	2100	2	1	0.00
941	2036	2100	2	2	0.00
942	2036	2100	3	1	0.00
943	2036	2100	3	2	0.00

NON\_FUEL\_VOC - (used)

	*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw
946	1	6.265	171.493	5.507	0.000
947	1	6.265	171.493	5.507	0.000
948	2	9.099	70.308	10.327	0.000
949	3	10.020	393.702	0.000	0.000
950	3	10.020	393.702	0.000	0.000
951	4	19.491	758.888	0.000	0.000
952	5	45.458	1036.494	0.000	0.000
953	6	0.000	0.000	0.000	0.000
954	7	0.000	0.000	0.000	0.000

NON\_FUEL\_VOC - (std)

	*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw
955	1	4.966	135.946	3.846	0.000
956	1	4.966	135.946	3.846	0.000
957	1	1.157	135.946	1.157	0.000
958	2	7.213	47.113	7.213	0.000
959	2	7.213	47.113	7.213	0.000
960	3	7.213	47.113	7.213	0.000
961	3	7.213	47.113	7.213	0.000
962	4	6.714	263.817	0.000	0.000
963	5	13.061	508.525	0.000	0.000
964	6	30.461	694.547	0.000	0.000

NON\_FUEL\_VOC\_CHANGES - (used)

	*% p.a.	*Start_yr	End_yr	veh_type	gnf
965		2012	2080	1	0.000
966		2012	2080	2	0.000
967		2012	2080	3	0.000
968		2012	2080	4	0.000
969		2012	2080	5	0.000

NON\_FUEL\_VOC\_CHANGES - (std)

	*% p.a.	*Start_yr	End_yr	veh_type	gnf
970		2011	2100	1	0.000
971		2011	2100	2	0.000
972		2011	2100	3	0.000
973		2011	2100	4	0.000
974		2011	2100	5	0.000
975		2011	2100	6	0.000
976		2011	2100	7	0.000
977		2011	2100	8	0.000

NON\_FUEL\_TAX\_RATES - (used)

	*% submode	final	intermediate
978	1	21.0	0.0

995	2	21.0	0.0
996	3	21.0	0.0
997	4	21.0	0.0
998	5	21.0	0.0
999	6	21.0	0.0
1000	7	21.0	0.0

1001  
1002 NON\_FUEL\_TAX\_RATES - (std)

1003 \*%  
1004 \*submode        final        intermediate  
1005        1        17.5        0.0  
1006        2        17.5        0.0  
1007        3        17.5        0.0  
1008        4        17.5        0.0  
1009        5        17.5        0.0  
1010        6        17.5        0.0  
1011        7        0.0        0.0  
1012        8        0.0        0.0

1013  
1014 NON\_FUEL\_TAX\_RATES\_CHANGES - (used)

1015 \*% change p.a.  
1016 \*Start\_yr        End\_yr        Submode        final        intermediate  
1017        2012        2012        1        5.7        7.9  
1018        2013        2080        1        0.0        0.0  
1019        2012        2012        2        7.9        10.3  
1020        2013        2080        2        0.0        0.0  
1021        2012        2012        3        7.9        10.3  
1022        2013        2080        3        0.0        0.0  
1023        2012        2012        4        7.9        10.3  
1024        2013        2080        4        0.0        0.0  
1025        2012        2012        5        7.9        10.3  
1026        2013        2080        5        0.0        0.0  
1027        2012        2012        6        7.9        10.3  
1028        2013        2080        6        0.0        0.0  
1029        2012        2012        7        0.0        0.0  
1030        2013        2080        7        0.0        0.0

1031  
1032 NON\_FUEL\_TAX\_RATES\_CHANGES - (std)

1033 \*% change p.a.  
1034 \*Start\_yr        End\_yr        Submode        final        intermediate  
1035        2011        2011        1        14.3        0.0  
1036        2011        2011        2        14.3        0.0  
1037        2011        2011        3        14.3        0.0  
1038        2011        2011        4        14.3        0.0  
1039        2011        2011        5        14.3        0.0  
1040        2011        2011        6        14.3        0.0  
1041        2011        2011        7        0.0        0.0  
1042        2011        2011        8        0.0        0.0  
1043        2012        2100        1        0.0        0.0  
1044        2012        2100        2        0.0        0.0  
1045        2012        2100        3        0.0        0.0  
1046        2012        2100        4        0.0        0.0  
1047        2012        2100        5        0.0        0.0  
1048        2012        2100        6        0.0        0.0  
1049        2012        2100        7        0.0        0.0  
1050        2012        2100        8        0.0        0.0

1051  
1052 DEFAULT\_PURPOSE\_SPLIT - (used)

1053 \*Vtype/submode    purpose        Period1    Period2    Period3    Period4    Period5  
1054        1        1        13.3        16.9        12.0  
1055        1        2        44.2        36.7        42.9  
1056        1        3        42.5        46.4        45.1  
1057        2        1        41.3        50.3        40.2  
1058        2        2        45.2        35.1        45.1  
1059        2        3        13.5        14.6        14.7  
1060        3        1        76.7        81.4        75.6  
1061        3        2        16.1        11.1        17.0  
1062        3        3        7.2        7.5        7.4  
1063        4        1        82.5        86.9        79.7



1064	4	2	11.7	7.8	13.2
1065	4	3	5.8	5.3	7.1
1066	5	1	10.2	10.2	10.2
1067	5	2	18.9	18.9	18.9
1068	5	3	70.8	70.8	70.9
1069	6	1	10.2	10.2	10.2
1070	6	2	18.9	18.9	18.9
1071	6	3	70.8	70.8	70.9
1072	7	1	10.2	10.2	10.2
1073	7	2	18.9	18.9	18.9
1074	7	3	70.8	70.8	70.9

1075

1076 DEFAULT\_PURPOSE\_SPLIT - (std)

*Vtype/submode	purpose	Period1	Period2	Period3	Period4	Period5	
1077	1	16.5	11.8	16.5	12.9	3.5	
1078	1	2	44.0	41.3	11.8	38.5	7.9
1079	1	3	39.5	46.9	71.7	48.6	88.6
1080	2	1	0.0	0.0	0.0	0.0	0.0
1081	2	2	0.0	0.0	0.0	0.0	0.0
1082	2	3	100.0	100.0	100.0	100.0	100.0
1083	3	1	100.0	100.0	100.0	100.0	100.0
1084	3	2	0.0	0.0	0.0	0.0	0.0
1085	3	3	0.0	0.0	0.0	0.0	0.0
1086	4	1	100.0	100.0	100.0	100.0	100.0
1087	4	2	0.0	0.0	0.0	0.0	0.0
1088	4	3	0.0	0.0	0.0	0.0	0.0
1089	5	1	100.0	100.0	100.0	100.0	100.0
1090	5	2	0.0	0.0	0.0	0.0	0.0
1091	5	3	0.0	0.0	0.0	0.0	0.0
1092	6	1	1.4	2.3	1.7	2.3	0.5
1093	6	2	18.4	25.9	6.5	35.4	6.1
1094	6	3	80.2	71.8	91.8	62.3	93.4
1095	7	1	4.5	5.2	3.2	2.5	0.7
1096	7	2	50.1	45.9	10.7	54.7	7.6
1097	7	3	45.4	48.9	86.1	42.8	91.7
1098	8	1	17.1	15.7	15.8	17.7	1.8
1099	8	2	31.2	38.1	5.5	38.6	2.8
1100	8	3	51.7	46.2	78.7	43.7	95.4

1102

1103 DEFAULT\_PERSON\_FACTORS - (used)

*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2..		
1104	1	1	1.00	1.00	1.00	
1105	1	1	2	0.26	0.25	0.26
1106	1	2	1	1.00	1.00	1.00
1107	1	2	2	0.23	0.22	0.23
1108	1	3	1	1.00	1.00	1.00
1109	1	3	2	0.66	0.65	0.68
1110	2	1	1	1.00	1.00	1.00
1111	2	1	2	0.37	0.32	0.38
1112	2	2	1	1.00	1.00	1.00
1113	2	2	2	0.40	0.41	0.40
1114	2	3	1	1.00	1.00	1.00
1115	2	3	2	0.49	0.45	0.48
1116	3	1	1	1.00	1.00	1.00
1117	3	1	2	0.09	0.09	0.09
1118	3	2	1	1.00	1.00	1.00
1119	3	2	2	0.24	0.28	0.24
1120	3	3	1	1.00	1.00	1.00
1121	3	3	2	0.26	0.33	0.27
1122	4	1	1	1.00	1.00	1.00
1123	4	1	2	0.03	0.03	0.03
1124	4	2	1	1.00	1.00	1.00
1125	4	2	2	0.11	0.14	0.08
1126	4	3	1	1.00	1.00	1.00
1127	4	3	2	0.11	0.12	0.16
1128	5	1	1	1.00	1.00	1.00
1129	5	1	2	0.35	0.35	0.35
1130	5	2	1	1.00	1.00	1.00
1131	5	2	2	1.50	1.50	1.50

1133	5	3	1	1.00	1.00	1.00
1134	5	3	2	8.35	8.35	8.35

1135

1136 DEFAULT\_PERSON\_FACTORS - (std)

1137	*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2..
1138	1	1	1	1.00	1.00
	1.00	1.00	1.00	1.00	
1139	1	1	2	0.13	0.15
	0.16	0.17	0.31		
1140	1	2	1	1.00	1.00
	1.00	1.00	1.00		
1141	1	2	2	0.13	0.14
	0.15	0.15	0.21		
1142	1	3	1	1.00	1.00
	1.00	1.00	1.00		
1143	1	3	2	0.71	0.79
	0.82	0.79	1.12		
1144	2	2	1	1.00	1.00
	1.00	1.00	1.00		
1145	2	2	2	0.46	0.46
	0.46	0.46	1.03		
1146	2	3	1	1.00	1.00
	1.00	1.00	1.00		
1147	2	3	2	0.46	0.46
	0.46	0.46	1.03		
1148	3	1	1	1.00	1.00
	1.00	1.00	1.00		
1149	3	1	2	0.20	0.20
	0.20	0.20	0.26		
1150	4	1	1	1.00	1.00
	1.00	1.00	1.00		
1151	5	1	1	1.00	1.00
	1.00	1.00	1.00		

1152

1153 DEFAULT\_PERSON\_FACTORS\_CHANGE - (used)

1154 \*% change p.a.

1155	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3	
	ChangePer4	ChangePer5							
1156	2011	2080		1	1	2	0.00	0.00	0.00
1157	2011	2080		1	2	2	0.00	0.00	0.00

1158

1159 DEFAULT\_PERSON\_FACTORS\_CHANGE - (std)

1160 \*% change p.a.

1161	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3
	ChangePer4	ChangePer5						
1162	2011	2036		1	1	2	0.00	0.00
	0.00	0.00	0.00					
1163	2011	2036		1	2	2	0.00	0.00
	0.00	0.00	0.00					
1164	2011	2036		1	3	2	0.00	0.00
	0.00	0.00	0.00					

1165

1166 INPUT\_SUMMARY

1167 Run name N25 Waterford to Glenmore - Navy  
 1168 DM scheme Do **Min**  
 1169 DS scheme Navy

1170

1171 Economic parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Teal\Economics\_Input\_TUBAv1.9.8  
 (Oct2020).txt

1172 Scheme parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Navy\TUBA\_Scheme\_Input\_Navy\_30year\_v1.9.8\_SPL\_1\_0.txt

1173

1174 First year of scheme costs 2020  
 1175 First Appraisal Year 2030

1176	Last Appraisal Year	2059
1177	Modelled years	2030 2045 2059
1178		
1179	Time period	Total hours
1180	AM Peak	646
1181	Inter Peak	2424
1182	PM Peak	640
1183	Total	3710

1184

1185

1186 Note: All monetary values are in 2011 market prices. All monetary values discounted to 2011 unless otherwise stated.

1187

1188 DM\_SCHEME\_COSTS

1189 Do minimum scheme costs. Undiscounted £000s

1190	Mode	Year	Prep.	Superv.	Constr.	Land
	Maint.	Oper.	Grant/Sub.	Dev._Cont		
1191	Road	2020	0	0	0	0
	0	0	0	0		
1192	Road	2021	0	0	0	0
	0	0	0	0		
1193	Road	2022	0	0	0	0
	0	0	0	0		
1194	Road	2023	0	0	0	0
	0	0	0	0		
1195	Road	2024	0	0	0	0
	0	0	0	0		
1196	Road	2025	0	0	0	0
	0	0	0	0		
1197	Road	2026	0	0	0	0
	0	0	0	0		
1198	Road	2027	0	0	0	0
	0	0	0	0		
1199	Road	2028	0	0	0	0
	0	0	0	0		
1200	Road	2029	0	0	0	0
	0	0	0	0		
1201	Road	2030	0	0	0	0
	0	0	0	0		
1202	Road	2031	0	0	0	0
	0	0	0	0		
1203	Road	2032	0	0	0	0
	0	0	0	0		
1204	Road	2033	0	0	0	0
	0	0	0	0		
1205	Road	2034	0	0	0	0
	0	0	0	0		
1206	Road	2035	0	0	0	0
	0	0	0	0		
1207	Road	2036	0	0	0	0
	0	0	0	0		
1208	Road	2037	0	0	0	0
	0	0	0	0		
1209	Road	2038	0	0	0	0
	0	0	0	0		
1210	Road	2039	0	0	0	0
	0	0	0	0		
1211	Road	2040	0	0	0	0
	0	0	0	0		
1212	Road	2041	0	0	0	0
	0	0	0	0		
1213	Road	2042	0	0	0	0
	0	0	0	0		
1214	Road	2043	0	0	0	0
	0	0	0	0		
1215	Road	2044	0	0	0	0
	0	0	0	0		
1216	Road	2045	0	0	0	0
	0	0	0	0		

1217	Road	2046	0	0	0	0	0
1218	Road	2047	0	0	0	0	0
1219	Road	2048	0	0	0	0	0
1220	Road	2049	0	0	0	0	0
1221	Road	2050	0	0	0	0	0
1222	Road	2051	0	0	0	0	0
1223	Road	2052	0	0	0	0	0
1224	Road	2053	0	0	0	0	0
1225	Road	2054	0	0	0	0	0
1226	Road	2055	0	0	0	0	0
1227	Road	2056	0	0	0	0	0
1228	Road	2057	0	0	0	0	0
1229	Road	2058	0	0	0	0	0
1230	Road	2059	0	0	0	0	0
1231	Bus	2020	0	0	0	0	0
1232	Bus	2021	0	0	0	0	0
1233	Bus	2022	0	0	0	0	0
1234	Bus	2023	0	0	0	0	0
1235	Bus	2024	0	0	0	0	0
1236	Bus	2025	0	0	0	0	0
1237	Bus	2026	0	0	0	0	0
1238	Bus	2027	0	0	0	0	0
1239	Bus	2028	0	0	0	0	0
1240	Bus	2029	0	0	0	0	0
1241	Bus	2030	0	0	0	0	0
1242	Bus	2031	0	0	0	0	0
1243	Bus	2032	0	0	0	0	0
1244	Bus	2033	0	0	0	0	0
1245	Bus	2034	0	0	0	0	0
1246	Bus	2035	0	0	0	0	0
1247	Bus	2036	0	0	0	0	0
1248	Bus	2037	0	0	0	0	0
1249	Bus	2038	0	0	0	0	0
1250	Bus	2039	0	0	0	0	0
1251	Bus	2040	0	0	0	0	0

1252	0	0	0	0	0	0	0	
	Bus	2041	0	0	0	0	0	
	0	0	0	0	0	0	0	
1253	Bus	2042	0	0	0	0	0	
	0	0	0	0	0	0	0	
1254	Bus	2043	0	0	0	0	0	
	0	0	0	0	0	0	0	
1255	Bus	2044	0	0	0	0	0	
	0	0	0	0	0	0	0	
1256	Bus	2045	0	0	0	0	0	
	0	0	0	0	0	0	0	
1257	Bus	2046	0	0	0	0	0	
	0	0	0	0	0	0	0	
1258	Bus	2047	0	0	0	0	0	
	0	0	0	0	0	0	0	
1259	Bus	2048	0	0	0	0	0	
	0	0	0	0	0	0	0	
1260	Bus	2049	0	0	0	0	0	
	0	0	0	0	0	0	0	
1261	Bus	2050	0	0	0	0	0	
	0	0	0	0	0	0	0	
1262	Bus	2051	0	0	0	0	0	
	0	0	0	0	0	0	0	
1263	Bus	2052	0	0	0	0	0	
	0	0	0	0	0	0	0	
1264	Bus	2053	0	0	0	0	0	
	0	0	0	0	0	0	0	
1265	Bus	2054	0	0	0	0	0	
	0	0	0	0	0	0	0	
1266	Bus	2055	0	0	0	0	0	
	0	0	0	0	0	0	0	
1267	Bus	2056	0	0	0	0	0	
	0	0	0	0	0	0	0	
1268	Bus	2057	0	0	0	0	0	
	0	0	0	0	0	0	0	
1269	Bus	2058	0	0	0	0	0	
	0	0	0	0	0	0	0	
1270	Bus	2059	0	0	0	0	0	
	0	0	0	0	0	0	0	
1271								
1272	DS_SCHEME_COSTS							
1273	Do something scheme costs. Undiscounted £000s							
1274	Mode	Year	Prep.	Superv.	Constr.	Land		
	Maint.	Oper.	Grant/Sub.	Dev._Cont				
1275	Road	2020	0	0	0	0	0	
	0	0	0	0	0	0	0	
1276	Road	2021	0	0	0	0	0	
	0	0	0	0	0	0	0	
1277	Road	2022	0	0	0	0	0	
	0	0	0	0	0	0	0	
1278	Road	2023	0	0	0	0	0	
	0	0	0	0	0	0	0	
1279	Road	2024	0	0	0	0	0	
	0	0	0	0	0	0	0	
1280	Road	2025	0	0	0	0	0	
	0	0	0	0	0	0	0	
1281	Road	2026	0	0	0	0	0	
	0	0	0	0	0	0	0	
1282	Road	2027	3208	0	22751	8297		
	0	0	0	0	0	0		
1283	Road	2028	642	2431	47986	8297		
	0	0	0	0	0	0		
1284	Road	2029	428	2431	24854	0		
	0	0	0	0	0	0		
1285	Road	2030	0	0	0	0		
	471	0	0	0	0	0		
1286	Road	2031	0	0	0	0		
	471	0	0	0	0	0		
1287	Road	2032	0	0	0	0		

1288	471	0	0	0	0	0	0
	Road	2033	0	0	0	0	0
1289	471	0	0	0	0	0	0
	Road	2034	0	0	0	0	0
1290	471	0	0	0	0	0	0
	Road	2035	0	0	0	0	0
1291	471	0	0	0	0	0	0
	Road	2036	0	0	0	0	0
1292	471	0	0	0	0	0	0
	Road	2037	0	0	0	0	0
1293	471	0	0	0	0	0	0
	Road	2038	0	0	0	0	0
1294	471	0	0	0	0	0	0
	Road	2039	0	0	0	0	0
1295	471	0	0	0	0	0	0
	Road	2040	0	0	0	0	0
1296	471	0	0	0	0	0	0
	Road	2041	0	0	0	0	0
1297	471	0	0	0	0	0	0
	Road	2042	0	0	0	0	0
1298	471	0	0	0	0	0	0
	Road	2043	0	0	0	0	0
1299	471	0	0	0	0	0	0
	Road	2044	0	0	0	0	0
1300	471	0	0	0	0	0	0
	Road	2045	0	0	0	0	0
1301	471	0	0	0	0	0	0
	Road	2046	0	0	0	0	0
1302	471	0	0	0	0	0	0
	Road	2047	0	0	0	0	0
1303	471	0	0	0	0	0	0
	Road	2048	0	0	0	0	0
1304	471	0	0	0	0	0	0
	Road	2049	0	0	0	0	0
1305	471	0	0	0	0	0	0
	Road	2050	0	0	0	0	0
1306	471	0	0	0	0	0	0
	Road	2051	0	0	0	0	0
1307	471	0	0	0	0	0	0
	Road	2052	0	0	0	0	0
1308	471	0	0	0	0	0	0
	Road	2053	0	0	0	0	0
1309	471	0	0	0	0	0	0
	Road	2054	0	0	0	0	0
1310	471	0	0	0	0	0	0
	Road	2055	0	0	0	0	0
1311	471	0	0	0	0	0	0
	Road	2056	0	0	0	0	0
1312	471	0	0	0	0	0	0
	Road	2057	0	0	0	0	0
1313	471	0	0	0	0	0	0
	Road	2058	0	0	0	0	0
1314	614	0	0	0	0	0	0
	Bus	2020	0	0	0	0	0
1316	0	0	0	0	0	0	0
	Bus	2021	0	0	0	0	0
1317	0	0	0	0	0	0	0
	Bus	2022	0	0	0	0	0
1318	0	0	0	0	0	0	0
	Bus	2023	0	0	0	0	0
1319	0	0	0	0	0	0	0
	Bus	2024	0	0	0	0	0
1320	0	0	0	0	0	0	0
	Bus	2025	0	0	0	0	0
1321	0	0	0	0	0	0	0
	Bus	2026	0	0	0	0	0

1322	Bus	2027	0	0	0	0	0
	0	0	0	0	0	0	0
1323	Bus	2028	0	0	0	0	0
	0	0	0	0	0	0	0
1324	Bus	2029	0	0	0	0	0
	0	0	0	0	0	0	0
1325	Bus	2030	0	0	0	0	0
	0	0	0	0	0	0	0
1326	Bus	2031	0	0	0	0	0
	0	0	0	0	0	0	0
1327	Bus	2032	0	0	0	0	0
	0	0	0	0	0	0	0
1328	Bus	2033	0	0	0	0	0
	0	0	0	0	0	0	0
1329	Bus	2034	0	0	0	0	0
	0	0	0	0	0	0	0
1330	Bus	2035	0	0	0	0	0
	0	0	0	0	0	0	0
1331	Bus	2036	0	0	0	0	0
	0	0	0	0	0	0	0
1332	Bus	2037	0	0	0	0	0
	0	0	0	0	0	0	0
1333	Bus	2038	0	0	0	0	0
	0	0	0	0	0	0	0
1334	Bus	2039	0	0	0	0	0
	0	0	0	0	0	0	0
1335	Bus	2040	0	0	0	0	0
	0	0	0	0	0	0	0
1336	Bus	2041	0	0	0	0	0
	0	0	0	0	0	0	0
1337	Bus	2042	0	0	0	0	0
	0	0	0	0	0	0	0
1338	Bus	2043	0	0	0	0	0
	0	0	0	0	0	0	0
1339	Bus	2044	0	0	0	0	0
	0	0	0	0	0	0	0
1340	Bus	2045	0	0	0	0	0
	0	0	0	0	0	0	0
1341	Bus	2046	0	0	0	0	0
	0	0	0	0	0	0	0
1342	Bus	2047	0	0	0	0	0
	0	0	0	0	0	0	0
1343	Bus	2048	0	0	0	0	0
	0	0	0	0	0	0	0
1344	Bus	2049	0	0	0	0	0
	0	0	0	0	0	0	0
1345	Bus	2050	0	0	0	0	0
	0	0	0	0	0	0	0
1346	Bus	2051	0	0	0	0	0
	0	0	0	0	0	0	0
1347	Bus	2052	0	0	0	0	0
	0	0	0	0	0	0	0
1348	Bus	2053	0	0	0	0	0
	0	0	0	0	0	0	0
1349	Bus	2054	0	0	0	0	0
	0	0	0	0	0	0	0
1350	Bus	2055	0	0	0	0	0
	0	0	0	0	0	0	0
1351	Bus	2056	0	0	0	0	0
	0	0	0	0	0	0	0
1352	Bus	2057	0	0	0	0	0
	0	0	0	0	0	0	0
1353	Bus	2058	0	0	0	0	0
	0	0	0	0	0	0	0
1354	Bus	2059	0	0	0	0	0
	0	0	0	0	0	0	0

1355  
1356 PRESENT\_VALUE\_COSTS  
1357 Scheme investment and operating costs (i.e. excluding grant/subsidy, developer

contributions and delays) and differences. £000s.

	Mode	Year	DM_scheme_costs	DS_scheme_costs	Difference
1358	Road	2020	0	0	0
1359	Road	2021	0	0	0
1360	Road	2022	0	0	0
1361	Road	2023	0	0	0
1362	Road	2024	0	0	0
1363	Road	2025	0	0	0
1364	Road	2026	0	0	0
1365	Road	2027	0	18289	18289
1366	Road	2028	0	30471	30471
1367	Road	2029	0	13679	13679
1368	Road	2030	0	224	224
1369	Road	2031	0	215	215
1370	Road	2032	0	207	207
1371	Road	2033	0	199	199
1372	Road	2034	0	191	191
1373	Road	2035	0	184	184
1374	Road	2036	0	177	177
1375	Road	2037	0	170	170
1376	Road	2038	0	163	163
1377	Road	2039	0	157	157
1378	Road	2040	0	151	151
1379	Road	2041	0	145	145
1380	Road	2042	0	140	140
1381	Road	2043	0	134	134
1382	Road	2044	0	129	129
1383	Road	2045	0	124	124
1384	Road	2046	0	119	119
1385	Road	2047	0	115	115
1386	Road	2048	0	110	110
1387	Road	2049	0	106	106
1388	Road	2050	0	103	103
1389	Road	2051	0	99	99
1390	Road	2052	0	96	96
1391	Road	2053	0	93	93
1392	Road	2054	0	89	89
1393	Road	2055	0	86	86
1394	Road	2056	0	83	83
1395	Road	2057	0	81	81
1396	Road	2058	0	78	78
1397	Road	2059	0	98	98
1398	Bus	2020	0	0	0
1399	Bus	2021	0	0	0
1400	Bus	2022	0	0	0
1401	Bus	2023	0	0	0
1402	Bus	2024	0	0	0
1403	Bus	2025	0	0	0
1404	Bus	2026	0	0	0
1405	Bus	2027	0	0	0
1406	Bus	2028	0	0	0
1407	Bus	2029	0	0	0
1408	Bus	2030	0	0	0
1409	Bus	2031	0	0	0
1410	Bus	2032	0	0	0
1411	Bus	2033	0	0	0
1412	Bus	2034	0	0	0
1413	Bus	2035	0	0	0
1414	Bus	2036	0	0	0
1415	Bus	2037	0	0	0
1416	Bus	2038	0	0	0
1417	Bus	2039	0	0	0
1418	Bus	2040	0	0	0
1419	Bus	2041	0	0	0
1420	Bus	2042	0	0	0
1421	Bus	2043	0	0	0
1422	Bus	2044	0	0	0
1423	Bus	2045	0	0	0
1424	Bus	2046	0	0	0



1426	Bus	2047	0	0	0
1427	Bus	2048	0	0	0
1428	Bus	2049	0	0	0
1429	Bus	2050	0	0	0
1430	Bus	2051	0	0	0
1431	Bus	2052	0	0	0
1432	Bus	2053	0	0	0
1433	Bus	2054	0	0	0
1434	Bus	2055	0	0	0
1435	Bus	2056	0	0	0
1436	Bus	2057	0	0	0
1437	Bus	2058	0	0	0
1438	Bus	2059	0	0	0
1439	Road	Total	0	66509	66509
1440	Bus	Total	0	0	0

1441					
1442	TRIP_MATRIX_TOTALS				
1443	Annualised total trip numbers (thousands)				
1444	Submode	Year	Time period	DO MIN	DO SOM
1445	Car	2030	AM Peak	4719	4719
1446	Car	2030	Inter Peak	15931	15931
1447	Car	2030	PM Peak	4822	4822
1448	Car	2030	All	25472	25472
1449	Car	2045	AM Peak	4859	4859
1450	Car	2045	Inter Peak	16387	16387
1451	Car	2045	PM Peak	4962	4962
1452	Car	2045	All	26208	26208
1453	Car	2059	AM Peak	4861	4861
1454	Car	2059	Inter Peak	16428	16428
1455	Car	2059	PM Peak	4963	4963
1456	Car	2059	All	26252	26252
1457	OGV2	2030	AM Peak	287	287
1458	OGV2	2030	Inter Peak	1018	1018
1459	OGV2	2030	PM Peak	236	236
1460	OGV2	2030	All	1541	1541
1461	OGV2	2045	AM Peak	339	339
1462	OGV2	2045	Inter Peak	1209	1209
1463	OGV2	2045	PM Peak	279	279
1464	OGV2	2045	All	1828	1828
1465	OGV2	2059	AM Peak	361	361
1466	OGV2	2059	Inter Peak	1292	1292
1467	OGV2	2059	PM Peak	297	297
1468	OGV2	2059	All	1950	1950
1469	All	2030	AM Peak	5006	5006
1470	All	2030	Inter Peak	16948	16948
1471	All	2030	PM Peak	5059	5059
1472	All	2030	All	27013	27013
1473	All	2045	AM Peak	5198	5198
1474	All	2045	Inter Peak	17596	17596
1475	All	2045	PM Peak	5241	5241
1476	All	2045	All	28035	28035
1477	All	2059	AM Peak	5221	5221
1478	All	2059	Inter Peak	17721	17721
1479	All	2059	PM Peak	5260	5260
1480	All	2059	All	28202	28202

1481						
1482	DM&DS_USER_COSTS					
1483	Total value of user costs, DM and DS. £000s.					
1484	Mode	Year	DMtot_time	DMtot_charge	DMtot_fuel	DMtot_nonfuel
	DStot_time	DStot_charge	DStot_fuel	DStot_nonfuel		
1485	Road	2030	104727	0	19837	20654
	103430	0	19823	20609		
1486	Road	2045	86732	0	12186	12416
	85544	0	12176	12385		
1487	Road	2059	73347	0	7656	7725
	72253	0	7648	7705		

1488					
1489	FUEL_CONSUMPTION				
1490	Total fuel consumption, DM and DS. kilounits.				

			Do minimum		Do something	
	Submode	Year	petrol	diesel	petrol	diesel
1491						
1492	Car	2030	11160	5939	11169	5935
1493	Car	2045	11511	6130	11520	6125
1494	Car	2059	11549	6151	11558	6145
1495	OGV2	2030	0	19097	0	19063
1496	OGV2	2045	0	22533	0	22490
1497	OGV2	2059	0	24009	0	23962
1498	All	2030	11160	25035	11169	24998
1499	All	2045	11511	28663	11520	28616
1500	All	2059	11549	30160	11558	30107
1501	Car	Total	342809	182521	343072	182382
1502	OGV2	Total	0	659576	0	658333
1503	All	Total	342809	842097	343072	840715

1505  
1506 CO2\_EMISSIONS\_UNTRADED  
1507

			Emissions (tonnes) (£000s, low central)			cost cost (£000s, high)	
	Submode	Year	DM	DS	Increase	DM	DM
	DS	Increase	DM	DS	Increase	DM	DM
	DS	Increase					
1508							
1509	Car	2030	40102	40111	10	1902	
	1903	0	381	381	0	381	
	381	0					
1510	Car	2045	41374	41382	8	2266	
	2266	0	218	218	0	218	
	218	0					
1511	Car	2059	41512	41518	5	2728	
	2728	0	133	133	0	133	
	133	0					
1512	OGV2	2030	48926	48840	-86	2321	
	2317	-4	464	464	-1	464	
	464	-1					
1513	OGV2	2045	57730	57621	-110	3161	
	3155	-6	304	304	-1	304	
	304	-1					
1514	OGV2	2059	61512	61391	-121	4042	
	4034	-8	196	196	-0	196	
	196	-0					
1515	All	2030	89027	88951	-76	4223	
	4220	-4	845	844	-1	845	
	844	-1					
1516	All	2031	89699	89622	-78	4296	
	4293	-4	819	818	-1	819	
	818	-1					
1517	All	2032	90371	90292	-80	4370	
	4366	-4	793	792	-1	793	
	792	-1					
1518	All	2033	91043	90962	-81	4445	
	4441	-4	768	768	-1	768	
	768	-1					
1519	All	2034	91715	91632	-83	4521	
	4517	-4	744	744	-1	744	
	744	-1					
1520	All	2035	92387	92302	-85	4598	
	4593	-4	721	720	-1	721	
	720	-1					
1521	All	2036	93058	92972	-86	4676	
	4671	-4	698	698	-1	698	
	698	-1					
1522	All	2037	93730	93642	-88	4755	
	4750	-4	676	676	-1	676	
	676	-1					
1523	All	2038	94402	94312	-90	4835	
	4830	-5	655	654	-1	655	
	654	-1					
1524	All	2039	95074	94982	-92	4916	
	4911	-5	634	633	-1	634	

	633	-1				
1525	All	2040	95746	95652	-93	4998
	4993	-5	614	613	-1	614
	613	-1				
1526	All	2041	96417	96322	-95	5082
	5077	-5	595	594	-1	595
	594	-1				
1527	All	2042	97089	96992	-97	5166
	5161	-5	576	575	-1	576
	575	-1				
1528	All	2043	97761	97662	-99	5252
	5247	-5	557	557	-1	557
	557	-1				
1529	All	2044	98433	98332	-100	5339
	5334	-5	540	539	-1	540
	539	-1				
1530	All	2045	99105	99003	-102	5427
	5422	-6	522	522	-1	522
	522	-1				
1531	All	2046	99385	99282	-103	5495
	5489	-6	504	503	-1	504
	503	-1				
1532	All	2047	99665	99561	-104	5563
	5558	-6	486	485	-1	486
	485	-1				
1533	All	2048	99944	99840	-105	5633
	5627	-6	468	468	-0	468
	468	-0				
1534	All	2049	100224	100119	-106	5703
	5697	-6	452	451	-0	452
	451	-0				
1535	All	2050	100504	100398	-107	5802
	5795	-6	438	437	-0	438
	437	-0				
1536	All	2051	100784	100677	-108	5902
	5896	-6	424	423	-0	424
	423	-0				
1537	All	2052	101064	100956	-109	6004
	5998	-6	411	410	-0	411
	410	-0				
1538	All	2053	101344	101235	-110	6108
	6101	-7	398	397	-0	398
	397	-0				
1539	All	2054	101624	101513	-111	6214
	6207	-7	386	385	-0	386
	385	-0				
1540	All	2055	101904	101792	-112	6321
	6314	-7	374	373	-0	374
	373	-0				
1541	All	2056	102184	102071	-113	6430
	6423	-7	362	361	-0	362
	361	-0				
1542	All	2057	102464	102350	-114	6541
	6534	-7	351	350	-0	351
	350	-0				
1543	All	2058	102744	102629	-115	6654
	6647	-7	340	339	-0	340
	339	-0				
1544	All	2059	103024	102908	-115	6769
	6762	-8	329	329	-0	329
	329	-0				
1545	Car	Total	1232082	1232312	230	68119
	68131	12	7024	7026	1	7024
	7026	1				
1546	OGV2	Total	1689834	1686650	-3185	93921
	93743	-178	9453	9435	-18	9453
	9435	-18				
1547	All	Total	2921917	2918962	-2955	162039
	161874	-165	16477	16461	-16	16477



1572	All	2044	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1573	All	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1574	All	2046	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1575	All	2047	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1576	All	2048	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1577	All	2049	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1578	All	2050	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1579	All	2051	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1580	All	2052	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1581	All	2053	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1582	All	2054	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1583	All	2055	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1584	All	2056	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1585	All	2057	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1586	All	2058	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1587	All	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1588	Car	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1589	OGV2	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1590	All	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0

1591  
1592 CO2\_EMISSIONS\_BY\_TIME\_PERIOD\_UNTRADED

1593			Emissions (tonnes)			cost	
			(£000s, low)			cost (£000s, high)	
			central)			DM	DM
1594	Submode	Year	DM	DS	Increase	DM	DM
	DS	Increase	DM	DS	Increase		
	DS	Increase					
1595	AM Peak	2030	17616	17599	-18	836	
	835	-1	167	167	-0	167	
	167	-0					
1596	AM Peak	2045	19478	19452	-26	1067	

	1065	-1	103	103	-0	103
	103	-0				
1597	AM Peak	2059	20145	20115	-30	1324
	1322	-2	64	64	-0	64
	64	-0				
1598	Inter Peak	2030	55393	55363	-30	2628
	2626	-1	526	526	-0	526
	526	-0				
1599	Inter Peak	2045	61964	61928	-36	3393
	3391	-2	327	326	-0	327
	326	-0				
1600	Inter Peak	2059	64617	64577	-40	4246
	4243	-3	206	206	-0	206
	206	-0				
1601	PM Peak	2030	16019	15990	-29	760
	759	-1	152	152	-0	152
	152	-0				
1602	PM Peak	2045	17662	17623	-40	967
	965	-2	93	93	-0	93
	93	-0				
1603	PM Peak	2059	18262	18216	-45	1200
	1197	-3	58	58	-0	58
	58	-0				
1604	AM Peak	Total	574452	573710	-742	31847
	31805	-42	3243	3239	-4	3243
	3239	-4				
1605	Inter Peak	Total	1826246	1825181	-1065	101299
	101240	-59	10290	10284	-6	10290
	10284	-6				
1606	PM Peak	Total	521219	520072	-1147	28893
	28829	-64	2943	2937	-6	2943
	2937	-6				

1607

1608 NOTE: The cost of any EU Allowances (EUAs) purchased to cover traded emissions (i.e. emissions from sectors covered by the EU Emissions Trading System)

1609 will be reflected in the purchase price of traded sector goods (such as electricity).

1610 Since the purchase price is used in the costs, considered in transport appraisal,

1611 the cost of the relevant EUAs will be included in the cost benefit analysis,

1612 "internalising" the costs of emissions from traded sectors.

1613 The CO2 EMISSIONS BY TIME PERIOD TRADED reported in the table below are therefore provided for information purposes only - they are not included in the

1614 Economic Efficiency of the Transport System (TEE) table.

1615 For further information, please refer to TAG Unit A-3 para. 4.1.5 and 4.2.9

1615 CO2\_EMISSIONS\_BY\_TIME\_PERIOD\_TRADED

1616	Submode	Year	Emissions (tonnes)			cost	
			DM	DS	Increase	cost (£000s, low)	cost (£000s, high)
1617	DS	Increase	DM	DS	Increase	DM	DM
1618	DS	Increase	DM	DS	Increase	DM	DM
	AM Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1619	AM Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1620	AM Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1621	Inter Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1622	Inter Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1623	Inter Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					

1624	PM Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1625	PM Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1626	PM Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1627	AM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1628	Inter Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1629	PM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					

1630

1631 MODE

1632 User benefits and changes in revenues by mode, all years. £000s.

1633 Mode Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1634			Time	PT_fares_(pri		Fuel	Non_fuel
			PT_fares_(pri		Taxes		
1635	Road	2030	1297	0		14	45
	0	-7					
1636	Road	2031	1290	0		14	44
	0	-7					
1637	Road	2032	1284	0		14	43
	0	-7					
1638	Road	2033	1277	0		14	42
	0	-7					
1639	Road	2034	1270	0		13	41
	0	-6					
1640	Road	2035	1263	0		13	40
	0	-6					
1641	Road	2036	1256	0		13	39
	0	-6					
1642	Road	2037	1249	0		13	38
	0	-6					
1643	Road	2038	1242	0		13	37
	0	-6					
1644	Road	2039	1234	0		12	36
	0	-6					
1645	Road	2040	1227	0		12	35
	0	-6					
1646	Road	2041	1219	0		12	34
	0	-6					
1647	Road	2042	1212	0		12	33
	0	-6					
1648	Road	2043	1204	0		11	32
	0	-6					
1649	Road	2044	1196	0		11	32
	0	-5					
1650	Road	2045	1188	0		11	31
	0	-5					
1651	Road	2046	1178	0		11	30
	0	-5					
1652	Road	2047	1167	0		10	29
	0	-5					
1653	Road	2048	1156	0		10	28
	0	-5					
1654	Road	2049	1146	0		10	27
	0	-5					
1655	Road	2050	1141	0		9	26
	0	-5					
1656	Road	2051	1136	0		9	26
	0	-5					

1657	Road	2052	1130	0	9	25
	0	-4				
1658	Road	2053	1125	0	9	24
	0	-4				
1659	Road	2054	1120	0	9	24
	0	-4				
1660	Road	2055	1115	0	8	23
	0	-4				
1661	Road	2056	1109	0	8	22
	0	-4				
1662	Road	2057	1104	0	8	22
	0	-4				
1663	Road	2058	1099	0	8	21
	0	-4				
1664	Road	2059	1093	0	8	21
	0	-4				
1665	Road	Total	35729	0	327	950
	0	-159				

1666

1667 SUBMODE

1668 User benefits and changes in revenues by submode/vehicle type, modelled years and total. £000s.

1669 Submode Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1670 Time PT\_fares\_(pri Fuel Non\_fuel  
PT\_fares\_(pri Taxes

1671	Car	2030	1046	0	-3	1
	0	2				
1672	Car	2045	943	0	-2	0
	0	1				
1673	Car	2059	871	0	-1	1
	0	1				
1674	OGV2	2030	251	0	18	44
	0	-9				
1675	OGV2	2045	246	0	12	31
	0	-6				
1676	OGV2	2059	222	0	8	20
	0	-4				
1677	All	2030	1297	0	14	45
	0	-7				
1678	All	2045	1188	0	11	31
	0	-5				
1679	All	2059	1093	0	8	21
	0	-4				
1680	Car	Total	28501	0	-52	13
	0	37				
1681	OGV2	Total	7229	0	379	937
	0	-196				
1682	All	Total	35729	0	327	950
	0	-159				

1683

1684 PERSON\_TYPES

1685 User benefits and changes in revenues by person type, modelled years and total. £000s.

1686 Person\_type Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1687 Time PT\_fares\_(pri Fuel Non\_fuel  
PT\_fares\_(pri Taxes

1688	All	2030	1297	0	14	45
	0	-7				
1689	All	2045	1188	0	11	31
	0	-5				
1690	All	2059	1093	0	8	21
	0	-4				
1691	All	Total	35729	0	327	950
	0	-159				

1692

1693 PURPOSE

1694 User benefits and changes in revenues by trip purpose, modelled years and total. £000s.

1695 Purpose Year User User\_Charges Vehicle\_Operating\_Cost



1696	Operator_Rev	Indirect	Time PT_fares_(pri PT_fares_(pri		Fuel	Non_fuel
1697	Business	2030	592	0	14	54
	0	-7				
1698	Business	2045	553	0	10	37
	0	-5				
1699	Business	2059	507	0	7	24
	0	-3				
1700	Commuting	2030	302	0	1	-4
	0	-0				
1701	Commuting	2045	273	0	1	-3
	0	-0				
1702	Commuting	2059	252	0	1	-2
	0	-0				
1703	Other	2030	402	0	-0	-5
	0	0				
1704	Other	2045	362	0	0	-3
	0	0				
1705	Other	2059	335	0	0	-2
	0	0				
1706	Business	Total	16524	0	307	1128
	0	-158				
1707	Commuting	Total	8248	0	21	-84
	0	-7				
1708	Other	Total	10957	0	-1	-95
	0	5				
1709						
1710	PERIOD					
1711	User benefits and changes in revenues by time period, modelled years and total. £000s.					
1712	Period	Year	User	User_Charges	Vehicle_Operating_Cost	
	Operator_Rev	Indirect	Time PT_fares_(pri PT_fares_(pri		Fuel	Non_fuel
1713						
1714	AM Peak	2030	372	0	3	9
	0	-1				
1715	AM Peak	2045	346	0	3	7
	0	-1				
1716	AM Peak	2059	319	0	2	5
	0	-1				
1717	Inter Peak	2030	541	0	5	25
	0	-2				
1718	Inter Peak	2045	488	0	4	17
	0	-2				
1719	Inter Peak	2059	452	0	2	11
	0	-1				
1720	PM Peak	2030	384	0	6	10
	0	-3				
1721	PM Peak	2045	354	0	5	7
	0	-2				
1722	PM Peak	2059	323	0	3	5
	0	-2				
1723	AM Peak	Total	10370	0	79	206
	0	-37				
1724	Inter Peak	Total	14752	0	113	527
	0	-52				
1725	PM Peak	Total	10607	0	135	217
	0	-69				
1726						
1727	NON MONETISED TIME BENEFITS BY TIME SAVING					
1728	Time benefits (thousands of person hrs) by size of time saving					
1729	Vehicle type Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins	0
	to 2 mins	2 to 5 mins	> 5 mins			
1730	Car	Business	2030	0	0	
	-0	9	6	0		
1731	Car	Business	2045	0	0	
	-0	10	7	0		
1732	Car	Business	2059	0	0	
	-0	11	8	0		

1733	Car	Business	Total	0	0
	-12	294	221	0	
1734	Car	Commuting	2030	0	0
	-1	21	22	0	
1735	Car	Commuting	2045	0	0
	-1	24	25	0	
1736	Car	Commuting	2059	0	0
	-1	26	28	0	
1737	Car	Commuting	Total	0	0
	-29	710	743	0	
1738	Car	Other	2030	0	0
	-2	33	30	0	
1739	Car	Other	2045	0	0
	-1	38	34	0	
1740	Car	Other	2059	0	0
	-2	42	38	0	
1741	Car	Other	Total	0	0
	-46	1132	1017	0	
1742	OGV2	Business	2030	0	0
	-0	9	2	0	
1743	OGV2	Business	2045	0	0
	-0	9	4	0	
1744	OGV2	Business	2059	0	0
	-0	10	5	0	
1745	OGV2	Business	Total	0	0
	-2	277	117	0	
1746	OGV2	Commuting	2030	0	0
	-0	1	0	0	
1747	OGV2	Commuting	2045	0	0
	-0	1	1	0	
1748	OGV2	Commuting	2059	0	0
	-0	1	1	0	
1749	OGV2	Commuting	Total	0	0
	-0	30	19	0	
1750	OGV2	Other	2030	0	0
	-0	1	0	0	
1751	OGV2	Other	2045	0	0
	-0	1	0	0	
1752	OGV2	Other	2059	0	0
	-0	1	0	0	
1753	OGV2	Other	Total	0	0
	-0	19	10	0	

1754	MONETISED TIME BENEFITS BY TIME SAVING									
1755	Time benefits (£000s) by size of time saving									
1756	Vehicle type	Purpose	Year	< -5 mins	-5 to	-2 mins	-2 to	0 mins	0	
1757	to 2 mins	2 to 5 mins	> 5 mins							
1758	Car	Business	2030	0				0		
	-10	200	152	0						
1759	Car	Business	2045	0				0		
	-7	180	134	0						
1760	Car	Business	2059	0				0		
	-7	167	124	0						
1761	Car	Business	Total	0				0		
	-229	5440	4085	0						
1762	Car	Commuting	2030	0				0		
	-7	150	160	0						
1763	Car	Commuting	2045	0				0		
	-5	136	142	0						
1764	Car	Commuting	2059	0				0		
	-5	126	131	0						
1765	Car	Commuting	Total	0				0		
	-167	4111	4304	0						
1766	Car	Other	2030	0				0		
	-11	216	197	0						
1767	Car	Other	2045	0				0		
	-7	195	175	0						
1768	Car	Other	2059	0				0		
	-7	180	162	0						

1769	Car	Other	Total	0	0
	-244	5898	5303	0	
1770	OGV2	Business	2030	0	0
	-1	208	44	0	
1771	OGV2	Business	2045	0	0
	-1	166	81	0	
1772	OGV2	Business	2059	0	0
	-2	148	76	0	
1773	OGV2	Business	Total	0	0
	-34	5151	2111	0	
1774	OGV2	Commuting	2030	0	0
	0	0	0	0	
1775	OGV2	Commuting	2045	0	0
	0	0	0	0	
1776	OGV2	Commuting	2059	0	0
	0	0	0	0	
1777	OGV2	Commuting	Total	0	0
	0	0	0	0	
1778	OGV2	Other	2030	0	0
	0	0	0	0	
1779	OGV2	Other	2045	0	0
	0	0	0	0	
1780	OGV2	Other	2059	0	0
	0	0	0	0	
1781	OGV2	Other	Total	0	0
	0	0	0	0	
1782					
1783	TOTAL BENEFITS BY TIME SAVING				
1784	Total benefits (£000s) by size of time saving				
1785	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins
	to 2 mins	2 to 5 mins	> 5 mins		-2 to 0 mins
1786	Car	Business	2030	0	0
	-11	205	157	0	
1787	Car	Business	2045	0	0
	-8	183	138	0	
1788	Car	Business	2059	0	0
	-7	168	127	0	
1789	Car	Business	Total	0	0
	-247	5540	4186	0	
1790	Car	Commuting	2030	0	0
	-9	146	160	0	
1791	Car	Commuting	2045	0	0
	-6	134	142	0	
1792	Car	Commuting	2059	0	0
	-5	124	131	0	
1793	Car	Commuting	Total	0	0
	-194	4025	4314	0	
1794	Car	Other	2030	0	0
	-13	211	198	0	
1795	Car	Other	2045	0	0
	-9	192	175	0	
1796	Car	Other	2059	0	0
	-7	178	162	0	
1797	Car	Other	Total	0	0
	-278	5801	5315	0	
1798	OGV2	Business	2030	0	0
	-1	255	56	0	
1799	OGV2	Business	2045	0	0
	-1	193	95	0	
1800	OGV2	Business	2059	0	0
	-2	165	86	0	
1801	OGV2	Business	Total	0	0
	-35	6021	2495	0	
1802	OGV2	Commuting	2030	0	0
	0	1	1	0	
1803	OGV2	Commuting	2045	0	0
	0	1	1	0	
1804	OGV2	Commuting	2059	0	0
	-0	0	0	0	

1805	OGV2	Commuting	Total	0	0
	-0	21	19	0	
1806	OGV2	Other	2030	0	0
	0	1	0	0	
1807	OGV2	Other	2045	0	0
	0	0	0	0	
1808	OGV2	Other	2059	0	0
	-0	0	0	0	
1809	OGV2	Other	Total	0	0
	-0	13	10	0	

1810

1811 NON MONETISED TIME BENEFITS BY DISTANCE

1812 Time benefits (thousands of person hrs) by distance

1813 Vehicle type Purpose Year < 1 kms 1 to 5 kms 5 to 10 kms  
10 to 15 kms 15 to 20 kms 20 to 50 kms 50 to 100 kms >100 kms

1814	Car	Business	2030	15	0	0
	0	0	0	0	0	0
1815	Car	Business	2045	17	0	0
	0	0	0	0	0	0
1816	Car	Business	2059	19	0	0
	0	0	0	0	0	0
1817	Car	Business	Total	502	0	0
	0	0	0	0	0	0
1818	Car	Commuting	2030	41	0	0
	0	0	0	0	0	0
1819	Car	Commuting	2045	48	0	0
	0	0	0	0	0	0
1820	Car	Commuting	2059	53	0	0
	0	0	0	0	0	0
1821	Car	Commuting	Total	1424	0	0
	0	0	0	0	0	0
1822	Car	Other	2030	61	0	0
	0	0	0	0	0	0
1823	Car	Other	2045	71	0	0
	0	0	0	0	0	0
1824	Car	Other	2059	78	0	0
	0	0	0	0	0	0
1825	Car	Other	Total	2103	0	0
	0	0	0	0	0	0
1826	OGV2	Business	2030	0	0	0
	0	0	0	9	1	0
1827	OGV2	Business	2045	0	0	0
	-0	0	0	12	1	0
1828	OGV2	Business	2059	0	-0	0
	-0	0	0	13	1	0
1829	OGV2	Business	Total	0	0	0
	-0	0	1	349	41	0
1830	OGV2	Commuting	2030	0	0	0
	0	0	0	1	0	0
1831	OGV2	Commuting	2045	0	0	0
	-0	0	0	2	0	0
1832	OGV2	Commuting	2059	0	-0	0
	-0	0	0	2	0	0
1833	OGV2	Commuting	Total	0	0	0
	-0	0	0	44	5	0
1834	OGV2	Other	2030	0	0	0
	0	0	0	1	0	0
1835	OGV2	Other	2045	0	0	0
	-0	0	0	1	0	0
1836	OGV2	Other	2059	0	-0	0
	-0	0	0	1	0	0
1837	OGV2	Other	Total	0	0	0
	-0	0	0	26	3	0

1838

1839 MONETISED TIME BENEFITS BY DISTANCE

1840 Time benefits (£000s) by distance

1841 Vehicle type Purpose Year < 1 kms 1 to 5 kms 5 to 10 kms  
10 to 15 kms 15 to 20 kms 20 to 50 kms 50 to 100 kms >100 kms

1842	Car	Business	2030	341	0	0
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1843	0	0	0	0	0	0	0
1843	Car	Business	2045	307	0	0	0
1844	0	0	0	0	0	0	0
1844	Car	Business	2059	284	0	0	0
1845	0	0	0	0	0	0	0
1845	Car	Business	Total	9295	0	0	0
1846	0	0	0	0	0	0	0
1846	Car	Commuting	2030	302	0	0	0
1847	0	0	0	0	0	0	0
1847	Car	Commuting	2045	273	0	0	0
1848	0	0	0	0	0	0	0
1848	Car	Commuting	2059	252	0	0	0
1849	0	0	0	0	0	0	0
1849	Car	Commuting	Total	8248	0	0	0
1850	0	0	0	0	0	0	0
1850	Car	Other	2030	402	0	0	0
1851	0	0	0	0	0	0	0
1851	Car	Other	2045	362	0	0	0
1852	0	0	0	0	0	0	0
1852	Car	Other	2059	335	0	0	0
1853	0	0	0	0	0	0	0
1853	Car	Other	Total	10957	0	0	0
1854	0	0	0	0	0	0	0
1854	OGV2	Business	2030	0	0	0	0
1855	0	0	0	220	31	0	0
1855	OGV2	Business	2045	0	0	0	0
1856	-0	0	0	220	25	0	0
1856	OGV2	Business	2059	0	-0	0	0
1857	-0	0	0	200	22	0	0
1857	OGV2	Business	Total	0	0	0	0
1858	-0	3	10	6446	770	0	0
1858	OGV2	Commuting	2030	0	0	0	0
1859	0	0	0	0	0	0	0
1859	OGV2	Commuting	2045	0	0	0	0
1860	0	0	0	0	0	0	0
1860	OGV2	Commuting	2059	0	0	0	0
1861	0	0	0	0	0	0	0
1861	OGV2	Commuting	Total	0	0	0	0
1862	0	0	0	0	0	0	0
1862	OGV2	Other	2030	0	0	0	0
1863	0	0	0	0	0	0	0
1863	OGV2	Other	2045	0	0	0	0
1864	0	0	0	0	0	0	0
1864	OGV2	Other	2059	0	0	0	0
1865	0	0	0	0	0	0	0
1865	OGV2	Other	Total	0	0	0	0

1866	TOTAL BENEFITS BY DISTANCE							
1867	Total benefits (£000s) by distance							
1868	Vehicle type	Purpose	Year	< 1 kms	1 to 5 kms	5 to 10 kms	>10 kms	
1869	10 to 15 kms	15 to 20 kms	20 to 50 kms	50 to 100 kms				
1870	Car	Business	2030	350	0	0	0	
1871	0	0	0	0	0	0	0	
1871	Car	Business	2045	313	0	0	0	
1872	0	0	0	0	0	0	0	
1872	Car	Business	2059	288	0	0	0	
1873	0	0	0	0	0	0	0	
1873	Car	Business	Total	9478	0	0	0	
1874	0	0	0	0	0	0	0	
1874	Car	Commuting	2030	297	0	0	0	
1875	0	0	0	0	0	0	0	
1875	Car	Commuting	2045	270	0	0	0	
1876	0	0	0	0	0	0	0	
1876	Car	Commuting	2059	250	0	0	0	
1877	0	0	0	0	0	0	0	
1877	Car	Commuting	Total	8145	0	0	0	
1878	0	0	0	0	0	0	0	
1878	Car	Other	2030	396	0	0	0	

1879	Car	Other	2045	359	0	0
	0	0	0	0	0	0
1880	Car	Other	2059	333	0	0
	0	0	0	0	0	0
1881	Car	Other	Total	10839	0	0
	0	0	0	0	0	0
1882	OGV2	Business	2030	0	0	0
	0	0	0	272	37	0
1883	OGV2	Business	2045	0	0	0
	-0	0	0	257	29	0
1884	OGV2	Business	2059	0	-0	0
	-0	0	0	225	24	0
1885	OGV2	Business	Total	0	0	0
	-0	3	10	7571	897	0
1886	OGV2	Commuting	2030	0	0	0
	0	0	-0	2	0	0
1887	OGV2	Commuting	2045	0	0	0
	-0	0	-0	1	0	0
1888	OGV2	Commuting	2059	0	-0	0
	-0	0	0	1	0	0
1889	OGV2	Commuting	Total	0	0	0
	0	0	-0	37	3	0
1890	OGV2	Other	2030	0	0	0
	0	0	-0	1	0	0
1891	OGV2	Other	2045	0	0	0
	-0	0	-0	1	0	0
1892	OGV2	Other	2059	0	-0	0
	-0	0	-0	0	0	0
1893	OGV2	Other	Total	0	0	0
	0	0	-0	21	2	0

1894	SENSITIVITY					
1895	Total user benefits as a percentage of total DM user costs					
1896	Modelled Years					
1897	Mode	2030	2045	2059		
1898	Road	0.93%	1.10%	1.26%		

1900  
1901 Economy:Economic Efficiency of the Transport System(TEE)  
1902

1903	Consumer - Commuting user benefits			All Modes		
	Road	Bus				
1904	Travel Time			8248		
	8248	0				
1905	Vehicle operating costs			-63		
	-63	0				
1906	User charges			0		
	0	0				
1907	During Construction & Maintenance			0		
	0	0				
1908	NET CONSUMER - COMMUTING BENEFITS			8185		
	8185	0				
1909						
1910	Consumer - Other user benefits			All Modes		
	Road	Bus				
1911	Travel Time			10957		
	10957	0				
1912	Vehicle operating costs			-95		
	-95	0				
1913	User charges			0		
	0	0				
1914	During Construction & Maintenance			0		
	0	0				
1915	NET CONSUMER - OTHER BENEFITS			10862		
	10862	0				
1916						
1917	Business			All Modes	Road Personal	Road Freight Bus
	Personal	Bus Freight				
1918	Travel Time			16524	9295	

1919	7229	0	0		
	Vehicle operating costs			1436	183
	1253	0	0		
1920	User charges			0	0
	0	0	0		
1921	During Construction & Maintenance			0	0
	0	0	0		
1922	Subtotal			17959	9478
	8481	0	0		
1923					
1924	Private Sector Provider Impacts				
1925	Revenue			0	
	0		0		
1926	Operating costs			0	
	0		0		
1927	Investment costs			0	
	0		0		
1928	Grant/subsidy			0	
	0		0		
1929	Subtotal			0	
	0		0		
1930					
1931	Other business Impacts				
1932	Developer contributions			0	
	0		0		
1933	NET BUSINESS IMPACT			17959	
1934					
1935	TOTAL				
1936	Present Value of Transport Economic				
1937	Efficiency Benefits (TEE)			37006	
1938					

Note: Benefits appear as positive numbers, while costs appear as negative numbers.  
Note: All entries are present values discounted to 2011, in 2011 prices

Public Accounts				
Local Government Funding		ALL MODES	Road	
Bus				
1944	Revenue	0	0	0
1945	Operating Costs	0	0	0
1946	Investment Costs	0	0	0
1947	Developer Contributions	0	0	0
1948	Grant/Subsidy Payments	0	0	0
1949	NET IMPACT	0	0	0
1950				
Central Government Funding: Transport		ALL MODES	Road	
Bus				
1952	Revenue	0	0	0
1953	Operating costs	4069	4069	0
1954	Investment costs	62440	62440	0
1955	Developer Contributions	0	0	0
1956	Grant/Subsidy Payments	0	0	0
1957	NET IMPACT	66509	66509	0
1958				
Central Government Funding: Non-Transport				
1961	Indirect Tax Revenues	159	159	0
1962				
1963	TOTALS			
1964	Broad Transport Budget	66509	66509	0
1965	Wider Public Finances	159	159	0
1966				

Note: Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.

Note: All entries are present values discounted to 2011, in 2011 prices

#### 1970 Analysis of Monetised Costs and Benefits

1971  
1972 Greenhouse Gases

1974	Economic Efficiency: Consumer Users (Commuting)	8185
1975	Economic Efficiency: Consumer Users (Other)	10862
1976	Economic Efficiency: Business Users and Providers	17959
1977	Wider Public Finances (Indirect Taxation Revenues)	-159
1978	Present Value of Benefits (PVB)	36863
1979		
1980	Broad Transport Budget	66509
1981	Present Value of Costs (PVC)	66509
1982		
1983	OVERALL IMPACTS	
1984	Net Present Value (NPV)	-29646
1985	Benefit to Cost Ratio (BCR)	0.554
1986		
1987	Note: This table includes costs and benefits which are regularly or occasionally presented in monetised form in	
1988	transport appraisals, together with some where monetisation is in prospect. There may also be other significant	
1989	costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis	
1990	presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.	
1991		
1992		
1993	TUBA Run Information	
1994	- calculations completed	
1995		
1996	File Summary	
1997	- Scheme File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Navy\TUBA_Scheme_Input_Navy_30year_v1.9.8_SPL_1_0.txt	
1998	- Economic File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Teal\Economics_Input_TUBAv1.9.8 (Oct2020).txt	
1999	- Output File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Navy\TUBA_Scheme_Input_Navy_30year_v1.9.8_SPL_1_0.out	
2000		
2001	Elapsed time : 0hrs 0mins 5sec	
2002		
2003		



1 Transport User Benefit Appraisal TUBA (64-BIT) 1.9.8(1xA) - Interim  
2 Program run on Mon Nov 16, 2020 at 18:06:42  
3

4 ERRORS AND WARNINGS

5 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
year 2080 is ignored  
6 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
year 2080 is ignored  
7 3 Warnings found  
8  
9

10 TUBA ECONOMICS FILE DIFFERENCES

11 PARAMETERS - (used)

12 TUBA\_version 1.9.8  
13 base\_year 2011  
14 pres\_val\_year 2011  
15 GDP\_base 100.00 0.00 0.00  
16 av\_ind\_tax 18.30 0.00 0.00  
17 nt\_carbdxvalues 20.00 20.00 20.00  
18  
19

20 PARAMETERS - (std)

21 TUBA\_version 1.9.8  
22 base\_year 2010  
23 pres\_val\_year 2010  
24 GDP\_base 100.00 0.00 0.00  
25 av\_ind\_tax 19.00 0.00 0.00  
26 nt\_carbdxvalues 26.60 79.80 53.20  
27 t\_carbdxvalues 11.80 11.80 11.80  
28

29 VEHICLE\_TYPE/SUBMODE - (used)

*no.	mode	new_mode	P&R	type	description
1	1	N	N	per	Car
2	1	N	N	per	LGV
3	1	N	N	fre	OGV1
4	1	N	N	fre	OGV2
5	2	N	N	per	Bus
6	3	N	N	per	Light Rail
7	3	N	N	per	Heavy Rail

38 VEHICLE\_TYPE/SUBMODE - (std)

*no.	mode	new_mode	P&R	type	description
1	1	N	N	per	Car
2	1	N	N	per	Personal LGV
3	1	N	N	fre	Freight LGV
4	1	N	N	fre	OGV1
5	1	N	N	fre	OGV2
6	2	N	N	per	Bus
7	3	N	N	per	Light Rail
8	3	N	N	per	Heavy rail

49 FUEL\_TYPE - (used)

50 \*no. name  
51 1 petrol  
52

```

53         2      diesel
54
55 FUEL_TYPE - (std)
56 *no.      name
57     1      Petrol
58     2      Diesel
59     3      Electric
60
61 TIME_PERIODS - (used)
62 *no.      description      comments
63     1      AM Peak          (8-9)
64     2      Inter Peak       (Avg
65     3      PM Peak          (17-1
66
67 TIME_PERIODS - (std)
68 *no.      description      comments
69     1      AM peak          (7-10 weekdays)
70     2      PM peak          (4-7 weekdays)
71     3      Inter-peak       (10-4 weekdays)
72     4      Off-peak         (7-7 weekdays)
73     5      Weekend          (weekend)
74
75 BREAKPOINTS - (used)
76 *description breakpoint1 breakpoint2 ..
77     Distance      1.0          5.0          10.0         15.0
78     20.0          50.0         100.0
79     TimeSaving    -5.0         -2.0         0.0          2.0
80     5.0
81
82 BREAKPOINTS - (std)
83 *description breakpoint1 breakpoint2 ..
84     Distance      1.0          5.0          10.0         25.0
85     50.0          100.0        200.0
86     TimeSaving    -5.0         -2.0         0.0          2.0
87     5.0
88
89 DISCOUNT_RATE - (used)
90 *% change p.a.
91 *Start_yr      End_yr      Rate
92     1           30         4.00
93     31          60         3.50
94     61          100        3.00
95
96 DISCOUNT_RATE - (std)
97 *% change p.a.
98 *Start_yr      End_yr      Rate
99     1           30         3.50
100    31          75         3.00
101    76          80         2.50
102
103 VALUE_OF_TIME_ALLOCATION - (used)
104 *Vtype/submode Purpose_type Person_type VOT_METHOD
105     1 1 1 3
106     1 2 1 3
107     1 3 1 3
108     1 1 2 3
109     1 2 2 3
110     1 3 2 3
111     3 1 1 3
112     3 2 1 3
113     3 3 1 3
114     3 1 2 3
115     3 2 2 3
116     3 3 2 3
117
118 VALUE_OF_TIME_ALLOCATION - (std)
119 *Vtype/submode Purpose_type Person_type VOT_METHOD
120     1 1 1 1
121     1 1 2 1

```

```

118         8   1   2   1
119
120 VALUE_OF_TIME_METHOD1 - (used)
121 *pence per hour
122 *Vtype/submode Person_type U_purpose1 U_purpose2 U_purpose3 .. xmid_purpose1
xmid_purpose2 xmis_purpose3 .. k_purpose1 k_purpose2 k_purpose3 ..
123
124 VALUE_OF_TIME_METHOD1 - (std)
125 *pence per hour
126 *Vtype/submode Person_type U_purpose1 U_purpose2 U_purpose3 .. xmid_purpose1
xmid_purpose2 xmis_purpose3 .. k_purpose1 k_purpose2 k_purpose3 ..
127     1           1           2480.0           0.0           0.0
128     67.0         0.0           0.0           67.0           0.0           0.0
129     1           2           2480.0           0.0           0.0           0.0
130     67.0         0.0           0.0           67.0           0.0           0.0
131     2           1           0.0           0.0           0.0           0.0
132     0.0          0.0           0.0           0.0           0.0           0.0
133     2           2           0.0           0.0           0.0           0.0
134     0.0          0.0           0.0           0.0           0.0           0.0
135     3           1           0.0           0.0           0.0           0.0
136     0.0          0.0           0.0           0.0           0.0           0.0
137     3           2           0.0           0.0           0.0           0.0
138     0.0          0.0           0.0           0.0           0.0           0.0
139     4           1           0.0           0.0           0.0           0.0
140     0.0          0.0           0.0           0.0           0.0           0.0
141     4           2           0.0           0.0           0.0           0.0
142     0.0          0.0           0.0           0.0           0.0           0.0
143     5           1           0.0           0.0           0.0           0.0
144     0.0          0.0           0.0           0.0           0.0           0.0
145     5           2           0.0           0.0           0.0           0.0
146     0.0          0.0           0.0           0.0           0.0           0.0
147     6           1           0.0           0.0           0.0           0.0
148     0.0          0.0           0.0           0.0           0.0           0.0
149     6           2           0.0           0.0           0.0           0.0
150     0.0          0.0           0.0           0.0           0.0           0.0
151     7           1           0.0           0.0           0.0           0.0
152     0.0          0.0           0.0           0.0           0.0           0.0
153     7           2           0.0           0.0           0.0           0.0
154     0.0          0.0           0.0           0.0           0.0           0.0
155     8           1           0.0           0.0           0.0           0.0
156     0.0          0.0           0.0           0.0           0.0           0.0
157     8           2           3647.0          0.0           0.0           0.0
158     107.0        0.0           0.0           64.0           0.0           0.0
159
160 VALUE_OF_TIME_METHOD2 - (used)
161 *pence per hour
162 *Vtype/submode Person_type 0_50km_purpose1 0_50km_purpose2 0_50km_purpose3 ..
50_100km_purpose1 50_100km_purpose2 50_100km_purpose3 .. 100_200km_purpose1
100_200km_purpose2 100_200km_purpose3 .. 200+km_purpose1 200+km_purpose2
200+km_purpose3..
163
164 VALUE_OF_TIME_METHOD2 - (std)
165 *pence per hour
166 *Vtype/submode Person_type 0_50km_purpose1 0_50km_purpose2 0_50km_purpose3 ..
50_100km_purpose1 50_100km_purpose2 50_100km_purpose3 .. 100_200km_purpose1
100_200km_purpose2 100_200km_purpose3 .. 200+km_purpose1 200+km_purpose2
200+km_purpose3..
167     1           1           842.0           0.0           0.0
168     1362.0        0.0           0.0           1849.0          0.0           0.0
169     2377.0        0.0           0.0
170     1           2           842.0           0.0           0.0
171     1362.0        0.0           0.0           1849.0          0.0           0.0
172     2377.0        0.0           0.0
173     2           1           0.0           0.0           0.0
174     0.0          0.0           0.0           0.0           0.0           0.0
175     0.0          0.0           0.0
176     2           2           0.0           0.0           0.0
177     0.0          0.0           0.0           0.0           0.0           0.0
178     0.0          0.0           0.0

```

155	3	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
156	3	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
157	4	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
158	4	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
159	5	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
160	5	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
161	6	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
162	6	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
163	7	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
164	7	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
165	8	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
166	8	2	842.0	0.0	0.0	
	1362.0	0.0	0.0	2372.0	0.0	0.0
	3422.0	0.0	0.0			

167

168 VALUE\_OF\_TIME\_METHOD3 - (used)

169 \*pence per hour

170 \*Vtype/submode Person\_type VOT\_purpose1 VOT\_purpose2 VOT\_purpose3 ..

171	1	1	2612.0	967.0	870.0	
172	1	2	2612.0	967.0	870.0	
173	2	1	2612.0	967.0	870.0	
174	2	2	2612.0	967.0	870.0	
175	3	1	2612.0	0.0	0.0	
176	3	2	2612.0	0.0	0.0	
177	4	1	2612.0	0.0	0.0	
178	4	2	2612.0	0.0	0.0	
179	5	1	2612.0	0.0	0.0	
180	5	2	2612.0	967.0	870.0	
181	6	1	2612.0	0.0	0.0	
182	6	2	2612.0	967.0	870.0	
183	7	1	2612.0	0.0	0.0	
184	7	2	2612.0	967.0	870.0	

185

186 VALUE\_OF\_TIME\_METHOD3 - (std)

187 \*pence per hour

188 \*Vtype/submode Person\_type VOT\_purpose1 VOT\_purpose2 VOT\_purpose3 ..

189	1	1	1486.0	995.0	454.0	
190	1	2	1486.0	995.0	454.0	
191	2	1	1024.0	995.0	454.0	
192	2	2	1024.0	995.0	454.0	
193	3	1	1024.0	0.0	0.0	
194	3	2	1024.0	0.0	0.0	
195	4	1	1206.0	0.0	0.0	
196	4	2	1206.0	0.0	0.0	
197	5	1	1206.0	0.0	0.0	
198	5	2	1206.0	0.0	0.0	
199	6	1	1232.0	0.0	0.0	

200	6	2	842.0	995.0	454.0
201	7	1	0.0	0.0	0.0
202	7	2	842.0	995.0	454.0
203	8	1	0.0	0.0	0.0
204	8	2	2452.0	995.0	454.0

205  
206 VALUE\_OF\_TIME\_GROWTH - (used)

207 \*% change p.a.

208 *Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
209 2012	2014	1.40	1.40	1.40	
210 2015	2019	3.60	3.60	3.60	
211 2020	2024	2.20	2.20	2.20	
212 2025	2100	2.30	2.30	2.30	

213  
214 VALUE\_OF\_TIME\_GROWTH - (std)

215 \*% change p.a.

216 *Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
217 2011	2011	0.67	0.67	0.67	
218 2012	2012	0.64	0.64	0.64	
219 2013	2013	1.27	1.27	1.27	
220 2014	2014	2.29	2.29	2.29	
221 2015	2015	1.44	1.44	1.44	
222 2016	2016	1.26	1.26	1.26	
223 2017	2017	1.49	1.49	1.49	
224 2018	2018	1.40	1.40	1.40	
225 2019	2019	1.43	1.43	1.43	
226 2020	2020	1.45	1.45	1.45	
227 2021	2021	1.76	1.76	1.76	
228 2022	2022	1.77	1.77	1.77	
229 2023	2023	1.78	1.78	1.78	
230 2024	2024	1.89	1.89	1.89	
231 2025	2025	1.91	1.91	1.91	
232 2026	2026	1.93	1.93	1.93	
233 2027	2027	1.94	1.94	1.94	
234 2028	2028	1.96	1.96	1.96	
235 2029	2029	1.98	1.98	1.98	
236 2030	2030	1.99	1.99	1.99	
237 2031	2031	2.01	2.01	2.01	
238 2032	2032	2.02	2.02	2.02	
239 2033	2033	2.04	2.04	2.04	
240 2034	2034	2.15	2.15	2.15	
241 2035	2035	2.06	2.06	2.06	
242 2036	2036	2.07	2.07	2.07	
243 2037	2037	2.08	2.08	2.08	
244 2038	2038	2.09	2.09	2.09	
245 2039	2039	2.09	2.09	2.09	
246 2040	2040	2.09	2.09	2.09	
247 2041	2041	2.09	2.09	2.09	
248 2042	2042	2.11	2.11	2.11	
249 2043	2043	2.11	2.11	2.11	
250 2044	2044	2.11	2.11	2.11	
251 2045	2045	2.11	2.11	2.11	
252 2046	2046	2.21	2.21	2.21	
253 2047	2047	2.14	2.14	2.14	
254 2048	2048	2.14	2.14	2.14	
255 2049	2049	2.14	2.14	2.14	
256 2050	2050	2.14	2.14	2.14	
257 2051	2051	2.04	2.04	2.04	
258 2052	2052	2.07	2.07	2.07	
259 2053	2053	2.07	2.07	2.07	
260 2054	2054	2.07	2.07	2.07	
261 2055	2055	2.07	2.07	2.07	
262 2056	2056	2.07	2.07	2.07	
263 2057	2057	2.09	2.09	2.09	
264 2058	2058	2.19	2.19	2.19	
265 2059	2059	2.19	2.19	2.19	
266 2060	2060	2.29	2.29	2.29	
267 2061	2061	2.29	2.29	2.29	
268 2062	2062	2.30	2.30	2.30	

269	2063	2063	2.30	2.30	2.30
270	2064	2064	2.20	2.20	2.20
271	2065	2065	2.20	2.20	2.20
272	2066	2066	2.20	2.20	2.20
273	2067	2067	2.18	2.18	2.18
274	2068	2068	2.18	2.18	2.18
275	2069	2069	2.18	2.18	2.18
276	2070	2070	2.18	2.18	2.18
277	2071	2071	2.18	2.18	2.18
278	2072	2072	2.17	2.17	2.17
279	2073	2073	2.17	2.17	2.17
280	2074	2074	2.17	2.17	2.17
281	2075	2075	2.17	2.17	2.17
282	2076	2076	2.17	2.17	2.17
283	2077	2077	2.16	2.16	2.16
284	2078	2078	2.16	2.16	2.16
285	2079	2079	2.16	2.16	2.16
286	2080	2080	2.16	2.16	2.16
287	2081	2081	2.16	2.16	2.16
288	2082	2082	2.17	2.17	2.17
289	2083	2083	2.17	2.17	2.17
290	2084	2084	2.17	2.17	2.17
291	2085	2085	2.17	2.17	2.17
292	2086	2086	2.17	2.17	2.17
293	2087	2087	2.18	2.18	2.18
294	2088	2088	2.18	2.18	2.18
295	2089	2089	2.18	2.18	2.18
296	2090	2090	2.18	2.18	2.18
297	2091	2091	2.18	2.18	2.18
298	2092	2092	2.18	2.18	2.18
299	2093	2093	2.18	2.18	2.18
300	2094	2094	2.18	2.18	2.18
301	2095	2095	2.18	2.18	2.18
302	2096	2096	2.18	2.18	2.18
303	2097	2097	2.18	2.18	2.18
304	2098	2098	2.18	2.18	2.18
305	2099	2099	2.18	2.18	2.18
306	2100	2100	2.18	2.18	2.18

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AV\_IND\_TAX\_CHANGES - (used)

\*% change p.a.

*Start_yr	End_yr	Growth
2012	2080	0.00

AV\_IND\_TAX\_CHANGES - (std)

\*% change p.a.

*Start_yr	End_yr	Growth
2011	2050	0.00

CHARGE\_TAX\_RATES - (used)

\*%

*charge	final	intermediate
1	0.0	0.0
2	0.0	0.0
3	0.0	0.0
4	0.0	0.0
5	0.0	0.0
6	0.0	0.0
7	0.0	0.0

CHARGE\_TAX\_RATES - (std)

\*%

*charge	final	intermediate
1	0.0	0.0
2	0.0	0.0
3	0.0	0.0
4	0.0	0.0
5	17.5	0.0
6	0.0	0.0

338 7 17.5 0.0  
 339 8 17.5 0.0

340

341 CHARGE\_TAX\_RATES\_CHANGES - (used)

342 \*% change p.a.

343 *Start_yr	End_yr	charge	final	intermediate
344 2012	2080	1	0.00	0.00
345 2012	2080	2	0.00	0.00
346 2012	2080	3	0.00	0.00
347 2012	2080	4	0.00	0.00
348 2012	2080	5	0.00	0.00
349 2012	2080	6	0.00	0.00
350 2012	2080	7	0.00	0.00

351

352 CHARGE\_TAX\_RATES\_CHANGES - (std)

353 \*% change p.a.

354 *Start_yr	End_yr	charge	final	intermediate
355 2011	2011	1	0.00	0.00
356 2011	2011	2	0.00	0.00
357 2011	2011	3	0.00	0.00
358 2011	2011	4	0.00	0.00
359 2011	2011	5	14.29	0.00
360 2011	2011	6	0.00	0.00
361 2011	2011	7	14.29	0.00
362 2011	2011	8	14.29	0.00
363 2012	2100	1	0.00	0.00
364 2012	2100	2	0.00	0.00
365 2012	2100	3	0.00	0.00
366 2012	2100	4	0.00	0.00
367 2012	2100	5	0.00	0.00
368 2012	2100	6	0.00	0.00
369 2012	2100	7	0.00	0.00
370 2012	2100	8	0.00	0.00

371

372 FUEL\_COST - (used)

373 \*type resource (p/unit) duty (p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)

374 1	63.0	57.6	21.0	2230.00
375 2	70.0	46.6	21.0	2562.00

376

377 FUEL\_COST - (std)

378 \*type resource (p/unit) duty (p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)

379 1	42.5	57.0	17.5	2230.00
380 2	44.2	57.0	17.5	2562.00
381 3	11.5	0.0	5.0	372.00

382

383 FUEL\_COST\_CHANGES - (used)

384 \*% change p.a.

385 *Start_yr	End_yr	fuel_type	resource	duty	VAT
386 2012	2012	1	10.70	0.00	
2.00	0.00				
387 2012	2012	2	3.90	0.00	
0.00	0.00				
388 2013	2013	1	-5.70	0.00	
0.00	0.00				
389 2013	2013	2	-5.20	0.00	
0.00	0.00				
390 2014	2014	1	0.00	0.00	
0.00	0.00				
391 2014	2014	2	-3.30	0.00	
0.00	0.00				
392 2015	2015	1	-30.60	2.00	
0.00	0.00				
393 2015	2015	2	-32.60	2.90	
0.00	0.00				
394 2016	2080	1	0.00	0.00	
0.00	0.00				

395 2016 2080 2 0.00 0.00  
0.00 0.00

396

397 FUEL\_COST\_CHANGES - (std)

398 \*% change p.a.

399 \*Start\_yr End\_yr fuel\_type resource duty VAT  
CO2\_Den\_change

400 2011 2011 1 22.14 -0.37  
14.29 -0.84

401 2012 2012 1 1.99 -2.09  
0.00 -0.02

402 2013 2013 1 -3.44 -1.74  
0.00 -0.44

403 2014 2014 1 -11.68 -1.62  
0.00 -0.54

404 2015 2015 1 -29.94 -1.09  
0.00 0.00

405 2016 2016 1 7.91 -0.89  
0.00 0.00

406 2017 2017 1 2.98 -0.08  
0.00 -1.35

407 2018 2018 1 2.03 0.67  
0.00 -1.37

408 2019 2019 1 2.08 1.05  
0.00 -1.39

409 2020 2020 1 6.76 0.71  
0.00 -1.41

410 2021 2021 1 6.33 0.78  
0.00 0.00

411 2022 2022 1 5.95 0.72  
0.00 0.00

412 2023 2023 1 5.62 0.68  
0.00 0.00

413 2024 2024 1 5.32 0.68  
0.00 0.00

414 2025 2025 1 5.05 0.68  
0.00 0.00

415 2026 2026 1 0.00 0.68  
0.00 0.00

416 2027 2027 1 0.00 0.68  
0.00 0.00

417 2028 2028 1 0.00 0.68  
0.00 0.00

418 2029 2029 1 0.00 0.68  
0.00 0.00

419 2030 2030 1 0.00 0.68  
0.00 0.00

420 2031 2031 1 0.00 0.68  
0.00 0.00

421 2032 2032 1 0.00 0.68  
0.00 0.00

422 2033 2033 1 0.00 0.68  
0.00 0.00

423 2034 2034 1 0.00 0.68  
0.00 0.00

424 2035 2035 1 0.00 0.68  
0.00 0.00

425 2036 2036 1 0.00 0.68  
0.00 0.00

426 2037 2037 1 0.00 0.68  
0.00 0.00

427 2038 2038 1 0.00 0.68  
0.00 0.00

428 2039 2039 1 0.00 0.68  
0.00 0.00

429 2040 2040 1 0.00 0.68  
0.00 0.00

430 2041 2041 1 0.00 0.68  
0.00 0.00



431	2042	2042	1	0.00	0.68
	0.00	0.00			
432	2043	2043	1	0.00	0.68
	0.00	0.00			
433	2044	2044	1	0.00	0.68
	0.00	0.00			
434	2045	2045	1	0.00	0.68
	0.00	0.00			
435	2046	2046	1	0.00	0.68
	0.00	0.00			
436	2047	2047	1	0.00	0.68
	0.00	0.00			
437	2048	2048	1	0.00	0.68
	0.00	0.00			
438	2049	2049	1	0.00	0.68
	0.00	0.00			
439	2050	2050	1	0.00	0.68
	0.00	0.00			
440	2051	2051	1	0.00	0.68
	0.00	0.00			
441	2052	2052	1	0.00	0.68
	0.00	0.00			
442	2053	2053	1	0.00	0.68
	0.00	0.00			
443	2054	2054	1	0.00	0.68
	0.00	0.00			
444	2055	2055	1	0.00	0.68
	0.00	0.00			
445	2056	2056	1	0.00	0.68
	0.00	0.00			
446	2057	2057	1	0.00	0.68
	0.00	0.00			
447	2058	2058	1	0.00	0.68
	0.00	0.00			
448	2059	2059	1	0.00	0.68
	0.00	0.00			
449	2060	2060	1	0.00	0.68
	0.00	0.00			
450	2061	2061	1	0.00	0.68
	0.00	0.00			
451	2062	2062	1	0.00	0.68
	0.00	0.00			
452	2063	2063	1	0.00	0.68
	0.00	0.00			
453	2064	2064	1	0.00	0.68
	0.00	0.00			
454	2065	2065	1	0.00	0.68
	0.00	0.00			
455	2066	2066	1	0.00	0.68
	0.00	0.00			
456	2067	2067	1	0.00	0.68
	0.00	0.00			
457	2068	2068	1	0.00	0.68
	0.00	0.00			
458	2069	2069	1	0.00	0.68
	0.00	0.00			
459	2070	2070	1	0.00	0.68
	0.00	0.00			
460	2071	2071	1	0.00	0.68
	0.00	0.00			
461	2072	2072	1	0.00	0.68
	0.00	0.00			
462	2073	2073	1	0.00	0.68
	0.00	0.00			
463	2074	2074	1	0.00	0.68
	0.00	0.00			
464	2075	2075	1	0.00	0.68
	0.00	0.00			
465	2076	2076	1	0.00	0.68

466	0.00	0.00			
	2077	2077	1	0.00	0.68
	0.00	0.00			
467	2078	2078	1	0.00	0.68
	0.00	0.00			
468	2079	2079	1	0.00	0.68
	0.00	0.00			
469	2080	2080	1	0.00	0.68
	0.00	0.00			
470	2081	2081	1	0.00	0.68
	0.00	0.00			
471	2082	2082	1	0.00	0.68
	0.00	0.00			
472	2083	2083	1	0.00	0.68
	0.00	0.00			
473	2084	2084	1	0.00	0.68
	0.00	0.00			
474	2085	2085	1	0.00	0.68
	0.00	0.00			
475	2086	2086	1	0.00	0.68
	0.00	0.00			
476	2087	2087	1	0.00	0.68
	0.00	0.00			
477	2088	2088	1	0.00	0.68
	0.00	0.00			
478	2089	2089	1	0.00	0.68
	0.00	0.00			
479	2090	2090	1	0.00	0.68
	0.00	0.00			
480	2091	2091	1	0.00	0.68
	0.00	0.00			
481	2092	2092	1	0.00	0.68
	0.00	0.00			
482	2093	2093	1	0.00	0.68
	0.00	0.00			
483	2094	2094	1	0.00	0.68
	0.00	0.00			
484	2095	2095	1	0.00	0.68
	0.00	0.00			
485	2096	2096	1	0.00	0.68
	0.00	0.00			
486	2097	2097	1	0.00	0.68
	0.00	0.00			
487	2098	2098	1	0.00	0.68
	0.00	0.00			
488	2099	2099	1	0.00	0.68
	0.00	0.00			
489	2100	2100	1	0.00	0.68
	0.00	0.00			
490	2011	2011	2	26.82	-0.37
	14.29	0.19			
491	2012	2012	2	3.20	-2.09
	0.00	1.64			
492	2013	2013	2	-3.67	-1.74
	0.00	-0.44			
493	2014	2014	2	-11.26	-1.62
	0.00	0.15			
494	2015	2015	2	-30.27	-1.09
	0.00	0.00			
495	2016	2016	2	8.32	-0.89
	0.00	0.00			
496	2017	2017	2	3.12	-0.08
	0.00	-1.74			
497	2018	2018	2	2.12	0.67
	0.00	-1.77			
498	2019	2019	2	2.17	1.05
	0.00	-1.81			
499	2020	2020	2	7.06	0.71
	0.00	-1.84			

500	2021 0.00	2021 0.00	2	6.59	0.78
501	2022 0.00	2022 0.00	2	6.18	0.72
502	2023 0.00	2023 0.00	2	5.82	0.68
503	2024 0.00	2024 0.00	2	5.50	0.68
504	2025 0.00	2025 0.00	2	5.22	0.68
505	2026 0.00	2026 0.00	2	0.00	0.68
506	2027 0.00	2027 0.00	2	0.00	0.68
507	2028 0.00	2028 0.00	2	0.00	0.68
508	2029 0.00	2029 0.00	2	0.00	0.68
509	2030 0.00	2030 0.00	2	0.00	0.68
510	2031 0.00	2031 0.00	2	0.00	0.68
511	2032 0.00	2032 0.00	2	0.00	0.68
512	2033 0.00	2033 0.00	2	0.00	0.68
513	2034 0.00	2034 0.00	2	0.00	0.68
514	2035 0.00	2035 0.00	2	0.00	0.68
515	2036 0.00	2036 0.00	2	0.00	0.68
516	2037 0.00	2037 0.00	2	0.00	0.68
517	2038 0.00	2038 0.00	2	0.00	0.68
518	2039 0.00	2039 0.00	2	0.00	0.68
519	2040 0.00	2040 0.00	2	0.00	0.68
520	2041 0.00	2041 0.00	2	0.00	0.68
521	2042 0.00	2042 0.00	2	0.00	0.68
522	2043 0.00	2043 0.00	2	0.00	0.68
523	2044 0.00	2044 0.00	2	0.00	0.68
524	2045 0.00	2045 0.00	2	0.00	0.68
525	2046 0.00	2046 0.00	2	0.00	0.68
526	2047 0.00	2047 0.00	2	0.00	0.68
527	2048 0.00	2048 0.00	2	0.00	0.68
528	2049 0.00	2049 0.00	2	0.00	0.68
529	2050 0.00	2050 0.00	2	0.00	0.68
530	2051 0.00	2051 0.00	2	0.00	0.68
531	2052 0.00	2052 0.00	2	0.00	0.68
532	2053 0.00	2053 0.00	2	0.00	0.68
533	2054 0.00	2054 0.00	2	0.00	0.68
534	2055	2055	2	0.00	0.68

	0.00	0.00			
535	2056	2056	2	0.00	0.68
	0.00	0.00			
536	2057	2057	2	0.00	0.68
	0.00	0.00			
537	2058	2058	2	0.00	0.68
	0.00	0.00			
538	2059	2059	2	0.00	0.68
	0.00	0.00			
539	2060	2060	2	0.00	0.68
	0.00	0.00			
540	2061	2061	2	0.00	0.68
	0.00	0.00			
541	2062	2062	2	0.00	0.68
	0.00	0.00			
542	2063	2063	2	0.00	0.68
	0.00	0.00			
543	2064	2064	2	0.00	0.68
	0.00	0.00			
544	2065	2065	2	0.00	0.68
	0.00	0.00			
545	2066	2066	2	0.00	0.68
	0.00	0.00			
546	2067	2067	2	0.00	0.68
	0.00	0.00			
547	2068	2068	2	0.00	0.68
	0.00	0.00			
548	2069	2069	2	0.00	0.68
	0.00	0.00			
549	2070	2070	2	0.00	0.68
	0.00	0.00			
550	2071	2071	2	0.00	0.68
	0.00	0.00			
551	2072	2072	2	0.00	0.68
	0.00	0.00			
552	2073	2073	2	0.00	0.68
	0.00	0.00			
553	2074	2074	2	0.00	0.68
	0.00	0.00			
554	2075	2075	2	0.00	0.68
	0.00	0.00			
555	2076	2076	2	0.00	0.68
	0.00	0.00			
556	2077	2077	2	0.00	0.68
	0.00	0.00			
557	2078	2078	2	0.00	0.68
	0.00	0.00			
558	2079	2079	2	0.00	0.68
	0.00	0.00			
559	2080	2080	2	0.00	0.68
	0.00	0.00			
560	2081	2081	2	0.00	0.68
	0.00	0.00			
561	2082	2082	2	0.00	0.68
	0.00	0.00			
562	2083	2083	2	0.00	0.68
	0.00	0.00			
563	2084	2084	2	0.00	0.68
	0.00	0.00			
564	2085	2085	2	0.00	0.68
	0.00	0.00			
565	2086	2086	2	0.00	0.68
	0.00	0.00			
566	2087	2087	2	0.00	0.68
	0.00	0.00			
567	2088	2088	2	0.00	0.68
	0.00	0.00			
568	2089	2089	2	0.00	0.68
	0.00	0.00			

569	2090	2090	2	0.00	0.68	
	0.00	0.00				
570	2091	2091	2	0.00	0.68	
	0.00	0.00				
571	2092	2092	2	0.00	0.68	
	0.00	0.00				
572	2093	2093	2	0.00	0.68	
	0.00	0.00				
573	2094	2094	2	0.00	0.68	
	0.00	0.00				
574	2095	2095	2	0.00	0.68	
	0.00	0.00				
575	2096	2096	2	0.00	0.68	
	0.00	0.00				
576	2097	2097	2	0.00	0.68	
	0.00	0.00				
577	2098	2098	2	0.00	0.68	
	0.00	0.00				
578	2099	2099	2	0.00	0.68	
	0.00	0.00				
579	2100	2100	2	0.00	0.68	
	0.00	0.00				
580	2011	2011	3	4.95	0.00	
	0.00	-1.89				
581	2012	2012	3	4.01	0.00	
	0.00	-2.03				
582	2013	2013	3	5.45	0.00	
	0.00	-2.18				
583	2014	2014	3	3.88	0.00	
	0.00	-2.35				
584	2015	2015	3	-5.82	0.00	
	0.00	-2.54				
585	2016	2016	3	3.17	0.00	
	0.00	-2.74				
586	2017	2017	3	6.71	0.00	
	0.00	-2.98				
587	2018	2018	3	4.60	0.00	
	0.00	-3.23				
588	2019	2019	3	2.96	0.00	
	0.00	-3.52				
589	2020	2020	3	1.91	0.00	
	0.00	-3.85				
590	2021	2021	3	0.52	0.00	
	0.00	-4.22				
591	2022	2022	3	2.13	0.00	
	0.00	-4.65				
592	2023	2023	3	-0.64	0.00	
	0.00	-5.14				
593	2024	2024	3	2.55	0.00	
	0.00	-5.71				
594	2025	2025	3	4.49	0.00	
	0.00	-6.39				
595	2026	2026	3	0.01	0.00	
	0.00	-7.19				
596	2027	2027	3	2.37	0.00	
	0.00	-8.17				
597	2028	2028	3	-1.49	0.00	
	0.00	-9.38				
598	2029	2029	3	-1.58	0.00	0.00
	-10.92					
599	2030	2030	3	0.32	0.00	0.00
	-12.92					
600	2031	2031	3	0.00	0.00	
	0.00	-8.85				
601	2032	2032	3	0.00	0.00	
	0.00	-8.85				
602	2033	2033	3	0.00	0.00	
	0.00	-8.85				
603	2034	2034	3	0.00	0.00	

604	0.00	-8.85				
	2035	2035	3	0.00	0.00	
	0.00	-8.85				
605	2036	2036	3	0.00	0.00	
	0.00	-8.85				
606	2037	2037	3	0.00	0.00	
	0.00	-8.85				
607	2038	2038	3	0.00	0.00	
	0.00	-8.85				
608	2039	2039	3	0.00	0.00	
	0.00	-8.85				
609	2040	2040	3	0.00	0.00	
	0.00	-8.85				
610	2041	2041	3	0.00	0.00	0.00
	-11.07					
611	2042	2042	3	0.00	0.00	
	0.00	-0.85				
612	2043	2043	3	0.00	0.00	0.00
	-11.10					
613	2044	2044	3	0.00	0.00	0.00
	-11.60					
614	2045	2045	3	0.00	0.00	
	0.00	1.50				
615	2046	2046	3	0.00	0.00	
	0.00	-8.95				
616	2047	2047	3	0.00	0.00	
	0.00	-7.43				
617	2048	2048	3	0.00	0.00	
	0.00	1.12				
618	2049	2049	3	0.00	0.00	
	0.00	-9.46				
619	2050	2050	3	0.00	0.00	
	0.00	-0.90				
620	2051	2100	3	0.00	0.00	
	0.00	0.00				

621						
622	CARBDX_VALUE_CHANGES - (used)					
623	*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be defined, not both					
624	*same growth applies to low, central and high CO2 values					
625	*Start_yr	End_yr	Rel. (%)	<b>Abs. (£/tonne/year)</b>		
626	2012	2019	0.000	0.000		
627	2020	2020	60.000	0.000		
628	2021	2021	21.900	0.000		
629	2022	2022	17.900	0.000		
630	2023	2023	13.000	0.000		
631	2024	2024	13.500	0.000		
632	2025	2025	11.900	0.000		
633	2026	2026	10.600	0.000		
634	2027	2027	9.600	0.000		
635	2028	2028	7.500	0.000		
636	2029	2029	8.100	0.000		
637	2030	2030	7.500	0.000		
638	2031	2100	5.000	0.000		

639						
640	CARBDX_VALUE_CHANGES - (std)					
641	*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be defined, not both					
642	*same growth applies to low, central and high CO2 values					
643	*Start_yr	End_yr	Rel. (%)	<b>Abs. (£/tonne/year)</b>		
644	2011	2011	1.500	0.000		
645	2012	2012	1.500	0.000		
646	2013	2013	1.500	0.000		
647	2014	2014	1.500	0.000		
648	2015	2015	1.500	0.000		
649	2016	2016	1.500	0.000		
650	2017	2017	1.500	0.000		
651	2018	2018	1.500	0.000		
652	2019	2019	1.500	0.000		

653	2020	2020	1.500	0.000
654	2021	2021	1.667	0.000
655	2022	2022	1.639	0.000
656	2023	2023	1.613	0.000
657	2024	2024	1.587	0.000
658	2025	2025	1.563	0.000
659	2026	2026	1.538	0.000
660	2027	2027	1.515	0.000
661	2028	2028	1.493	0.000
662	2029	2029	1.471	0.000
663	2030	2030	1.449	0.000
664	2031	2031	9.286	0.000
665	2032	2032	8.497	0.000
666	2033	2033	7.831	0.000
667	2034	2034	7.263	0.000
668	2035	2035	6.771	0.000
669	2036	2036	6.341	0.000
670	2037	2037	5.963	0.000
671	2038	2038	5.628	0.000
672	2039	2039	5.328	0.000
673	2040	2040	5.058	0.000
674	2041	2041	4.815	0.000
675	2042	2042	4.594	0.000
676	2043	2043	4.392	0.000
677	2044	2044	4.207	0.000
678	2045	2045	4.037	0.000
679	2046	2046	3.881	0.000
680	2047	2047	3.736	0.000
681	2048	2048	3.601	0.000
682	2049	2049	3.476	0.000
683	2050	2050	3.359	0.000
684	2051	2051	2.501	0.000
685	2052	2052	2.265	0.000
686	2053	2053	2.165	0.000
687	2054	2054	2.056	0.000
688	2055	2055	1.856	0.000
689	2056	2056	1.779	0.000
690	2057	2057	1.589	0.000
691	2058	2058	1.446	0.000
692	2059	2059	1.330	0.000
693	2060	2060	1.201	0.000
694	2061	2061	0.673	0.000
695	2062	2062	0.618	0.000
696	2063	2063	0.401	0.000
697	2064	2064	0.283	0.000
698	2065	2065	0.079	0.000
699	2066	2066	0.033	0.000
700	2067	2067	-0.193	0.000
701	2068	2068	-0.302	0.000
702	2069	2069	-0.461	0.000
703	2070	2070	-0.585	0.000
704	2071	2071	-0.609	0.000
705	2072	2072	-0.738	0.000
706	2073	2073	-0.837	0.000
707	2074	2074	-1.033	0.000
708	2075	2075	-1.037	0.000
709	2076	2076	-1.310	0.000
710	2077	2077	-1.316	0.000
711	2078	2078	-1.493	0.000
712	2079	2079	-1.571	0.000
713	2080	2080	-1.769	0.000
714	2081	2081	-1.478	0.000
715	2082	2082	-1.672	0.000
716	2083	2083	-1.769	0.000
717	2084	2084	-1.854	0.000
718	2085	2085	-1.834	0.000
719	2086	2086	-2.050	0.000
720	2087	2087	-2.154	0.000
721	2088	2088	-2.198	0.000

722	2089	2089	-2.321	0.000
723	2090	2090	-2.359	0.000
724	2091	2091	-2.279	0.000
725	2092	2092	-2.328	0.000
726	2093	2093	-2.521	0.000
727	2094	2094	-2.577	0.000
728	2095	2095	-2.649	0.000
729	2096	2096	-2.712	0.000
730	2097	2097	-2.715	0.000
731	2098	2098	-2.915	0.000
732	2099	2099	-2.865	0.000
733	2100	2100	-3.011	0.000

734

735 FLEET - (used)

736	*veh_type	%petrol	%diesel	
737	1	69.90	30.10	
738	2	0.30	99.70	
739	3	0.00	100.00	
740	4	0.00	100.00	
741	5	0.00	100.00	
742	6	0.00	100.00	
743	7	0.00	100.00	

744

745 FLEET - (std)

746	*veh_type	%Petrol	%Diesel	%Electric
747	1	59.27	40.73	0.01
748	2	5.86	94.14	0.00
749	3	5.86	94.14	0.00
750	4	0.00	100.00	0.00
751	5	0.00	100.00	0.00
752	6	0.00	100.00	0.00
753	7	0.00	100.00	0.00
754	8	0.00	100.00	0.00

755

756 FLEET\_CHANGES - (used)

757	*% p.a.				
758	*Start_yr	End_yr	Veh_type	%Change_petrol	%Change_diesel
759	2012	2015	1	-2.642	5.437
760	2016	2020	1	0.473	-0.820
761	2021	2025	1	-0.662	1.150
762	2026	2030	1	-0.884	1.389
763	2012	2015	2	-9.640	0.025
764	2016	2020	2	-60.000	0.040
765	2021	2025	2	0.000	0.000
766	2026	2030	2	0.000	0.000

767

768 FLEET\_CHANGES - (std)

769	*% p.a.					
770	*Start_yr	End_yr	Veh_type	%Change_Petrol	%Change_Diesel	%Change_Electric
771	2011	2011	1	-3.810	5.477	502.540
772	2012	2012	1	-3.966	5.188	100.000
773	2013	2013	1	-4.130	4.932	50.000
774	2014	2014	1	-4.308	4.700	33.333
775	2015	2015	1	-4.502	4.489	25.000
776	2016	2016	1	-1.777	1.335	97.788
777	2017	2017	1	-1.809	1.317	49.441
778	2018	2018	1	-1.842	1.300	33.084
779	2019	2019	1	-1.877	1.283	24.859
780	2020	2020	1	-1.913	1.267	19.910
781	2021	2021	1	0.323	-0.826	32.794
782	2022	2022	1	0.322	-0.833	24.695
783	2023	2023	1	0.321	-0.840	19.804
784	2024	2024	1	0.320	-0.847	16.531
785	2025	2025	1	0.319	-0.854	14.186
786	2026	2026	1	0.021	-1.060	21.755
787	2027	2027	1	0.021	-1.071	17.868
788	2028	2028	1	0.021	-1.083	15.159
789	2029	2029	1	0.021	-1.095	13.164



790	2030	2030	1	0.021	-1.107	11.632
791	2011	2011	2	-7.579	0.472	0.000
792	2012	2012	2	-8.200	0.470	0.000
793	2013	2013	2	-8.932	0.468	0.000
794	2014	2014	2	-9.809	0.465	0.000
795	2015	2015	2	-10.875	0.463	0.000
796	2016	2016	2	-9.634	0.364	0.000
797	2017	2017	2	-10.661	0.363	0.000
798	2018	2018	2	-11.933	0.361	0.000
799	2019	2019	2	-13.550	0.360	0.000
800	2020	2020	2	-15.674	0.359	0.000
801	2021	2021	2	-8.979	0.173	0.000
802	2022	2022	2	-9.865	0.172	0.000
803	2023	2023	2	-10.945	0.172	0.000
804	2024	2024	2	-12.290	0.172	0.000
805	2025	2025	2	-14.012	0.171	0.000
806	2026	2026	2	-4.888	0.051	0.000
807	2027	2027	2	-5.139	0.051	0.000
808	2028	2028	2	-5.418	0.051	0.000
809	2029	2029	2	-5.728	0.051	0.000
810	2030	2030	2	-6.076	0.051	0.000
811	2011	2011	3	-7.579	0.472	0.000
812	2012	2012	3	-8.200	0.470	0.000
813	2013	2013	3	-8.932	0.468	0.000
814	2014	2014	3	-9.809	0.465	0.000
815	2015	2015	3	-10.875	0.463	0.000
816	2016	2016	3	-9.634	0.364	0.000
817	2017	2017	3	-10.661	0.363	0.000
818	2018	2018	3	-11.933	0.361	0.000
819	2019	2019	3	-13.550	0.360	0.000
820	2020	2020	3	-15.674	0.359	0.000
821	2021	2021	3	-8.979	0.173	0.000
822	2022	2022	3	-9.865	0.172	0.000
823	2023	2023	3	-10.945	0.172	0.000
824	2024	2024	3	-12.290	0.172	0.000
825	2025	2025	3	-14.012	0.171	0.000
826	2026	2026	3	-4.888	0.051	0.000
827	2027	2027	3	-5.139	0.051	0.000
828	2028	2028	3	-5.418	0.051	0.000
829	2029	2029	3	-5.728	0.051	0.000
830	2030	2030	3	-6.076	0.051	0.000

831								
832	FUEL_CONSUMPTION - (used)							
833	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel		
	cut-off_speed(km/h)							
834	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140	
835	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140	
836	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
837	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
838	3	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96	
839	4	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96	
840	5	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96	

841								
842	FUEL_CONSUMPTION - (std)							
843	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel		
	cut-off_speed(km/h)							
844	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140	
845	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140	
846	1	3	0.0000	0.12564	0.00000E+00	0.00000E+00	140	
847	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
848	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
849	3	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
850	3	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
851	4	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96	
852	5	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96	
853	6	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96	

854								
855	FUEL EFFICIENCY - (used)							
856	*% p.a.							

	*Start_yr	End_yr	veh_type	fuel_type	change
857					
858	2012	2012	1	1	-0.46
859	2012	2012	1	2	0.09
860	2013	2013	1	1	-0.42
861	2013	2013	1	2	0.07
862	2014	2020	1	1	2.48
863	2014	2020	1	2	2.92
864	2021	2025	1	1	2.37
865	2021	2025	1	2	1.62
866	2026	2030	1	1	0.92
867	2026	2030	1	2	0.77
868	2012	2012	2	2	0.20
869	2013	2013	2	2	0.18
870	2014	2020	2	2	3.25
871	2021	2025	2	2	0.67
872	2026	2030	2	2	0.27
873	2012	2012	3	2	0.43
874	2013	2013	3	2	0.38
875	2014	2020	3	2	-1.67
876	2021	2025	3	2	0.07
877	2026	2030	3	2	0.01
878	2012	2012	4	2	0.43
879	2013	2013	4	2	0.38
880	2014	2020	4	2	-1.67
881	2021	2025	4	2	0.07
882	2026	2030	4	2	0.01
883	2012	2012	5	2	0.32
884	2013	2013	5	2	0.34
885	2014	2020	5	2	-0.64
886	2021	2025	5	2	0.03
887	2026	2030	5	2	-0.02
888	2012	2012	6	2	0.00
889	2013	2013	6	2	0.00
890	2014	2020	6	2	0.00
891	2021	2025	6	2	0.00
892	2026	2030	6	2	0.00
893	2012	2012	7	2	0.00
894	2013	2013	7	2	0.00
895	2014	2020	7	2	0.00
896	2021	2025	7	2	0.00
897	2026	2030	7	2	0.00

	FUEL EFFICIENCY - (std)				
	*% p.a.				
	*Start_yr	End_yr	veh_type	fuel_type	change
898					
899					
900					
901					
902	2011	2015	1	1	1.81
903	2011	2015	1	2	2.23
904	2011	2015	1	3	-0.10
905	2011	2015	2	1	0.11
906	2011	2015	2	2	2.71
907	2011	2015	3	1	0.11
908	2011	2015	3	2	2.71
909	2016	2020	1	1	3.32
910	2016	2020	1	2	2.22
911	2016	2020	1	3	0.02
912	2016	2020	2	1	2.35
913	2016	2020	2	2	2.35
914	2016	2020	3	1	2.35
915	2016	2020	3	2	2.35
916	2021	2025	1	1	3.16
917	2021	2025	1	2	2.02
918	2021	2025	1	3	0.12
919	2021	2025	2	1	2.85
920	2021	2025	2	2	1.65
921	2021	2025	3	1	2.85
922	2021	2025	3	2	1.65
923	2026	2030	1	1	1.56
924	2026	2030	1	2	1.19
925	2026	2030	1	3	0.00

926	2026	2030	2	1	2.40
927	2026	2030	2	2	0.74
928	2026	2030	3	1	2.40
929	2026	2030	3	2	0.74
930	2031	2035	1	1	0.57
931	2031	2035	1	2	0.52
932	2031	2035	1	3	-0.08
933	2031	2035	2	1	0.54
934	2031	2035	2	2	0.22
935	2031	2035	3	1	0.54
936	2031	2035	3	2	0.22
937	2036	2100	1	1	0.00
938	2036	2100	1	2	0.00
939	2036	2100	1	3	0.00
940	2036	2100	2	1	0.00
941	2036	2100	2	2	0.00
942	2036	2100	3	1	0.00
943	2036	2100	3	2	0.00

NON\_FUEL\_VOC - (used)

*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw
946	1	6.265	171.493	5.507
947	1	6.265	171.493	5.507
948	2	9.099	70.308	10.327
949	3	10.020	393.702	0.000
950	3	10.020	393.702	0.000
951	4	19.491	758.888	0.000
952	5	45.458	1036.494	0.000
953	6	0.000	0.000	0.000
954	7	0.000	0.000	0.000

NON\_FUEL\_VOC - (std)

*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw
955	1	4.966	135.946	3.846
956	1	4.966	135.946	3.846
957	1	1.157	135.946	1.157
958	2	7.213	47.113	7.213
959	2	7.213	47.113	7.213
960	3	7.213	47.113	7.213
961	3	7.213	47.113	7.213
962	4	6.714	263.817	0.000
963	5	13.061	508.525	0.000
964	6	30.461	694.547	0.000

NON\_FUEL\_VOC\_CHANGES - (used)

*% p.a.	*Start_yr	End_yr	veh_type	gnf
970	2012	2080	1	0.000
971	2012	2080	2	0.000
972	2012	2080	3	0.000
973	2012	2080	4	0.000
974	2012	2080	5	0.000

NON\_FUEL\_VOC\_CHANGES - (std)

*% p.a.	*Start_yr	End_yr	veh_type	gnf
975	2011	2100	1	0.000
976	2011	2100	2	0.000
977	2011	2100	3	0.000
978	2011	2100	4	0.000
979	2011	2100	5	0.000
980	2011	2100	6	0.000
981	2011	2100	7	0.000
982	2011	2100	8	0.000

NON\_FUEL\_TAX\_RATES - (used)

*% submode	final	intermediate
990	1	21.0
991		0.0

995	2	21.0	0.0
996	3	21.0	0.0
997	4	21.0	0.0
998	5	21.0	0.0
999	6	21.0	0.0
1000	7	21.0	0.0

1001  
1002 NON\_FUEL\_TAX\_RATES - (std)

1003 \*%  
1004 \*submode        final        intermediate  
1005        1        17.5        0.0  
1006        2        17.5        0.0  
1007        3        17.5        0.0  
1008        4        17.5        0.0  
1009        5        17.5        0.0  
1010        6        17.5        0.0  
1011        7        0.0        0.0  
1012        8        0.0        0.0

1013  
1014 NON\_FUEL\_TAX\_RATES\_CHANGES - (used)

1015 \*% change p.a.  
1016 \*Start\_yr        End\_yr        Submode        final        intermediate  
1017        2012        2012        1        5.7        7.9  
1018        2013        2080        1        0.0        0.0  
1019        2012        2012        2        7.9        10.3  
1020        2013        2080        2        0.0        0.0  
1021        2012        2012        3        7.9        10.3  
1022        2013        2080        3        0.0        0.0  
1023        2012        2012        4        7.9        10.3  
1024        2013        2080        4        0.0        0.0  
1025        2012        2012        5        7.9        10.3  
1026        2013        2080        5        0.0        0.0  
1027        2012        2012        6        7.9        10.3  
1028        2013        2080        6        0.0        0.0  
1029        2012        2012        7        0.0        0.0  
1030        2013        2080        7        0.0        0.0

1031  
1032 NON\_FUEL\_TAX\_RATES\_CHANGES - (std)

1033 \*% change p.a.  
1034 \*Start\_yr        End\_yr        Submode        final        intermediate  
1035        2011        2011        1        14.3        0.0  
1036        2011        2011        2        14.3        0.0  
1037        2011        2011        3        14.3        0.0  
1038        2011        2011        4        14.3        0.0  
1039        2011        2011        5        14.3        0.0  
1040        2011        2011        6        14.3        0.0  
1041        2011        2011        7        0.0        0.0  
1042        2011        2011        8        0.0        0.0  
1043        2012        2100        1        0.0        0.0  
1044        2012        2100        2        0.0        0.0  
1045        2012        2100        3        0.0        0.0  
1046        2012        2100        4        0.0        0.0  
1047        2012        2100        5        0.0        0.0  
1048        2012        2100        6        0.0        0.0  
1049        2012        2100        7        0.0        0.0  
1050        2012        2100        8        0.0        0.0

1051  
1052 DEFAULT\_PURPOSE\_SPLIT - (used)

1053 \*Vtype/submode    purpose        Period1    Period2    Period3    Period4    Period5  
1054        1        1        13.3        16.9        12.0  
1055        1        2        44.2        36.7        42.9  
1056        1        3        42.5        46.4        45.1  
1057        2        1        41.3        50.3        40.2  
1058        2        2        45.2        35.1        45.1  
1059        2        3        13.5        14.6        14.7  
1060        3        1        76.7        81.4        75.6  
1061        3        2        16.1        11.1        17.0  
1062        3        3        7.2        7.5        7.4  
1063        4        1        82.5        86.9        79.7

1064	4	2	11.7	7.8	13.2
1065	4	3	5.8	5.3	7.1
1066	5	1	10.2	10.2	10.2
1067	5	2	18.9	18.9	18.9
1068	5	3	70.8	70.8	70.9
1069	6	1	10.2	10.2	10.2
1070	6	2	18.9	18.9	18.9
1071	6	3	70.8	70.8	70.9
1072	7	1	10.2	10.2	10.2
1073	7	2	18.9	18.9	18.9
1074	7	3	70.8	70.8	70.9

1075

1076 DEFAULT\_PURPOSE\_SPLIT - (std)

*Vtype/submode	purpose	Period1	Period2	Period3	Period4	Period5	
1077	1	16.5	11.8	16.5	12.9	3.5	
1078	1	2	44.0	41.3	11.8	38.5	7.9
1079	1	3	39.5	46.9	71.7	48.6	88.6
1080	2	1	0.0	0.0	0.0	0.0	0.0
1081	2	2	0.0	0.0	0.0	0.0	0.0
1082	2	3	100.0	100.0	100.0	100.0	100.0
1083	3	1	100.0	100.0	100.0	100.0	100.0
1084	3	2	0.0	0.0	0.0	0.0	0.0
1085	3	3	0.0	0.0	0.0	0.0	0.0
1086	4	1	100.0	100.0	100.0	100.0	100.0
1087	4	2	0.0	0.0	0.0	0.0	0.0
1088	4	3	0.0	0.0	0.0	0.0	0.0
1089	5	1	100.0	100.0	100.0	100.0	100.0
1090	5	2	0.0	0.0	0.0	0.0	0.0
1091	5	3	0.0	0.0	0.0	0.0	0.0
1092	6	1	1.4	2.3	1.7	2.3	0.5
1093	6	2	18.4	25.9	6.5	35.4	6.1
1094	6	3	80.2	71.8	91.8	62.3	93.4
1095	7	1	4.5	5.2	3.2	2.5	0.7
1096	7	2	50.1	45.9	10.7	54.7	7.6
1097	7	3	45.4	48.9	86.1	42.8	91.7
1098	8	1	17.1	15.7	15.8	17.7	1.8
1099	8	2	31.2	38.1	5.5	38.6	2.8
1100	8	3	51.7	46.2	78.7	43.7	95.4

1102

1103 DEFAULT\_PERSON\_FACTORS - (used)

*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2..		
1104	1	1	1.00	1.00	1.00	
1105	1	1	2	0.26	0.25	0.26
1106	1	2	1	1.00	1.00	1.00
1107	1	2	2	0.23	0.22	0.23
1108	1	3	1	1.00	1.00	1.00
1109	1	3	2	0.66	0.65	0.68
1110	2	1	1	1.00	1.00	1.00
1111	2	1	2	0.37	0.32	0.38
1112	2	2	1	1.00	1.00	1.00
1113	2	2	2	0.40	0.41	0.40
1114	2	3	1	1.00	1.00	1.00
1115	2	3	2	0.49	0.45	0.48
1116	3	1	1	1.00	1.00	1.00
1117	3	1	2	0.09	0.09	0.09
1118	3	2	1	1.00	1.00	1.00
1119	3	2	2	0.24	0.28	0.24
1120	3	3	1	1.00	1.00	1.00
1121	3	3	2	0.26	0.33	0.27
1122	4	1	1	1.00	1.00	1.00
1123	4	1	2	0.03	0.03	0.03
1124	4	2	1	1.00	1.00	1.00
1125	4	2	2	0.11	0.14	0.08
1126	4	3	1	1.00	1.00	1.00
1127	4	3	2	0.11	0.12	0.16
1128	5	1	1	1.00	1.00	1.00
1129	5	1	2	0.35	0.35	0.35
1130	5	2	1	1.00	1.00	1.00
1131	5	2	2	1.50	1.50	1.50

1133	5	3	1	1.00	1.00	1.00
1134	5	3	2	8.35	8.35	8.35

1135

1136 DEFAULT\_PERSON\_FACTORS - (std)

1137	*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2..
1138	1	1	1	1.00	1.00
	1.00	1.00	1.00	1.00	
1139	1	1	2	0.13	0.15
	0.16	0.17	0.31		
1140	1	2	1	1.00	1.00
	1.00	1.00	1.00		
1141	1	2	2	0.13	0.14
	0.15	0.15	0.21		
1142	1	3	1	1.00	1.00
	1.00	1.00	1.00		
1143	1	3	2	0.71	0.79
	0.82	0.79	1.12		
1144	2	2	1	1.00	1.00
	1.00	1.00	1.00		
1145	2	2	2	0.46	0.46
	0.46	0.46	1.03		
1146	2	3	1	1.00	1.00
	1.00	1.00	1.00		
1147	2	3	2	0.46	0.46
	0.46	0.46	1.03		
1148	3	1	1	1.00	1.00
	1.00	1.00	1.00		
1149	3	1	2	0.20	0.20
	0.20	0.20	0.26		
1150	4	1	1	1.00	1.00
	1.00	1.00	1.00		
1151	5	1	1	1.00	1.00
	1.00	1.00	1.00		

1152

1153 DEFAULT\_PERSON\_FACTORS\_CHANGE - (used)

1154 \*% change p.a.

1155	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3
	ChangePer4	ChangePer5						
1156	2011	2080	1	1	2	0.00	0.00	0.00
1157	2011	2080	1	2	2	0.00	0.00	0.00

1158

1159 DEFAULT\_PERSON\_FACTORS\_CHANGE - (std)

1160 \*% change p.a.

1161	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3
	ChangePer4	ChangePer5						
1162	2011	2036	1	1	2	0.00	0.00	
	0.00	0.00	0.00					
1163	2011	2036	1	2	2	0.00	0.00	
	0.00	0.00	0.00					
1164	2011	2036	1	3	2	0.00	0.00	
	0.00	0.00	0.00					

1165

1166 INPUT\_SUMMARY

1167 Run name N25 Waterford to Glenmore - Purp  
 1168 DM scheme Do **Min**  
 1169 DS scheme Purple

1170

1171 Economic parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Teal\Economics\_Input\_TUBAv1.9.8  
 (Oct2020).txt

1172 Scheme parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Purple\TUBA\_Scheme\_Input\_Purple\_30year\_v1.9.8\_SPL\_1\_0.txt

1173

1174 First year of scheme costs 2020  
 1175 First Appraisal Year 2030

1176	Last Appraisal Year	2059
1177	Modelled years	2030 2045 2059
1178		
1179	Time period	Total hours
1180	AM Peak	646
1181	Inter Peak	2424
1182	PM Peak	640
1183	Total	3710

1184

1185

1186 Note: All monetary values are in 2011 market prices. All monetary values discounted to 2011 unless otherwise stated.

1187

1188 DM\_SCHEME\_COSTS

1189 Do minimum scheme costs. Undiscounted £000s

1190	Mode	Year	Prep.	Superv.	Constr.	Land
	Maint.	Oper.	Grant/Sub.	Dev._Cont		
1191	Road	2020	0	0	0	0
	0	0	0	0		
1192	Road	2021	0	0	0	0
	0	0	0	0		
1193	Road	2022	0	0	0	0
	0	0	0	0		
1194	Road	2023	0	0	0	0
	0	0	0	0		
1195	Road	2024	0	0	0	0
	0	0	0	0		
1196	Road	2025	0	0	0	0
	0	0	0	0		
1197	Road	2026	0	0	0	0
	0	0	0	0		
1198	Road	2027	0	0	0	0
	0	0	0	0		
1199	Road	2028	0	0	0	0
	0	0	0	0		
1200	Road	2029	0	0	0	0
	0	0	0	0		
1201	Road	2030	0	0	0	0
	0	0	0	0		
1202	Road	2031	0	0	0	0
	0	0	0	0		
1203	Road	2032	0	0	0	0
	0	0	0	0		
1204	Road	2033	0	0	0	0
	0	0	0	0		
1205	Road	2034	0	0	0	0
	0	0	0	0		
1206	Road	2035	0	0	0	0
	0	0	0	0		
1207	Road	2036	0	0	0	0
	0	0	0	0		
1208	Road	2037	0	0	0	0
	0	0	0	0		
1209	Road	2038	0	0	0	0
	0	0	0	0		
1210	Road	2039	0	0	0	0
	0	0	0	0		
1211	Road	2040	0	0	0	0
	0	0	0	0		
1212	Road	2041	0	0	0	0
	0	0	0	0		
1213	Road	2042	0	0	0	0
	0	0	0	0		
1214	Road	2043	0	0	0	0
	0	0	0	0		
1215	Road	2044	0	0	0	0
	0	0	0	0		
1216	Road	2045	0	0	0	0
	0	0	0	0		

1217	Road	2046	0	0	0	0	0
	0	0	0	0	0	0	0
1218	Road	2047	0	0	0	0	0
	0	0	0	0	0	0	0
1219	Road	2048	0	0	0	0	0
	0	0	0	0	0	0	0
1220	Road	2049	0	0	0	0	0
	0	0	0	0	0	0	0
1221	Road	2050	0	0	0	0	0
	0	0	0	0	0	0	0
1222	Road	2051	0	0	0	0	0
	0	0	0	0	0	0	0
1223	Road	2052	0	0	0	0	0
	0	0	0	0	0	0	0
1224	Road	2053	0	0	0	0	0
	0	0	0	0	0	0	0
1225	Road	2054	0	0	0	0	0
	0	0	0	0	0	0	0
1226	Road	2055	0	0	0	0	0
	0	0	0	0	0	0	0
1227	Road	2056	0	0	0	0	0
	0	0	0	0	0	0	0
1228	Road	2057	0	0	0	0	0
	0	0	0	0	0	0	0
1229	Road	2058	0	0	0	0	0
	0	0	0	0	0	0	0
1230	Road	2059	0	0	0	0	0
	0	0	0	0	0	0	0
1231	Bus	2020	0	0	0	0	0
	0	0	0	0	0	0	0
1232	Bus	2021	0	0	0	0	0
	0	0	0	0	0	0	0
1233	Bus	2022	0	0	0	0	0
	0	0	0	0	0	0	0
1234	Bus	2023	0	0	0	0	0
	0	0	0	0	0	0	0
1235	Bus	2024	0	0	0	0	0
	0	0	0	0	0	0	0
1236	Bus	2025	0	0	0	0	0
	0	0	0	0	0	0	0
1237	Bus	2026	0	0	0	0	0
	0	0	0	0	0	0	0
1238	Bus	2027	0	0	0	0	0
	0	0	0	0	0	0	0
1239	Bus	2028	0	0	0	0	0
	0	0	0	0	0	0	0
1240	Bus	2029	0	0	0	0	0
	0	0	0	0	0	0	0
1241	Bus	2030	0	0	0	0	0
	0	0	0	0	0	0	0
1242	Bus	2031	0	0	0	0	0
	0	0	0	0	0	0	0
1243	Bus	2032	0	0	0	0	0
	0	0	0	0	0	0	0
1244	Bus	2033	0	0	0	0	0
	0	0	0	0	0	0	0
1245	Bus	2034	0	0	0	0	0
	0	0	0	0	0	0	0
1246	Bus	2035	0	0	0	0	0
	0	0	0	0	0	0	0
1247	Bus	2036	0	0	0	0	0
	0	0	0	0	0	0	0
1248	Bus	2037	0	0	0	0	0
	0	0	0	0	0	0	0
1249	Bus	2038	0	0	0	0	0
	0	0	0	0	0	0	0
1250	Bus	2039	0	0	0	0	0
	0	0	0	0	0	0	0
1251	Bus	2040	0	0	0	0	0



1252	0	0	0	0	0	0	0	
	Bus	2041	0	0	0	0	0	
	0	0	0	0	0	0	0	
1253	Bus	2042	0	0	0	0	0	
	0	0	0	0	0	0	0	
1254	Bus	2043	0	0	0	0	0	
	0	0	0	0	0	0	0	
1255	Bus	2044	0	0	0	0	0	
	0	0	0	0	0	0	0	
1256	Bus	2045	0	0	0	0	0	
	0	0	0	0	0	0	0	
1257	Bus	2046	0	0	0	0	0	
	0	0	0	0	0	0	0	
1258	Bus	2047	0	0	0	0	0	
	0	0	0	0	0	0	0	
1259	Bus	2048	0	0	0	0	0	
	0	0	0	0	0	0	0	
1260	Bus	2049	0	0	0	0	0	
	0	0	0	0	0	0	0	
1261	Bus	2050	0	0	0	0	0	
	0	0	0	0	0	0	0	
1262	Bus	2051	0	0	0	0	0	
	0	0	0	0	0	0	0	
1263	Bus	2052	0	0	0	0	0	
	0	0	0	0	0	0	0	
1264	Bus	2053	0	0	0	0	0	
	0	0	0	0	0	0	0	
1265	Bus	2054	0	0	0	0	0	
	0	0	0	0	0	0	0	
1266	Bus	2055	0	0	0	0	0	
	0	0	0	0	0	0	0	
1267	Bus	2056	0	0	0	0	0	
	0	0	0	0	0	0	0	
1268	Bus	2057	0	0	0	0	0	
	0	0	0	0	0	0	0	
1269	Bus	2058	0	0	0	0	0	
	0	0	0	0	0	0	0	
1270	Bus	2059	0	0	0	0	0	
	0	0	0	0	0	0	0	
1271								
1272	DS_SCHEME_COSTS							
1273	Do something scheme costs. Undiscounted £000s							
1274	Mode	Year	Prep.	Superv.	Constr.	Land		
	Maint.	Oper.	Grant/Sub.	Dev._Cont				
1275	Road	2020	0	0	0	0	0	
	0	0	0	0	0	0	0	
1276	Road	2021	0	0	0	0	0	
	0	0	0	0	0	0	0	
1277	Road	2022	0	0	0	0	0	
	0	0	0	0	0	0	0	
1278	Road	2023	0	0	0	0	0	
	0	0	0	0	0	0	0	
1279	Road	2024	0	0	0	0	0	
	0	0	0	0	0	0	0	
1280	Road	2025	0	0	0	0	0	
	0	0	0	0	0	0	0	
1281	Road	2026	0	0	0	0	0	
	0	0	0	0	0	0	0	
1282	Road	2027	4826	0	31726	9989		
	0	0	0	0	0	0		
1283	Road	2028	965	3656	66918	9989		
	0	0	0	0	0	0		
1284	Road	2029	643	3656	34659	0		
	0	0	0	0	0	0		
1285	Road	2030	0	0	0	0		
	576	0	0	0	0	0		
1286	Road	2031	0	0	0	0		
	576	0	0	0	0	0		
1287	Road	2032	0	0	0	0		

1288	576	0	0	0	0	0	0
	Road	2033	0	0	0	0	0
1289	576	0	0	0	0	0	0
	Road	2034	0	0	0	0	0
1290	576	0	0	0	0	0	0
	Road	2035	0	0	0	0	0
1291	576	0	0	0	0	0	0
	Road	2036	0	0	0	0	0
1292	576	0	0	0	0	0	0
	Road	2037	0	0	0	0	0
1293	576	0	0	0	0	0	0
	Road	2038	0	0	0	0	0
1294	576	0	0	0	0	0	0
	Road	2039	0	0	0	0	0
1295	576	0	0	0	0	0	0
	Road	2040	0	0	0	0	0
1296	576	0	0	0	0	0	0
	Road	2041	0	0	0	0	0
1297	576	0	0	0	0	0	0
	Road	2042	0	0	0	0	0
1298	576	0	0	0	0	0	0
	Road	2043	0	0	0	0	0
1299	576	0	0	0	0	0	0
	Road	2044	0	0	0	0	0
1300	576	0	0	0	0	0	0
	Road	2045	0	0	0	0	0
1301	576	0	0	0	0	0	0
	Road	2046	0	0	0	0	0
1302	576	0	0	0	0	0	0
	Road	2047	0	0	0	0	0
1303	576	0	0	0	0	0	0
	Road	2048	0	0	0	0	0
1304	576	0	0	0	0	0	0
	Road	2049	0	0	0	0	0
1305	576	0	0	0	0	0	0
	Road	2050	0	0	0	0	0
1306	576	0	0	0	0	0	0
	Road	2051	0	0	0	0	0
1307	576	0	0	0	0	0	0
	Road	2052	0	0	0	0	0
1308	576	0	0	0	0	0	0
	Road	2053	0	0	0	0	0
1309	576	0	0	0	0	0	0
	Road	2054	0	0	0	0	0
1310	576	0	0	0	0	0	0
	Road	2055	0	0	0	0	0
1311	576	0	0	0	0	0	0
	Road	2056	0	0	0	0	0
1312	576	0	0	0	0	0	0
	Road	2057	0	0	0	0	0
1313	576	0	0	0	0	0	0
	Road	2058	0	0	0	0	0
1314	576	0	0	0	0	0	0
	Road	2059	0	0	0	0	0
1315	750	0	0	0	0	0	0
	Bus	2020	0	0	0	0	0
1316	0	0	0	0	0	0	0
	Bus	2021	0	0	0	0	0
1317	0	0	0	0	0	0	0
	Bus	2022	0	0	0	0	0
1318	0	0	0	0	0	0	0
	Bus	2023	0	0	0	0	0
1319	0	0	0	0	0	0	0
	Bus	2024	0	0	0	0	0
1320	0	0	0	0	0	0	0
	Bus	2025	0	0	0	0	0
1321	0	0	0	0	0	0	0
	Bus	2026	0	0	0	0	0

1322	Bus	2027	0	0	0	0	0
	0	0	0	0	0	0	0
1323	Bus	2028	0	0	0	0	0
	0	0	0	0	0	0	0
1324	Bus	2029	0	0	0	0	0
	0	0	0	0	0	0	0
1325	Bus	2030	0	0	0	0	0
	0	0	0	0	0	0	0
1326	Bus	2031	0	0	0	0	0
	0	0	0	0	0	0	0
1327	Bus	2032	0	0	0	0	0
	0	0	0	0	0	0	0
1328	Bus	2033	0	0	0	0	0
	0	0	0	0	0	0	0
1329	Bus	2034	0	0	0	0	0
	0	0	0	0	0	0	0
1330	Bus	2035	0	0	0	0	0
	0	0	0	0	0	0	0
1331	Bus	2036	0	0	0	0	0
	0	0	0	0	0	0	0
1332	Bus	2037	0	0	0	0	0
	0	0	0	0	0	0	0
1333	Bus	2038	0	0	0	0	0
	0	0	0	0	0	0	0
1334	Bus	2039	0	0	0	0	0
	0	0	0	0	0	0	0
1335	Bus	2040	0	0	0	0	0
	0	0	0	0	0	0	0
1336	Bus	2041	0	0	0	0	0
	0	0	0	0	0	0	0
1337	Bus	2042	0	0	0	0	0
	0	0	0	0	0	0	0
1338	Bus	2043	0	0	0	0	0
	0	0	0	0	0	0	0
1339	Bus	2044	0	0	0	0	0
	0	0	0	0	0	0	0
1340	Bus	2045	0	0	0	0	0
	0	0	0	0	0	0	0
1341	Bus	2046	0	0	0	0	0
	0	0	0	0	0	0	0
1342	Bus	2047	0	0	0	0	0
	0	0	0	0	0	0	0
1343	Bus	2048	0	0	0	0	0
	0	0	0	0	0	0	0
1344	Bus	2049	0	0	0	0	0
	0	0	0	0	0	0	0
1345	Bus	2050	0	0	0	0	0
	0	0	0	0	0	0	0
1346	Bus	2051	0	0	0	0	0
	0	0	0	0	0	0	0
1347	Bus	2052	0	0	0	0	0
	0	0	0	0	0	0	0
1348	Bus	2053	0	0	0	0	0
	0	0	0	0	0	0	0
1349	Bus	2054	0	0	0	0	0
	0	0	0	0	0	0	0
1350	Bus	2055	0	0	0	0	0
	0	0	0	0	0	0	0
1351	Bus	2056	0	0	0	0	0
	0	0	0	0	0	0	0
1352	Bus	2057	0	0	0	0	0
	0	0	0	0	0	0	0
1353	Bus	2058	0	0	0	0	0
	0	0	0	0	0	0	0
1354	Bus	2059	0	0	0	0	0
	0	0	0	0	0	0	0

1355  
1356 PRESENT\_VALUE\_COSTS  
1357 Scheme investment and operating costs (i.e. excluding grant/subsidy, developer

contributions and delays) and differences. £000s.

	Mode	Year	DM_scheme_costs	DS_scheme_costs	Difference
1358	Road	2020	0	0	0
1359	Road	2021	0	0	0
1360	Road	2022	0	0	0
1361	Road	2023	0	0	0
1362	Road	2024	0	0	0
1363	Road	2025	0	0	0
1364	Road	2026	0	0	0
1365	Road	2027	0	24849	24849
1366	Road	2028	0	41854	41854
1367	Road	2029	0	19231	19231
1368	Road	2030	0	273	273
1369	Road	2031	0	263	263
1370	Road	2032	0	253	253
1371	Road	2033	0	243	243
1372	Road	2034	0	234	234
1373	Road	2035	0	225	225
1374	Road	2036	0	216	216
1375	Road	2037	0	208	208
1376	Road	2038	0	200	200
1377	Road	2039	0	192	192
1378	Road	2040	0	185	185
1379	Road	2041	0	177	177
1380	Road	2042	0	171	171
1381	Road	2043	0	164	164
1382	Road	2044	0	158	158
1383	Road	2045	0	152	152
1384	Road	2046	0	146	146
1385	Road	2047	0	140	140
1386	Road	2048	0	135	135
1387	Road	2049	0	130	130
1388	Road	2050	0	125	125
1389	Road	2051	0	121	121
1390	Road	2052	0	117	117
1391	Road	2053	0	113	113
1392	Road	2054	0	109	109
1393	Road	2055	0	105	105
1394	Road	2056	0	102	102
1395	Road	2057	0	98	98
1396	Road	2058	0	95	95
1397	Road	2059	0	120	120
1398	Bus	2020	0	0	0
1399	Bus	2021	0	0	0
1400	Bus	2022	0	0	0
1401	Bus	2023	0	0	0
1402	Bus	2024	0	0	0
1403	Bus	2025	0	0	0
1404	Bus	2026	0	0	0
1405	Bus	2027	0	0	0
1406	Bus	2028	0	0	0
1407	Bus	2029	0	0	0
1408	Bus	2030	0	0	0
1409	Bus	2031	0	0	0
1410	Bus	2032	0	0	0
1411	Bus	2033	0	0	0
1412	Bus	2034	0	0	0
1413	Bus	2035	0	0	0
1414	Bus	2036	0	0	0
1415	Bus	2037	0	0	0
1416	Bus	2038	0	0	0
1417	Bus	2039	0	0	0
1418	Bus	2040	0	0	0
1419	Bus	2041	0	0	0
1420	Bus	2042	0	0	0
1421	Bus	2043	0	0	0
1422	Bus	2044	0	0	0
1423	Bus	2045	0	0	0
1424	Bus	2046	0	0	0

1426	Bus	2047	0	0	0
1427	Bus	2048	0	0	0
1428	Bus	2049	0	0	0
1429	Bus	2050	0	0	0
1430	Bus	2051	0	0	0
1431	Bus	2052	0	0	0
1432	Bus	2053	0	0	0
1433	Bus	2054	0	0	0
1434	Bus	2055	0	0	0
1435	Bus	2056	0	0	0
1436	Bus	2057	0	0	0
1437	Bus	2058	0	0	0
1438	Bus	2059	0	0	0
1439	Road	Total	0	90902	90902
1440	Bus	Total	0	0	0

1441

1442 TRIP\_MATRIX\_TOTALS

1443 Annualised total trip numbers (thousands)

1444	Submode	Year	Time period	DO MIN	DO SOM
1445	Car	2030	AM Peak	4719	4719
1446	Car	2030	Inter Peak	15931	15931
1447	Car	2030	PM Peak	4822	4822
1448	Car	2030	All	25472	25472
1449	Car	2045	AM Peak	4859	4859
1450	Car	2045	Inter Peak	16387	16387
1451	Car	2045	PM Peak	4962	4962
1452	Car	2045	All	26208	26208
1453	Car	2059	AM Peak	4861	4861
1454	Car	2059	Inter Peak	16428	16428
1455	Car	2059	PM Peak	4963	4963
1456	Car	2059	All	26252	26252
1457	OGV2	2030	AM Peak	287	287
1458	OGV2	2030	Inter Peak	1018	1018
1459	OGV2	2030	PM Peak	236	236
1460	OGV2	2030	All	1541	1541
1461	OGV2	2045	AM Peak	339	339
1462	OGV2	2045	Inter Peak	1209	1209
1463	OGV2	2045	PM Peak	279	279
1464	OGV2	2045	All	1828	1828
1465	OGV2	2059	AM Peak	361	361
1466	OGV2	2059	Inter Peak	1292	1292
1467	OGV2	2059	PM Peak	297	297
1468	OGV2	2059	All	1950	1950
1469	All	2030	AM Peak	5006	5006
1470	All	2030	Inter Peak	16948	16948
1471	All	2030	PM Peak	5059	5059
1472	All	2030	All	27013	27013
1473	All	2045	AM Peak	5198	5198
1474	All	2045	Inter Peak	17596	17596
1475	All	2045	PM Peak	5241	5241
1476	All	2045	All	28035	28035
1477	All	2059	AM Peak	5221	5221
1478	All	2059	Inter Peak	17721	17721
1479	All	2059	PM Peak	5260	5260
1480	All	2059	All	28202	28202

1481

1482 DM&DS\_USER\_COSTS

1483 Total value of user costs, DM and DS. £000s.

1484	Mode	Year	DMtot_time	DMtot_charge	DMtot_fuel	DMtot_nonfuel
	DStot_time	DStot_charge	DStot_fuel	DStot_nonfuel		
1485	Road	2030	104727	0	19837	20654
	104972	0	19916	20766		
1486	Road	2045	86732	0	12186	12416
	86819	0	12239	12489		
1487	Road	2059	73347	0	7656	7725
	73371	0	7689	7771		

1488

1489 FUEL\_CONSUMPTION

1490 Total fuel consumption, DM and DS. kilounits.

			Do minimum		Do something	
	Submode	Year	petrol	diesel	petrol	diesel
1491						
1492	Car	2030	11160	5939	11251	5983
1493	Car	2045	11511	6130	11618	6181
1494	Car	2059	11549	6151	11658	6203
1495	OGV2	2030	0	19097	0	19098
1496	OGV2	2045	0	22533	0	22538
1497	OGV2	2059	0	24009	0	24017
1498	All	2030	11160	25035	11251	25082
1499	All	2045	11511	28663	11618	28719
1500	All	2059	11549	30160	11658	30219
1501	Car	Total	342809	182521	345912	184010
1502	OGV2	Total	0	659576	0	659714
1503	All	Total	342809	842097	345912	843724
1504						
1505						

1506 CO2\_EMISSIONS\_UNTRADED

			Emissions (tonnes) (£000s, low central)			cost cost (£000s, high)	
	Submode	Year	DM	DS	Increase	DM	
	DS	Increase	DM	DS	Increase	DM	
	DS	Increase					
1507							
1508	Car	2030	40102	40420	319	1902	
1509	1918	15	381	384	3	381	
1510	384	3					
1510	Car	2045	41374	41744	370	2266	
1511	2286	20	218	220	2	218	
1511	220	2					
1511	Car	2059	41512	41889	376	2728	
1512	2752	25	133	134	1	133	
1512	134	1					
1512	OGV2	2030	48926	48930	4	2321	
1513	2321	0	464	464	0	464	
1513	464	0					
1513	OGV2	2045	57730	57743	12	3161	
1514	3162	1	304	304	0	304	
1514	304	0					
1514	OGV2	2059	61512	61531	19	4042	
1515	4043	1	196	197	0	196	
1515	197	0					
1515	All	2030	89027	89350	322	4223	
1516	4239	15	845	848	3	845	
1516	848	3					
1516	All	2031	89699	90026	326	4296	
1517	4312	16	819	822	3	819	
1517	822	3					
1517	All	2032	90371	90701	330	4370	
1518	4386	16	793	796	3	793	
1518	796	3					
1518	All	2033	91043	91377	334	4445	
1519	4461	16	768	771	3	768	
1519	771	3					
1519	All	2034	91715	92053	338	4521	
1520	4537	17	744	747	3	744	
1520	747	3					
1520	All	2035	92387	92729	342	4598	
1521	4615	17	721	724	3	721	
1521	724	3					
1521	All	2036	93058	93405	346	4676	
1522	4693	17	698	701	3	698	
1522	701	3					
1522	All	2037	93730	94080	350	4755	
1523	4772	18	676	679	3	676	
1523	679	3					
1523	All	2038	94402	94756	354	4835	
1524	4853	18	655	657	2	655	
1524	657	2					
1524	All	2039	95074	95432	358	4916	
1524	4935	19	634	636	2	634	

1525	636	2				
	All	2040	95746	96108	362	4998
	5017	19	614	616	2	614
	616	2				
1526	All	2041	96417	96784	366	5082
	5101	19	595	597	2	595
	597	2				
1527	All	2042	97089	97459	370	5166
	5186	20	576	578	2	576
	578	2				
1528	All	2043	97761	98135	374	5252
	5272	20	557	559	2	557
	559	2				
1529	All	2044	98433	98811	378	5339
	5360	21	540	542	2	540
	542	2				
1530	All	2045	99105	99487	382	5427
	5448	21	522	524	2	522
	524	2				
1531	All	2046	99385	99768	383	5495
	5516	21	504	506	2	504
	506	2				
1532	All	2047	99665	100049	384	5563
	5585	21	486	488	2	486
	488	2				
1533	All	2048	99944	100330	385	5633
	5654	22	468	470	2	468
	470	2				
1534	All	2049	100224	100610	386	5703
	5725	22	452	453	2	452
	453	2				
1535	All	2050	100504	100891	387	5802
	5824	22	438	439	2	438
	439	2				
1536	All	2051	100784	101172	388	5902
	5925	23	424	426	2	424
	426	2				
1537	All	2052	101064	101453	389	6004
	6027	23	411	412	2	411
	412	2				
1538	All	2053	101344	101734	390	6108
	6132	23	398	399	2	398
	399	2				
1539	All	2054	101624	102015	391	6214
	6238	24	386	387	1	386
	387	1				
1540	All	2055	101904	102296	392	6321
	6345	24	374	375	1	374
	375	1				
1541	All	2056	102184	102577	393	6430
	6455	25	362	363	1	362
	363	1				
1542	All	2057	102464	102858	394	6541
	6567	25	351	352	1	351
	352	1				
1543	All	2058	102744	103139	395	6654
	6680	26	340	341	1	340
	341	1				
1544	All	2059	103024	103419	395	6769
	6795	26	329	330	1	329
	330	1				
1545	Car	Total	1232082	1242817	10734	68119
	68714	596	7024	7085	60	7024
	7085	60				
1546	OGV2	Total	1689834	1690187	352	93921
	93941	20	9453	9454	2	9453
	9454	2				
1547	All	Total	2921917	2933004	11087	162039
	162655	616	16477	16539	62	16477





1572	All	2044	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1573	All	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1574	All	2046	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1575	All	2047	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1576	All	2048	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1577	All	2049	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1578	All	2050	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1579	All	2051	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1580	All	2052	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1581	All	2053	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1582	All	2054	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1583	All	2055	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1584	All	2056	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1585	All	2057	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1586	All	2058	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1587	All	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1588	Car	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1589	OGV2	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1590	All	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0

1591							
1592	CO2_EMISSIONS_BY_TIME_PERIOD_UNTRADED						
1593			Emissions (tonnes)			cost	
			(£000s, low)			cost (£000s,	
			central)			high)	
1594	Submode	Year	DM	DS	Increase	cost	DM
	DS	Increase	DM	DS	Increase	DM	DM
	DS	Increase					
1595	AM Peak	2030	17616	17724	108	836	
	841	5	167	168	1	167	
	168	1					
1596	AM Peak	2045	19478	19604	125	1067	

	1074	7	103	103	1	103
	103	1				
1597	AM Peak	2059	20145	20271	126	1324
	1332	8	64	65	0	64
	65	0				
1598	Inter Peak	2030	55393	55537	144	2628
	2635	7	526	527	1	526
	527	1				
1599	Inter Peak	2045	61964	62140	177	3393
	3403	10	327	328	1	327
	328	1				
1600	Inter Peak	2059	64617	64803	186	4246
	4258	12	206	207	1	206
	207	1				
1601	PM Peak	2030	16019	16089	70	760
	763	3	152	153	1	152
	153	1				
1602	PM Peak	2045	17662	17743	80	967
	972	4	93	94	0	93
	94	0				
1603	PM Peak	2059	18262	18345	83	1200
	1205	5	58	59	0	58
	59	0				
1604	AM Peak	Total	574452	578077	3625	31847
	32048	201	3243	3263	20	3243
	3263	20				
1605	Inter Peak	Total	1826246	1831356	5110	101299
	101584	284	10290	10319	29	10290
	10319	29				
1606	PM Peak	Total	521219	523571	2352	28893
	29024	131	2943	2957	13	2943
	2957	13				

1607

1608 NOTE: The cost of any EU Allowances (EUAs) purchased to cover traded emissions (i.e. emissions from sectors covered by the EU Emissions Trading System)

1609 will be reflected in the purchase price of traded sector goods (such as electricity).

1610 Since the purchase price is used in the costs, considered in transport appraisal,

1611 the cost of the relevant EUAs will be included in the cost benefit analysis,

1612 "internalising" the costs of emissions from traded sectors.

1613 The CO2 EMISSIONS BY TIME PERIOD TRADED reported in the table below are therefore provided for information purposes only - they are not included in the

1614 Economic Efficiency of the Transport System (TEE) table.

1615 For further information, please refer to TAG Unit A-3 para. 4.1.5 and 4.2.9

CO2_EMISSIONS_BY_TIME_PERIOD_TRADED		Emissions (tonnes)				cost	
		(£000s, low)		central		(£000s, high)	
Submode	Year	DM	DS	Increase	cost	cost	
DS	Increase	DM	DS	Increase	DM	DM	
DS	Increase						
1618	AM Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0						
1619	AM Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0						
1620	AM Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0						
1621	Inter Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0						
1622	Inter Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0						
1623	Inter Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0						

1624	PM Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1625	PM Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1626	PM Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1627	AM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1628	Inter Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1629	PM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					

1630  
1631 MODE  
1632 User benefits and changes in revenues by mode, all years. £000s.

1633	Mode	Year	User	User_Charges	Vehicle_Operating_Cost	
1634	Operator_Rev	Indirect	Time	PT_fares_(pri	Fuel	Non_fuel
			PT_fares_(pri	Taxes		
1635	Road	2030	-245	0	-79	-112
	0	47				
1636	Road	2031	-232	0	-77	-109
	0	46				
1637	Road	2032	-220	0	-75	-106
	0	45				
1638	Road	2033	-208	0	-73	-103
	0	43				
1639	Road	2034	-196	0	-71	-100
	0	42				
1640	Road	2035	-184	0	-69	-98
	0	41				
1641	Road	2036	-173	0	-67	-95
	0	40				
1642	Road	2037	-162	0	-65	-92
	0	39				
1643	Road	2038	-152	0	-64	-90
	0	38				
1644	Road	2039	-142	0	-62	-87
	0	37				
1645	Road	2040	-132	0	-60	-85
	0	36				
1646	Road	2041	-122	0	-58	-82
	0	35				
1647	Road	2042	-113	0	-57	-80
	0	34				
1648	Road	2043	-104	0	-55	-78
	0	33				
1649	Road	2044	-95	0	-54	-75
	0	32				
1650	Road	2045	-86	0	-52	-73
	0	31				
1651	Road	2046	-81	0	-50	-70
	0	30				
1652	Road	2047	-76	0	-48	-68
	0	29				
1653	Road	2048	-71	0	-47	-65
	0	28				
1654	Road	2049	-66	0	-45	-63
	0	27				
1655	Road	2050	-61	0	-44	-61
	0	26				
1656	Road	2051	-57	0	-42	-59
	0	25				

1657	Road	2052	-52	0	-41	-57
	0	24				
1658	Road	2053	-48	0	-40	-55
	0	23				
1659	Road	2054	-44	0	-38	-53
	0	23				
1660	Road	2055	-40	0	-37	-52
	0	22				
1661	Road	2056	-36	0	-36	-50
	0	21				
1662	Road	2057	-32	0	-35	-49
	0	21				
1663	Road	2058	-28	0	-34	-47
	0	20				
1664	Road	2059	-25	0	-33	-45
	0	19				
1665	Road	Total	-3281	0	-1609	-2260
	0	954				

1666

1667 SUBMODE

1668 User benefits and changes in revenues by submode/vehicle type, modelled years and total. £000s.

1669 Submode Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1670 Time PT\_fares\_(pri Fuel Non\_fuel  
PT\_fares\_(pri Taxes

1671 Car 2030 -218 0 -79 -108  
0 47

1672 Car 2045 -65 0 -51 -70  
0 30

1673 Car 2059 -4 0 -31 -43  
0 19

1674 OGV2 2030 -27 0 -1 -4  
0 0

1675 OGV2 2045 -22 0 -1 -3  
0 1

1676 OGV2 2059 -21 0 -1 -2  
0 1

1677 All 2030 -245 0 -79 -112  
0 47

1678 All 2045 -86 0 -52 -73  
0 31

1679 All 2059 -25 0 -33 -45  
0 19

1680 Car Total -2600 0 -1571 -2167  
0 935

1681 OGV2 Total -681 0 -38 -93  
0 20

1682 All Total -3281 0 -1609 -2260  
0 954

1683

1684 PERSON\_TYPES

1685 User benefits and changes in revenues by person type, modelled years and total. £000s.

1686 Person\_type Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1687 Time PT\_fares\_(pri Fuel Non\_fuel  
PT\_fares\_(pri Taxes

1688 All 2030 -245 0 -79 -112  
0 47

1689 All 2045 -86 0 -52 -73  
0 31

1690 All 2059 -25 0 -33 -45  
0 19

1691 All Total -3281 0 -1609 -2260  
0 954

1692

1693 PURPOSE

1694 User benefits and changes in revenues by trip purpose, modelled years and total. £000s.

1695 Purpose Year User User\_Charges Vehicle\_Operating\_Cost

1696	Operator_Rev	Indirect	Time PT_fares_(pri		Fuel	Non_fuel	
			PT_fares_(pri	Taxes			
1697	Business	2030	-116	0	-12	-24	
	0	6					
1698	Business	2045	-57	0	-8	-15	
	0	5					
1699	Business	2059	-34	0	-6	-9	
	0	3					
1700	Commuting	2030	-47	0	-32	-42	
	0	19					
1701	Commuting	2045	-6	0	-21	-28	
	0	13					
1702	Commuting	2059	10	0	-13	-17	
	0	8					
1703	Other	2030	-82	0	-35	-46	
	0	21					
1704	Other	2045	-23	0	-23	-31	
	0	14					
1705	Other	2059	-0	0	-14	-19	
	0	9					
1706	Business	Total	-1969	0	-257	-463	
	0	140					
1707	Commuting	Total	-356	0	-644	-857	
	0	388					
1708	Other	Total	-957	0	-708	-941	
	0	426					
1709							
1710	PERIOD						
1711	User benefits and changes in revenues by time period, modelled years and total. £000s.						
1712	Period	Year	User	User_Charges	Vehicle_Operating_Cost		
	Operator_Rev	Indirect	Time PT_fares_(pri		Fuel	Non_fuel	
			PT_fares_(pri	Taxes			
1713							
1714	AM Peak	2030	48	0	-27	-36	
	0	16					
1715	AM Peak	2045	70	0	-17	-23	
	0	10					
1716	AM Peak	2059	71	0	-11	-14	
	0	6					
1717	Inter Peak	2030	-357	0	-35	-52	
	0	21					
1718	Inter Peak	2045	-248	0	-24	-35	
	0	14					
1719	Inter Peak	2059	-191	0	-15	-22	
	0	9					
1720	PM Peak	2030	64	0	-18	-24	
	0	11					
1721	PM Peak	2045	91	0	-11	-15	
	0	7					
1722	PM Peak	2059	95	0	-7	-9	
	0	4					
1723	AM Peak	Total	1949	0	-533	-720	
	0	318					
1724	Inter Peak	Total	-7798	0	-729	-1074	
	0	428					
1725	PM Peak	Total	2567	0	-347	-466	
	0	208					
1726							
1727	NON MONETISED TIME BENEFITS BY TIME SAVING						
1728	Time benefits (thousands of person hrs) by size of time saving						
1729	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins	0
	to 2 mins	2 to 5 mins	> 5 mins				
1730	Car	Business	2030	0		0	
	-7	3	0	0			
1731	Car	Business	2045	0		0	
	-6	4	0	0			
1732	Car	Business	2059	0		0	
	-5	5	0	0			



1769	Car	Other	Total	0	0	0
	-3582	2625		0	0	
1770	OGV2	Business	2030	0	0	0
	-39	13		0	0	
1771	OGV2	Business	2045	0	0	0
	-39	17		0	0	
1772	OGV2	Business	2059	0	0	0
	-37	16		0	0	
1773	OGV2	Business	Total	0	0	0
	-1152	470		0	0	
1774	OGV2	Commuting	2030	0	0	0
	0	0		0	0	
1775	OGV2	Commuting	2045	0	0	0
	0	0		0	0	
1776	OGV2	Commuting	2059	0	0	0
	0	0		0	0	
1777	OGV2	Commuting	Total	0	0	0
	0	0		0	0	
1778	OGV2	Other	2030	0	0	0
	0	0		0	0	
1779	OGV2	Other	2045	0	0	0
	0	0		0	0	
1780	OGV2	Other	2059	0	0	0
	0	0		0	0	
1781	OGV2	Other	Total	0	0	0
	0	0		0	0	
1782						
1783	TOTAL BENEFITS BY TIME SAVING					
1784	Total benefits (£000s) by size of time saving					
1785	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins
	to 2 mins	2 to 5 mins	> 5 mins			0
1786	Car	Business	2030	0	0	0
	-175	55		0	0	
1787	Car	Business	2045	0	0	0
	-113	59		0	0	
1788	Car	Business	2059	0	0	0
	-86	61		0	0	
1789	Car	Business	Total	0	0	0
	-3632	1750		0	0	
1790	Car	Commuting	2030	0	0	0
	-151	30		0	0	
1791	Car	Commuting	2045	0	0	0
	-96	41		0	0	
1792	Car	Commuting	2059	0	0	0
	-68	48		0	0	
1793	Car	Commuting	Total	0	0	0
	-3050	1197		0	0	
1794	Car	Other	2030	0	0	0
	-210	47		0	0	
1795	Car	Other	2045	0	0	0
	-134	57		0	0	
1796	Car	Other	2059	0	0	0
	-97	63		0	0	
1797	Car	Other	Total	0	0	0
	-4283	1679		0	0	
1798	OGV2	Business	2030	0	0	0
	-48	16		0	0	
1799	OGV2	Business	2045	0	0	0
	-45	19		0	0	
1800	OGV2	Business	2059	0	0	0
	-41	17		0	0	
1801	OGV2	Business	Total	0	0	0
	-1342	535		0	0	
1802	OGV2	Commuting	2030	0	0	0
	-0	0		0	0	
1803	OGV2	Commuting	2045	0	0	0
	-0	0		0	0	
1804	OGV2	Commuting	2059	0	0	0
	-0	0		0	0	

1805	OGV2	Commuting	Total	0	0
	-5	3	0	0	0
1806	OGV2	Other	2030	0	0
	-0	0	0	0	0
1807	OGV2	Other	2045	0	0
	-0	0	0	0	0
1808	OGV2	Other	2059	0	0
	-0	0	0	0	0
1809	OGV2	Other	Total	0	0
	-3	1	0	0	0

1810

1811 NON MONETISED TIME BENEFITS BY DISTANCE

1812 Time benefits (thousands of person hrs) by distance

1813 Vehicle type Purpose Year < 1 kms 1 to 5 kms 5 to 10 kms  
10 to 15 kms 15 to 20 kms 20 to 50 kms 50 to 100 kms >100 kms

1814	Car	Business	2030	-4	0	0
	0	0	0	0	0	0
1815	Car	Business	2045	-2	0	0
	0	0	0	0	0	0
1816	Car	Business	2059	-1	0	0
	0	0	0	0	0	0
1817	Car	Business	Total	-65	0	0
	0	0	0	0	0	0
1818	Car	Commuting	2030	-6	0	0
	0	0	0	0	0	0
1819	Car	Commuting	2045	-1	0	0
	0	0	0	0	0	0
1820	Car	Commuting	2059	2	0	0
	0	0	0	0	0	0
1821	Car	Commuting	Total	-51	0	0
	0	0	0	0	0	0
1822	Car	Other	2030	-13	0	0
	0	0	0	0	0	0
1823	Car	Other	2045	-5	0	0
	0	0	0	0	0	0
1824	Car	Other	2059	-0	0	0
	0	0	0	0	0	0
1825	Car	Other	Total	-167	0	0
	0	0	0	0	0	0
1826	OGV2	Business	2030	0	0	0
	0	0	0	-1	-0	0
1827	OGV2	Business	2045	0	0	0
	-0	0	0	-1	-0	0
1828	OGV2	Business	2059	0	0	0
	-0	0	0	-1	-0	0
1829	OGV2	Business	Total	0	0	0
	-0	0	0	-30	-6	0
1830	OGV2	Commuting	2030	0	0	0
	0	0	0	-0	-0	0
1831	OGV2	Commuting	2045	0	0	0
	-0	0	0	-0	-0	0
1832	OGV2	Commuting	2059	0	0	0
	-0	0	0	-0	-0	0
1833	OGV2	Commuting	Total	0	0	0
	-0	0	0	-2	-1	0
1834	OGV2	Other	2030	0	0	0
	0	0	0	-0	-0	0
1835	OGV2	Other	2045	0	0	0
	-0	0	0	-0	-0	0
1836	OGV2	Other	2059	0	0	0
	-0	0	0	-0	-0	0
1837	OGV2	Other	Total	0	0	0
	-0	0	0	-2	-0	0

1838

1839 MONETISED TIME BENEFITS BY DISTANCE

1840 Time benefits (£000s) by distance

1841 Vehicle type Purpose Year < 1 kms 1 to 5 kms 5 to 10 kms  
10 to 15 kms 15 to 20 kms 20 to 50 kms 50 to 100 kms >100 kms

1842	Car	Business	2030	-89	0	0
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1843	0	0	0	0	0	0	0	0
1843	Car	Business	2045	-35	0	0	0	0
1844	0	0	0	0	0	0	0	0
1844	Car	Business	2059	-13	0	0	0	0
1845	0	0	0	0	0	0	0	0
1845	Car	Business	Total	-1287	0	0	0	0
1846	0	0	0	0	0	0	0	0
1846	Car	Commuting	2030	-47	0	0	0	0
1847	0	0	0	0	0	0	0	0
1847	Car	Commuting	2045	-6	0	0	0	0
1848	0	0	0	0	0	0	0	0
1848	Car	Commuting	2059	10	0	0	0	0
1849	0	0	0	0	0	0	0	0
1849	Car	Commuting	Total	-356	0	0	0	0
1850	0	0	0	0	0	0	0	0
1850	Car	Other	2030	-82	0	0	0	0
1851	0	0	0	0	0	0	0	0
1851	Car	Other	2045	-23	0	0	0	0
1852	0	0	0	0	0	0	0	0
1852	Car	Other	2059	-0	0	0	0	0
1853	0	0	0	0	0	0	0	0
1853	Car	Other	Total	-957	0	0	0	0
1854	0	0	0	0	0	0	0	0
1854	OGV2	Business	2030	0	0	0	0	0
1855	0	0	0	-22	-5	0	0	0
1855	OGV2	Business	2045	0	0	0	0	0
1856	-0	0	0	-18	-4	0	0	0
1856	OGV2	Business	2059	0	-0	0	0	0
1857	-0	0	0	-17	-3	0	0	0
1857	OGV2	Business	Total	0	0	0	0	0
1858	-0	1	4	-564	-122	0	0	0
1858	OGV2	Commuting	2030	0	0	0	0	0
1859	0	0	0	0	0	0	0	0
1859	OGV2	Commuting	2045	0	0	0	0	0
1860	0	0	0	0	0	0	0	0
1860	OGV2	Commuting	2059	0	0	0	0	0
1861	0	0	0	0	0	0	0	0
1861	OGV2	Commuting	Total	0	0	0	0	0
1862	0	0	0	0	0	0	0	0
1862	OGV2	Other	2030	0	0	0	0	0
1863	0	0	0	0	0	0	0	0
1863	OGV2	Other	2045	0	0	0	0	0
1864	0	0	0	0	0	0	0	0
1864	OGV2	Other	2059	0	0	0	0	0
1865	0	0	0	0	0	0	0	0
1865	OGV2	Other	Total	0	0	0	0	0
1866	0	0	0	0	0	0	0	0

1866 TOTAL BENEFITS BY DISTANCE

1867 Total benefits (£000s) by distance

1869	Vehicle type	Purpose	Year	< 1 kms	1 to 5 kms	5 to 10 kms	>10 kms
1870	10 to 15 kms	15 to 20 kms	20 to 50 kms	50 to 100 kms	100 to 150 kms	150 to 200 kms	>200 kms
1870	Car	Business	2030	-120	0	0	0
1871	0	0	0	0	0	0	0
1871	Car	Business	2045	-54	0	0	0
1872	0	0	0	0	0	0	0
1872	Car	Business	2059	-25	0	0	0
1873	0	0	0	0	0	0	0
1873	Car	Business	Total	-1882	0	0	0
1874	0	0	0	0	0	0	0
1874	Car	Commuting	2030	-121	0	0	0
1875	0	0	0	0	0	0	0
1875	Car	Commuting	2045	-54	0	0	0
1876	0	0	0	0	0	0	0
1876	Car	Commuting	2059	-20	0	0	0
1877	0	0	0	0	0	0	0
1877	Car	Commuting	Total	-1853	0	0	0
1878	0	0	0	0	0	0	0
1878	Car	Other	2030	-164	0	0	0

1879	Car	Other	2045	-77	0	0
	0	0	0	0	0	0
1880	Car	Other	2059	-33	0	0
	0	0	0	0	0	0
1881	Car	Other	Total	-2604	0	0
	0	0	0	0	0	0
1882	OGV2	Business	2030	0	0	0
	0	0	0	-26	-6	0
1883	OGV2	Business	2045	0	0	0
	-0	0	0	-22	-5	0
1884	OGV2	Business	2059	0	-0	0
	-0	0	0	-20	-4	0
1885	OGV2	Business	Total	0	0	0
	-0	1	4	-670	-143	0
1886	OGV2	Commuting	2030	0	0	0
	0	0	0	-0	-0	0
1887	OGV2	Commuting	2045	0	0	0
	-0	0	0	-0	-0	0
1888	OGV2	Commuting	2059	0	-0	0
	-0	0	0	-0	-0	0
1889	OGV2	Commuting	Total	0	0	0
	-0	0	0	-2	-0	0
1890	OGV2	Other	2030	0	0	0
	0	0	0	-0	-0	0
1891	OGV2	Other	2045	0	0	0
	-0	0	0	-0	-0	0
1892	OGV2	Other	2059	0	-0	0
	-0	0	0	-0	-0	0
1893	OGV2	Other	Total	0	0	0
	-0	0	0	-2	-0	0

1894

1895 SENSITIVITY

1896 Total user benefits as a percentage of total DM user costs

1897 Modelled Years

1898	Mode	2030	2045	2059
1899	Road	-0.30%	-0.19%	-0.12%

1900

1901 Economy:Economic Efficiency of the Transport System(TEE)

1902

1903	Consumer - Commuting user benefits	All Modes
	Road	Bus
1904	Travel Time	-356
	-356	0
1905	Vehicle operating costs	-1500
	-1500	0
1906	User charges	0
	0	0
1907	During Construction & Maintenance	0
	0	0
1908	NET CONSUMER - COMMUTING BENEFITS	-1856
	-1856	0

1909	Consumer - Other user benefits	All Modes
	Road	Bus
1911	Travel Time	-957
	-957	0
1912	Vehicle operating costs	-1649
	-1649	0
1913	User charges	0
	0	0
1914	During Construction & Maintenance	0
	0	0
1915	NET CONSUMER - OTHER BENEFITS	-2606
	-2606	0

1916	Business	All Modes	Road	Personal	Road	Freight	Bus
1917	Personal	Bus	Freight				
1918	Travel Time	-1969		-1287			

1919	-681	0	0		
	Vehicle operating costs			-720	-595
	-126	0	0		
1920	User charges			0	0
	0	0	0		
1921	During Construction & Maintenance			0	0
	0	0	0		
1922	Subtotal			-2689	-1882
	-807	0	0		

1923					
1924	Private Sector Provider Impacts				
1925	Revenue			0	
	0		0		
1926	Operating costs			0	
	0		0		
1927	Investment costs			0	
	0		0		
1928	Grant/subsidy			0	
	0		0		
1929	Subtotal			0	
	0		0		

1930					
1931	Other business Impacts				
1932	Developer contributions			0	
	0		0		
1933	NET BUSINESS IMPACT			-2689	

1934					
1935	TOTAL				
1936	Present Value of Transport Economic				
1937	Efficiency Benefits (TEE)			-7151	

1938

1939 Note: Benefits appear as positive numbers, while costs appear as negative numbers.

1940 Note: All entries are present values discounted to 2011, in 2011 prices

1941					
1942	Public Accounts				
1943	Local Government Funding	ALL MODES	Road		
	Bus				
1944	Revenue	0	0	0	
1945	Operating Costs	0	0	0	
1946	Investment Costs	0	0	0	
1947	Developer Contributions	0	0	0	
1948	Grant/Subsidy Payments	0	0	0	
1949	NET IMPACT	0	0	0	

1950					
1951	Central Government Funding: Transport	ALL MODES	Road		
	Bus				
1952	Revenue	0	0	0	
1953	Operating costs	4968	4968	0	
1954	Investment costs	85933	85933	0	
1955	Developer Contributions	0	0	0	
1956	Grant/Subsidy Payments	0	0	0	
1957	NET IMPACT	90902	90902	0	

1958					
1959	Central Government Funding: Non-Transport				
1960					
1961	Indirect Tax Revenues	-954	-954	0	
1962					
1963	TOTALS				
1964	Broad Transport Budget	90902	90902	0	
1965	Wider Public Finances	-954	-954	0	

1966

1967 Note: Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.

1968 Note: All entries are present values discounted to 2011, in 2011 prices

1969

1970 Analysis of Monetised Costs and Benefits

1971					
1972	Greenhouse Gases				-62
1973					

1974	Economic Efficiency: Consumer Users (Commuting)	-1856
1975	Economic Efficiency: Consumer Users (Other)	-2606
1976	Economic Efficiency: Business Users and Providers	-2689
1977	Wider Public Finances (Indirect Taxation Revenues)	954
1978	Present Value of Benefits (PVB)	-6259
1979		
1980	Broad Transport Budget	90902
1981	Present Value of Costs (PVC)	90902
1982		
1983	OVERALL IMPACTS	
1984	Net Present Value (NPV)	-97161
1985	Benefit to Cost Ratio (BCR)	-0.069
1986		
1987	Note: This table includes costs and benefits which are regularly or occasionally presented in monetised form in	
1988	transport appraisals, together with some where monetisation is in prospect. There may also be other significant	
1989	costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis	
1990	presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.	
1991		
1992		
1993	TUBA Run Information	
1994	- calculations completed	
1995		
1996	File Summary	
1997	- Scheme File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Purple\TUBA_Scheme_Input_Purple_30year_v1.9.8_SPL_1_0.txt	
1998	- Economic File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Teal\Economics_Input_TUBAv1.9.8 (Oct2020).txt	
1999	- Output File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Purple\TUBA_Scheme_Input_Purple_30year_v1.9.8_SPL_1_0.out	
2000		
2001	Elapsed time : 0hrs 0mins 5sec	
2002		
2003		

1 Transport User Benefit Appraisal TUBA (64-BIT) 1.9.8(1xA) - Interim  
2 Program run on Mon Nov 16, 2020 at 17:59:04  
3

4 ERRORS AND WARNINGS  
5 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
year 2080 is ignored  
6 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
year 2080 is ignored  
7 3 Warnings found  
8  
9

10 TUBA ECONOMICS FILE DIFFERENCES

11  
12 PARAMETERS - (used)  
13 TUBA\_version 1.9.8  
14 base\_year 2011  
15 pres\_val\_year 2011  
16 GDP\_base 100.00 0.00 0.00  
17 av\_ind\_tax 18.30 0.00 0.00  
18 nt\_carbdxvalues 20.00 20.00 20.00  
19

20 PARAMETERS - (std)  
21 TUBA\_version 1.9.8  
22 base\_year 2010  
23 pres\_val\_year 2010  
24 GDP\_base 100.00 0.00 0.00  
25 av\_ind\_tax 19.00 0.00 0.00  
26 nt\_carbdxvalues 26.60 79.80 53.20  
27 t\_carbdxvalues 11.80 11.80 11.80  
28

29 VEHICLE\_TYPE/SUBMODE - (used)

*no.	mode	new_mode	P&R	type	description
1	1	N	N	per	Car
2	1	N	N	per	LGV
3	1	N	N	fre	OGV1
4	1	N	N	fre	OGV2
5	2	N	N	per	Bus
6	3	N	N	per	Light Rail
7	3	N	N	per	Heavy Rail

38  
39 VEHICLE\_TYPE/SUBMODE - (std)

*no.	mode	new_mode	P&R	type	description
1	1	N	N	per	Car
2	1	N	N	per	Personal LGV
3	1	N	N	fre	Freight LGV
4	1	N	N	fre	OGV1
5	1	N	N	fre	OGV2
6	2	N	N	per	Bus
7	3	N	N	per	Light Rail
8	3	N	N	per	Heavy rail

49 FUEL\_TYPE - (used)

*no.	name
1	petrol

```

53         2      diesel
54
55 FUEL_TYPE - (std)
56 *no.      name
57     1      Petrol
58     2      Diesel
59     3      Electric
60
61 TIME_PERIODS - (used)
62 *no.      description      comments
63     1      AM Peak          (8-9)
64     2      Inter Peak       (Avg
65     3      PM Peak          (17-1
66
67 TIME_PERIODS - (std)
68 *no.      description      comments
69     1      AM peak          (7-10 weekdays)
70     2      PM peak          (4-7 weekdays)
71     3      Inter-peak       (10-4 weekdays)
72     4      Off-peak         (7-7 weekdays)
73     5      Weekend          (weekend)
74
75 BREAKPOINTS - (used)
76 *description breakpoint1 breakpoint2 ..
77     Distance      1.0          5.0          10.0         15.0
78     20.0          50.0         100.0
79     TimeSaving    -5.0         -2.0         0.0          2.0
80     5.0
81
82 BREAKPOINTS - (std)
83 *description breakpoint1 breakpoint2 ..
84     Distance      1.0          5.0          10.0         25.0
85     50.0          100.0        200.0
86     TimeSaving    -5.0         -2.0         0.0          2.0
87     5.0
88
89 DISCOUNT_RATE - (used)
90 *% change p.a.
91 *Start_yr      End_yr      Rate
92     1           30         4.00
93     31          60         3.50
94     61          100        3.00
95
96 DISCOUNT_RATE - (std)
97 *% change p.a.
98 *Start_yr      End_yr      Rate
99     1           30         3.50
100    31          75         3.00
101    76          80         2.50
102
103 VALUE_OF_TIME_ALLOCATION - (used)
104 *Vtype/submode Purpose_type Person_type VOT_METHOD
105     1 1 1 3
106     1 2 1 3
107     1 3 1 3
108     1 1 2 3
109     1 2 2 3
110     1 3 2 3
111     3 1 1 3
112     3 2 1 3
113     3 3 1 3
114     3 1 2 3
115     3 2 2 3
116     3 3 2 3
117
118 VALUE_OF_TIME_ALLOCATION - (std)
119 *Vtype/submode Purpose_type Person_type VOT_METHOD
120     1 1 1 1
121     1 1 2 1

```

```

118         8   1   2   1
119
120 VALUE_OF_TIME_METHOD1 - (used)
121 *pence per hour
122 *Vtype/submode Person_type U_purpose1 U_purpose2 U_purpose3 .. xmid_purpose1
xmid_purpose2 xmis_purpose3 .. k_purpose1 k_purpose2 k_purpose3 ..
123
124 VALUE_OF_TIME_METHOD1 - (std)
125 *pence per hour
126 *Vtype/submode Person_type U_purpose1 U_purpose2 U_purpose3 .. xmid_purpose1
xmid_purpose2 xmis_purpose3 .. k_purpose1 k_purpose2 k_purpose3 ..
127     1           1           2480.0           0.0           0.0
128     67.0         0.0           0.0           67.0           0.0           0.0
129     1           2           2480.0           0.0           0.0           0.0
130     67.0         0.0           0.0           67.0           0.0           0.0
131     2           1           0.0           0.0           0.0           0.0
132     0.0          0.0           0.0           0.0           0.0           0.0
133     2           2           0.0           0.0           0.0           0.0
134     0.0          0.0           0.0           0.0           0.0           0.0
135     3           1           0.0           0.0           0.0           0.0
136     0.0          0.0           0.0           0.0           0.0           0.0
137     3           2           0.0           0.0           0.0           0.0
138     0.0          0.0           0.0           0.0           0.0           0.0
139     4           1           0.0           0.0           0.0           0.0
140     0.0          0.0           0.0           0.0           0.0           0.0
141     4           2           0.0           0.0           0.0           0.0
142     0.0          0.0           0.0           0.0           0.0           0.0
143     5           1           0.0           0.0           0.0           0.0
144     0.0          0.0           0.0           0.0           0.0           0.0
145     5           2           0.0           0.0           0.0           0.0
146     0.0          0.0           0.0           0.0           0.0           0.0
147     6           1           0.0           0.0           0.0           0.0
148     0.0          0.0           0.0           0.0           0.0           0.0
149     6           2           0.0           0.0           0.0           0.0
150     0.0          0.0           0.0           0.0           0.0           0.0
151     7           1           0.0           0.0           0.0           0.0
152     0.0          0.0           0.0           0.0           0.0           0.0
153     7           2           0.0           0.0           0.0           0.0
154     0.0          0.0           0.0           0.0           0.0           0.0
155     8           1           0.0           0.0           0.0           0.0
156     0.0          0.0           0.0           0.0           0.0           0.0
157     8           2           3647.0          0.0           0.0           0.0
158     107.0        0.0           0.0           64.0           0.0           0.0
159
160 VALUE_OF_TIME_METHOD2 - (used)
161 *pence per hour
162 *Vtype/submode Person_type 0_50km_purpose1 0_50km_purpose2 0_50km_purpose3 ..
50_100km_purpose1 50_100km_purpose2 50_100km_purpose3 .. 100_200km_purpose1
100_200km_purpose2 100_200km_purpose3 .. 200+km_purpose1 200+km_purpose2
200+km_purpose3..
163
164 VALUE_OF_TIME_METHOD2 - (std)
165 *pence per hour
166 *Vtype/submode Person_type 0_50km_purpose1 0_50km_purpose2 0_50km_purpose3 ..
50_100km_purpose1 50_100km_purpose2 50_100km_purpose3 .. 100_200km_purpose1
100_200km_purpose2 100_200km_purpose3 .. 200+km_purpose1 200+km_purpose2
200+km_purpose3..
167     1           1           842.0           0.0           0.0
168     1362.0       0.0           0.0           1849.0          0.0           0.0
169     2377.0       0.0           0.0
170     1           2           842.0           0.0           0.0
171     1362.0       0.0           0.0           1849.0          0.0           0.0
172     2377.0       0.0           0.0
173     2           1           0.0           0.0           0.0
174     0.0          0.0           0.0           0.0           0.0           0.0
175     0.0          0.0           0.0
176     2           2           0.0           0.0           0.0
177     0.0          0.0           0.0           0.0           0.0           0.0
178     0.0          0.0           0.0

```

155	3	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
156	3	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
157	4	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
158	4	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
159	5	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
160	5	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
161	6	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
162	6	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
163	7	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
164	7	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
165	8	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
166	8	2	842.0	0.0	0.0	
	1362.0	0.0	0.0	2372.0	0.0	0.0
	3422.0	0.0	0.0			

167

168 VALUE\_OF\_TIME\_METHOD3 - (used)

169 \*pence per hour

170 \*Vtype/submode Person\_type VOT\_purpose1 VOT\_purpose2 VOT\_purpose3 ..

171	1	1	2612.0	967.0	870.0	
172	1	2	2612.0	967.0	870.0	
173	2	1	2612.0	967.0	870.0	
174	2	2	2612.0	967.0	870.0	
175	3	1	2612.0	0.0	0.0	
176	3	2	2612.0	0.0	0.0	
177	4	1	2612.0	0.0	0.0	
178	4	2	2612.0	0.0	0.0	
179	5	1	2612.0	0.0	0.0	
180	5	2	2612.0	967.0	870.0	
181	6	1	2612.0	0.0	0.0	
182	6	2	2612.0	967.0	870.0	
183	7	1	2612.0	0.0	0.0	
184	7	2	2612.0	967.0	870.0	

185

186 VALUE\_OF\_TIME\_METHOD3 - (std)

187 \*pence per hour

188 \*Vtype/submode Person\_type VOT\_purpose1 VOT\_purpose2 VOT\_purpose3 ..

189	1	1	1486.0	995.0	454.0	
190	1	2	1486.0	995.0	454.0	
191	2	1	1024.0	995.0	454.0	
192	2	2	1024.0	995.0	454.0	
193	3	1	1024.0	0.0	0.0	
194	3	2	1024.0	0.0	0.0	
195	4	1	1206.0	0.0	0.0	
196	4	2	1206.0	0.0	0.0	
197	5	1	1206.0	0.0	0.0	
198	5	2	1206.0	0.0	0.0	
199	6	1	1232.0	0.0	0.0	



200	6	2	842.0	995.0	454.0
201	7	1	0.0	0.0	0.0
202	7	2	842.0	995.0	454.0
203	8	1	0.0	0.0	0.0
204	8	2	2452.0	995.0	454.0

205  
206 VALUE\_OF\_TIME\_GROWTH - (used)

207 \*% change p.a.

208 *Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
209 2012	2014	1.40	1.40	1.40	
210 2015	2019	3.60	3.60	3.60	
211 2020	2024	2.20	2.20	2.20	
212 2025	2100	2.30	2.30	2.30	

213  
214 VALUE\_OF\_TIME\_GROWTH - (std)

215 \*% change p.a.

216 *Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
217 2011	2011	0.67	0.67	0.67	
218 2012	2012	0.64	0.64	0.64	
219 2013	2013	1.27	1.27	1.27	
220 2014	2014	2.29	2.29	2.29	
221 2015	2015	1.44	1.44	1.44	
222 2016	2016	1.26	1.26	1.26	
223 2017	2017	1.49	1.49	1.49	
224 2018	2018	1.40	1.40	1.40	
225 2019	2019	1.43	1.43	1.43	
226 2020	2020	1.45	1.45	1.45	
227 2021	2021	1.76	1.76	1.76	
228 2022	2022	1.77	1.77	1.77	
229 2023	2023	1.78	1.78	1.78	
230 2024	2024	1.89	1.89	1.89	
231 2025	2025	1.91	1.91	1.91	
232 2026	2026	1.93	1.93	1.93	
233 2027	2027	1.94	1.94	1.94	
234 2028	2028	1.96	1.96	1.96	
235 2029	2029	1.98	1.98	1.98	
236 2030	2030	1.99	1.99	1.99	
237 2031	2031	2.01	2.01	2.01	
238 2032	2032	2.02	2.02	2.02	
239 2033	2033	2.04	2.04	2.04	
240 2034	2034	2.15	2.15	2.15	
241 2035	2035	2.06	2.06	2.06	
242 2036	2036	2.07	2.07	2.07	
243 2037	2037	2.08	2.08	2.08	
244 2038	2038	2.09	2.09	2.09	
245 2039	2039	2.09	2.09	2.09	
246 2040	2040	2.09	2.09	2.09	
247 2041	2041	2.09	2.09	2.09	
248 2042	2042	2.11	2.11	2.11	
249 2043	2043	2.11	2.11	2.11	
250 2044	2044	2.11	2.11	2.11	
251 2045	2045	2.11	2.11	2.11	
252 2046	2046	2.21	2.21	2.21	
253 2047	2047	2.14	2.14	2.14	
254 2048	2048	2.14	2.14	2.14	
255 2049	2049	2.14	2.14	2.14	
256 2050	2050	2.14	2.14	2.14	
257 2051	2051	2.04	2.04	2.04	
258 2052	2052	2.07	2.07	2.07	
259 2053	2053	2.07	2.07	2.07	
260 2054	2054	2.07	2.07	2.07	
261 2055	2055	2.07	2.07	2.07	
262 2056	2056	2.07	2.07	2.07	
263 2057	2057	2.09	2.09	2.09	
264 2058	2058	2.19	2.19	2.19	
265 2059	2059	2.19	2.19	2.19	
266 2060	2060	2.29	2.29	2.29	
267 2061	2061	2.29	2.29	2.29	
268 2062	2062	2.30	2.30	2.30	

269	2063	2063	2.30	2.30	2.30
270	2064	2064	2.20	2.20	2.20
271	2065	2065	2.20	2.20	2.20
272	2066	2066	2.20	2.20	2.20
273	2067	2067	2.18	2.18	2.18
274	2068	2068	2.18	2.18	2.18
275	2069	2069	2.18	2.18	2.18
276	2070	2070	2.18	2.18	2.18
277	2071	2071	2.18	2.18	2.18
278	2072	2072	2.17	2.17	2.17
279	2073	2073	2.17	2.17	2.17
280	2074	2074	2.17	2.17	2.17
281	2075	2075	2.17	2.17	2.17
282	2076	2076	2.17	2.17	2.17
283	2077	2077	2.16	2.16	2.16
284	2078	2078	2.16	2.16	2.16
285	2079	2079	2.16	2.16	2.16
286	2080	2080	2.16	2.16	2.16
287	2081	2081	2.16	2.16	2.16
288	2082	2082	2.17	2.17	2.17
289	2083	2083	2.17	2.17	2.17
290	2084	2084	2.17	2.17	2.17
291	2085	2085	2.17	2.17	2.17
292	2086	2086	2.17	2.17	2.17
293	2087	2087	2.18	2.18	2.18
294	2088	2088	2.18	2.18	2.18
295	2089	2089	2.18	2.18	2.18
296	2090	2090	2.18	2.18	2.18
297	2091	2091	2.18	2.18	2.18
298	2092	2092	2.18	2.18	2.18
299	2093	2093	2.18	2.18	2.18
300	2094	2094	2.18	2.18	2.18
301	2095	2095	2.18	2.18	2.18
302	2096	2096	2.18	2.18	2.18
303	2097	2097	2.18	2.18	2.18
304	2098	2098	2.18	2.18	2.18
305	2099	2099	2.18	2.18	2.18
306	2100	2100	2.18	2.18	2.18

307  
308 AV\_IND\_TAX\_CHANGES - (used)

309 \*% change p.a.  
310 \*Start\_yr      End\_yr      Growth  
311 2012            2080            0.00

312  
313 AV\_IND\_TAX\_CHANGES - (std)

314 \*% change p.a.  
315 \*Start\_yr      End\_yr      Growth  
316 2011            2050            0.00

317  
318 CHARGE\_TAX\_RATES - (used)

319 \*%  
320 \*charge            final            intermediate  
321 1                    0.0            0.0  
322 2                    0.0            0.0  
323 3                    0.0            0.0  
324 4                    0.0            0.0  
325 5                    0.0            0.0  
326 6                    0.0            0.0  
327 7                    0.0            0.0

328  
329 CHARGE\_TAX\_RATES - (std)

330 \*%  
331 \*charge            final            intermediate  
332 1                    0.0            0.0  
333 2                    0.0            0.0  
334 3                    0.0            0.0  
335 4                    0.0            0.0  
336 5                    17.5           0.0  
337 6                    0.0            0.0

338 7 17.5 0.0  
 339 8 17.5 0.0

340

341 CHARGE\_TAX\_RATES\_CHANGES - (used)

342 \*% change p.a.

343 *Start_yr	End_yr	charge	final	intermediate
344 2012	2080	1	0.00	0.00
345 2012	2080	2	0.00	0.00
346 2012	2080	3	0.00	0.00
347 2012	2080	4	0.00	0.00
348 2012	2080	5	0.00	0.00
349 2012	2080	6	0.00	0.00
350 2012	2080	7	0.00	0.00

351

352 CHARGE\_TAX\_RATES\_CHANGES - (std)

353 \*% change p.a.

354 *Start_yr	End_yr	charge	final	intermediate
355 2011	2011	1	0.00	0.00
356 2011	2011	2	0.00	0.00
357 2011	2011	3	0.00	0.00
358 2011	2011	4	0.00	0.00
359 2011	2011	5	14.29	0.00
360 2011	2011	6	0.00	0.00
361 2011	2011	7	14.29	0.00
362 2011	2011	8	14.29	0.00
363 2012	2100	1	0.00	0.00
364 2012	2100	2	0.00	0.00
365 2012	2100	3	0.00	0.00
366 2012	2100	4	0.00	0.00
367 2012	2100	5	0.00	0.00
368 2012	2100	6	0.00	0.00
369 2012	2100	7	0.00	0.00
370 2012	2100	8	0.00	0.00

371

372 FUEL\_COST - (used)

373 \*type resource (p/unit) duty(p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)

374 1	63.0	57.6	21.0	2230.00
375 2	70.0	46.6	21.0	2562.00

376

377 FUEL\_COST - (std)

378 \*type resource (p/unit) duty(p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)

379 1	42.5	57.0	17.5	2230.00
380 2	44.2	57.0	17.5	2562.00
381 3	11.5	0.0	5.0	372.00

382

383 FUEL\_COST\_CHANGES - (used)

384 \*% change p.a.

385 *Start_yr	End_yr	fuel_type	resource	duty	VAT
386 2012	2012	1	10.70	0.00	
2.00	0.00				
387 2012	2012	2	3.90	0.00	
0.00	0.00				
388 2013	2013	1	-5.70	0.00	
0.00	0.00				
389 2013	2013	2	-5.20	0.00	
0.00	0.00				
390 2014	2014	1	0.00	0.00	
0.00	0.00				
391 2014	2014	2	-3.30	0.00	
0.00	0.00				
392 2015	2015	1	-30.60	2.00	
0.00	0.00				
393 2015	2015	2	-32.60	2.90	
0.00	0.00				
394 2016	2080	1	0.00	0.00	
0.00	0.00				

395 2016 2080 2 0.00 0.00  
0.00 0.00

396

397 FUEL\_COST\_CHANGES - (std)

398 \*% change p.a.

399 \*Start\_yr End\_yr fuel\_type resource duty VAT  
CO2\_Den\_change

400 2011 2011 1 22.14 -0.37  
14.29 -0.84

401 2012 2012 1 1.99 -2.09  
0.00 -0.02

402 2013 2013 1 -3.44 -1.74  
0.00 -0.44

403 2014 2014 1 -11.68 -1.62  
0.00 -0.54

404 2015 2015 1 -29.94 -1.09  
0.00 0.00

405 2016 2016 1 7.91 -0.89  
0.00 0.00

406 2017 2017 1 2.98 -0.08  
0.00 -1.35

407 2018 2018 1 2.03 0.67  
0.00 -1.37

408 2019 2019 1 2.08 1.05  
0.00 -1.39

409 2020 2020 1 6.76 0.71  
0.00 -1.41

410 2021 2021 1 6.33 0.78  
0.00 0.00

411 2022 2022 1 5.95 0.72  
0.00 0.00

412 2023 2023 1 5.62 0.68  
0.00 0.00

413 2024 2024 1 5.32 0.68  
0.00 0.00

414 2025 2025 1 5.05 0.68  
0.00 0.00

415 2026 2026 1 0.00 0.68  
0.00 0.00

416 2027 2027 1 0.00 0.68  
0.00 0.00

417 2028 2028 1 0.00 0.68  
0.00 0.00

418 2029 2029 1 0.00 0.68  
0.00 0.00

419 2030 2030 1 0.00 0.68  
0.00 0.00

420 2031 2031 1 0.00 0.68  
0.00 0.00

421 2032 2032 1 0.00 0.68  
0.00 0.00

422 2033 2033 1 0.00 0.68  
0.00 0.00

423 2034 2034 1 0.00 0.68  
0.00 0.00

424 2035 2035 1 0.00 0.68  
0.00 0.00

425 2036 2036 1 0.00 0.68  
0.00 0.00

426 2037 2037 1 0.00 0.68  
0.00 0.00

427 2038 2038 1 0.00 0.68  
0.00 0.00

428 2039 2039 1 0.00 0.68  
0.00 0.00

429 2040 2040 1 0.00 0.68  
0.00 0.00

430 2041 2041 1 0.00 0.68  
0.00 0.00

431	2042 0.00	2042 0.00	1	0.00	0.68
432	2043 0.00	2043 0.00	1	0.00	0.68
433	2044 0.00	2044 0.00	1	0.00	0.68
434	2045 0.00	2045 0.00	1	0.00	0.68
435	2046 0.00	2046 0.00	1	0.00	0.68
436	2047 0.00	2047 0.00	1	0.00	0.68
437	2048 0.00	2048 0.00	1	0.00	0.68
438	2049 0.00	2049 0.00	1	0.00	0.68
439	2050 0.00	2050 0.00	1	0.00	0.68
440	2051 0.00	2051 0.00	1	0.00	0.68
441	2052 0.00	2052 0.00	1	0.00	0.68
442	2053 0.00	2053 0.00	1	0.00	0.68
443	2054 0.00	2054 0.00	1	0.00	0.68
444	2055 0.00	2055 0.00	1	0.00	0.68
445	2056 0.00	2056 0.00	1	0.00	0.68
446	2057 0.00	2057 0.00	1	0.00	0.68
447	2058 0.00	2058 0.00	1	0.00	0.68
448	2059 0.00	2059 0.00	1	0.00	0.68
449	2060 0.00	2060 0.00	1	0.00	0.68
450	2061 0.00	2061 0.00	1	0.00	0.68
451	2062 0.00	2062 0.00	1	0.00	0.68
452	2063 0.00	2063 0.00	1	0.00	0.68
453	2064 0.00	2064 0.00	1	0.00	0.68
454	2065 0.00	2065 0.00	1	0.00	0.68
455	2066 0.00	2066 0.00	1	0.00	0.68
456	2067 0.00	2067 0.00	1	0.00	0.68
457	2068 0.00	2068 0.00	1	0.00	0.68
458	2069 0.00	2069 0.00	1	0.00	0.68
459	2070 0.00	2070 0.00	1	0.00	0.68
460	2071 0.00	2071 0.00	1	0.00	0.68
461	2072 0.00	2072 0.00	1	0.00	0.68
462	2073 0.00	2073 0.00	1	0.00	0.68
463	2074 0.00	2074 0.00	1	0.00	0.68
464	2075 0.00	2075 0.00	1	0.00	0.68
465	2076	2076	1	0.00	0.68

	0.00	0.00			
466	2077	2077	1	0.00	0.68
	0.00	0.00			
467	2078	2078	1	0.00	0.68
	0.00	0.00			
468	2079	2079	1	0.00	0.68
	0.00	0.00			
469	2080	2080	1	0.00	0.68
	0.00	0.00			
470	2081	2081	1	0.00	0.68
	0.00	0.00			
471	2082	2082	1	0.00	0.68
	0.00	0.00			
472	2083	2083	1	0.00	0.68
	0.00	0.00			
473	2084	2084	1	0.00	0.68
	0.00	0.00			
474	2085	2085	1	0.00	0.68
	0.00	0.00			
475	2086	2086	1	0.00	0.68
	0.00	0.00			
476	2087	2087	1	0.00	0.68
	0.00	0.00			
477	2088	2088	1	0.00	0.68
	0.00	0.00			
478	2089	2089	1	0.00	0.68
	0.00	0.00			
479	2090	2090	1	0.00	0.68
	0.00	0.00			
480	2091	2091	1	0.00	0.68
	0.00	0.00			
481	2092	2092	1	0.00	0.68
	0.00	0.00			
482	2093	2093	1	0.00	0.68
	0.00	0.00			
483	2094	2094	1	0.00	0.68
	0.00	0.00			
484	2095	2095	1	0.00	0.68
	0.00	0.00			
485	2096	2096	1	0.00	0.68
	0.00	0.00			
486	2097	2097	1	0.00	0.68
	0.00	0.00			
487	2098	2098	1	0.00	0.68
	0.00	0.00			
488	2099	2099	1	0.00	0.68
	0.00	0.00			
489	2100	2100	1	0.00	0.68
	0.00	0.00			
490	2011	2011	2	26.82	-0.37
	14.29	0.19			
491	2012	2012	2	3.20	-2.09
	0.00	1.64			
492	2013	2013	2	-3.67	-1.74
	0.00	-0.44			
493	2014	2014	2	-11.26	-1.62
	0.00	0.15			
494	2015	2015	2	-30.27	-1.09
	0.00	0.00			
495	2016	2016	2	8.32	-0.89
	0.00	0.00			
496	2017	2017	2	3.12	-0.08
	0.00	-1.74			
497	2018	2018	2	2.12	0.67
	0.00	-1.77			
498	2019	2019	2	2.17	1.05
	0.00	-1.81			
499	2020	2020	2	7.06	0.71
	0.00	-1.84			

500	2021 0.00	2021 0.00	2	6.59	0.78
501	2022 0.00	2022 0.00	2	6.18	0.72
502	2023 0.00	2023 0.00	2	5.82	0.68
503	2024 0.00	2024 0.00	2	5.50	0.68
504	2025 0.00	2025 0.00	2	5.22	0.68
505	2026 0.00	2026 0.00	2	0.00	0.68
506	2027 0.00	2027 0.00	2	0.00	0.68
507	2028 0.00	2028 0.00	2	0.00	0.68
508	2029 0.00	2029 0.00	2	0.00	0.68
509	2030 0.00	2030 0.00	2	0.00	0.68
510	2031 0.00	2031 0.00	2	0.00	0.68
511	2032 0.00	2032 0.00	2	0.00	0.68
512	2033 0.00	2033 0.00	2	0.00	0.68
513	2034 0.00	2034 0.00	2	0.00	0.68
514	2035 0.00	2035 0.00	2	0.00	0.68
515	2036 0.00	2036 0.00	2	0.00	0.68
516	2037 0.00	2037 0.00	2	0.00	0.68
517	2038 0.00	2038 0.00	2	0.00	0.68
518	2039 0.00	2039 0.00	2	0.00	0.68
519	2040 0.00	2040 0.00	2	0.00	0.68
520	2041 0.00	2041 0.00	2	0.00	0.68
521	2042 0.00	2042 0.00	2	0.00	0.68
522	2043 0.00	2043 0.00	2	0.00	0.68
523	2044 0.00	2044 0.00	2	0.00	0.68
524	2045 0.00	2045 0.00	2	0.00	0.68
525	2046 0.00	2046 0.00	2	0.00	0.68
526	2047 0.00	2047 0.00	2	0.00	0.68
527	2048 0.00	2048 0.00	2	0.00	0.68
528	2049 0.00	2049 0.00	2	0.00	0.68
529	2050 0.00	2050 0.00	2	0.00	0.68
530	2051 0.00	2051 0.00	2	0.00	0.68
531	2052 0.00	2052 0.00	2	0.00	0.68
532	2053 0.00	2053 0.00	2	0.00	0.68
533	2054 0.00	2054 0.00	2	0.00	0.68
534	2055	2055	2	0.00	0.68

	0.00	0.00			
535	2056	2056	2	0.00	0.68
	0.00	0.00			
536	2057	2057	2	0.00	0.68
	0.00	0.00			
537	2058	2058	2	0.00	0.68
	0.00	0.00			
538	2059	2059	2	0.00	0.68
	0.00	0.00			
539	2060	2060	2	0.00	0.68
	0.00	0.00			
540	2061	2061	2	0.00	0.68
	0.00	0.00			
541	2062	2062	2	0.00	0.68
	0.00	0.00			
542	2063	2063	2	0.00	0.68
	0.00	0.00			
543	2064	2064	2	0.00	0.68
	0.00	0.00			
544	2065	2065	2	0.00	0.68
	0.00	0.00			
545	2066	2066	2	0.00	0.68
	0.00	0.00			
546	2067	2067	2	0.00	0.68
	0.00	0.00			
547	2068	2068	2	0.00	0.68
	0.00	0.00			
548	2069	2069	2	0.00	0.68
	0.00	0.00			
549	2070	2070	2	0.00	0.68
	0.00	0.00			
550	2071	2071	2	0.00	0.68
	0.00	0.00			
551	2072	2072	2	0.00	0.68
	0.00	0.00			
552	2073	2073	2	0.00	0.68
	0.00	0.00			
553	2074	2074	2	0.00	0.68
	0.00	0.00			
554	2075	2075	2	0.00	0.68
	0.00	0.00			
555	2076	2076	2	0.00	0.68
	0.00	0.00			
556	2077	2077	2	0.00	0.68
	0.00	0.00			
557	2078	2078	2	0.00	0.68
	0.00	0.00			
558	2079	2079	2	0.00	0.68
	0.00	0.00			
559	2080	2080	2	0.00	0.68
	0.00	0.00			
560	2081	2081	2	0.00	0.68
	0.00	0.00			
561	2082	2082	2	0.00	0.68
	0.00	0.00			
562	2083	2083	2	0.00	0.68
	0.00	0.00			
563	2084	2084	2	0.00	0.68
	0.00	0.00			
564	2085	2085	2	0.00	0.68
	0.00	0.00			
565	2086	2086	2	0.00	0.68
	0.00	0.00			
566	2087	2087	2	0.00	0.68
	0.00	0.00			
567	2088	2088	2	0.00	0.68
	0.00	0.00			
568	2089	2089	2	0.00	0.68
	0.00	0.00			



569	2090	2090	2	0.00	0.68	
	0.00	0.00				
570	2091	2091	2	0.00	0.68	
	0.00	0.00				
571	2092	2092	2	0.00	0.68	
	0.00	0.00				
572	2093	2093	2	0.00	0.68	
	0.00	0.00				
573	2094	2094	2	0.00	0.68	
	0.00	0.00				
574	2095	2095	2	0.00	0.68	
	0.00	0.00				
575	2096	2096	2	0.00	0.68	
	0.00	0.00				
576	2097	2097	2	0.00	0.68	
	0.00	0.00				
577	2098	2098	2	0.00	0.68	
	0.00	0.00				
578	2099	2099	2	0.00	0.68	
	0.00	0.00				
579	2100	2100	2	0.00	0.68	
	0.00	0.00				
580	2011	2011	3	4.95	0.00	
	0.00	-1.89				
581	2012	2012	3	4.01	0.00	
	0.00	-2.03				
582	2013	2013	3	5.45	0.00	
	0.00	-2.18				
583	2014	2014	3	3.88	0.00	
	0.00	-2.35				
584	2015	2015	3	-5.82	0.00	
	0.00	-2.54				
585	2016	2016	3	3.17	0.00	
	0.00	-2.74				
586	2017	2017	3	6.71	0.00	
	0.00	-2.98				
587	2018	2018	3	4.60	0.00	
	0.00	-3.23				
588	2019	2019	3	2.96	0.00	
	0.00	-3.52				
589	2020	2020	3	1.91	0.00	
	0.00	-3.85				
590	2021	2021	3	0.52	0.00	
	0.00	-4.22				
591	2022	2022	3	2.13	0.00	
	0.00	-4.65				
592	2023	2023	3	-0.64	0.00	
	0.00	-5.14				
593	2024	2024	3	2.55	0.00	
	0.00	-5.71				
594	2025	2025	3	4.49	0.00	
	0.00	-6.39				
595	2026	2026	3	0.01	0.00	
	0.00	-7.19				
596	2027	2027	3	2.37	0.00	
	0.00	-8.17				
597	2028	2028	3	-1.49	0.00	
	0.00	-9.38				
598	2029	2029	3	-1.58	0.00	0.00
	-10.92					
599	2030	2030	3	0.32	0.00	0.00
	-12.92					
600	2031	2031	3	0.00	0.00	
	0.00	-8.85				
601	2032	2032	3	0.00	0.00	
	0.00	-8.85				
602	2033	2033	3	0.00	0.00	
	0.00	-8.85				
603	2034	2034	3	0.00	0.00	

604	0.00	-8.85				
	2035	2035	3	0.00	0.00	
	0.00	-8.85				
605	2036	2036	3	0.00	0.00	
	0.00	-8.85				
606	2037	2037	3	0.00	0.00	
	0.00	-8.85				
607	2038	2038	3	0.00	0.00	
	0.00	-8.85				
608	2039	2039	3	0.00	0.00	
	0.00	-8.85				
609	2040	2040	3	0.00	0.00	
	0.00	-8.85				
610	2041	2041	3	0.00	0.00	0.00
	-11.07					
611	2042	2042	3	0.00	0.00	
	0.00	-0.85				
612	2043	2043	3	0.00	0.00	0.00
	-11.10					
613	2044	2044	3	0.00	0.00	0.00
	-11.60					
614	2045	2045	3	0.00	0.00	
	0.00	1.50				
615	2046	2046	3	0.00	0.00	
	0.00	-8.95				
616	2047	2047	3	0.00	0.00	
	0.00	-7.43				
617	2048	2048	3	0.00	0.00	
	0.00	1.12				
618	2049	2049	3	0.00	0.00	
	0.00	-9.46				
619	2050	2050	3	0.00	0.00	
	0.00	-0.90				
620	2051	2100	3	0.00	0.00	
	0.00	0.00				

621						
622	CARBDX_VALUE_CHANGES - (used)					
623	*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be defined, not both					
624	*same growth applies to low, central and high CO2 values					
625	*Start_yr	End_yr	Rel. (%)	<b>Abs. (£/tonne/year)</b>		
626	2012	2019	0.000	0.000		
627	2020	2020	60.000	0.000		
628	2021	2021	21.900	0.000		
629	2022	2022	17.900	0.000		
630	2023	2023	13.000	0.000		
631	2024	2024	13.500	0.000		
632	2025	2025	11.900	0.000		
633	2026	2026	10.600	0.000		
634	2027	2027	9.600	0.000		
635	2028	2028	7.500	0.000		
636	2029	2029	8.100	0.000		
637	2030	2030	7.500	0.000		
638	2031	2100	5.000	0.000		

639						
640	CARBDX_VALUE_CHANGES - (std)					
641	*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be defined, not both					
642	*same growth applies to low, central and high CO2 values					
643	*Start_yr	End_yr	Rel. (%)	<b>Abs. (£/tonne/year)</b>		
644	2011	2011	1.500	0.000		
645	2012	2012	1.500	0.000		
646	2013	2013	1.500	0.000		
647	2014	2014	1.500	0.000		
648	2015	2015	1.500	0.000		
649	2016	2016	1.500	0.000		
650	2017	2017	1.500	0.000		
651	2018	2018	1.500	0.000		
652	2019	2019	1.500	0.000		

653	2020	2020	1.500	0.000
654	2021	2021	1.667	0.000
655	2022	2022	1.639	0.000
656	2023	2023	1.613	0.000
657	2024	2024	1.587	0.000
658	2025	2025	1.563	0.000
659	2026	2026	1.538	0.000
660	2027	2027	1.515	0.000
661	2028	2028	1.493	0.000
662	2029	2029	1.471	0.000
663	2030	2030	1.449	0.000
664	2031	2031	9.286	0.000
665	2032	2032	8.497	0.000
666	2033	2033	7.831	0.000
667	2034	2034	7.263	0.000
668	2035	2035	6.771	0.000
669	2036	2036	6.341	0.000
670	2037	2037	5.963	0.000
671	2038	2038	5.628	0.000
672	2039	2039	5.328	0.000
673	2040	2040	5.058	0.000
674	2041	2041	4.815	0.000
675	2042	2042	4.594	0.000
676	2043	2043	4.392	0.000
677	2044	2044	4.207	0.000
678	2045	2045	4.037	0.000
679	2046	2046	3.881	0.000
680	2047	2047	3.736	0.000
681	2048	2048	3.601	0.000
682	2049	2049	3.476	0.000
683	2050	2050	3.359	0.000
684	2051	2051	2.501	0.000
685	2052	2052	2.265	0.000
686	2053	2053	2.165	0.000
687	2054	2054	2.056	0.000
688	2055	2055	1.856	0.000
689	2056	2056	1.779	0.000
690	2057	2057	1.589	0.000
691	2058	2058	1.446	0.000
692	2059	2059	1.330	0.000
693	2060	2060	1.201	0.000
694	2061	2061	0.673	0.000
695	2062	2062	0.618	0.000
696	2063	2063	0.401	0.000
697	2064	2064	0.283	0.000
698	2065	2065	0.079	0.000
699	2066	2066	0.033	0.000
700	2067	2067	-0.193	0.000
701	2068	2068	-0.302	0.000
702	2069	2069	-0.461	0.000
703	2070	2070	-0.585	0.000
704	2071	2071	-0.609	0.000
705	2072	2072	-0.738	0.000
706	2073	2073	-0.837	0.000
707	2074	2074	-1.033	0.000
708	2075	2075	-1.037	0.000
709	2076	2076	-1.310	0.000
710	2077	2077	-1.316	0.000
711	2078	2078	-1.493	0.000
712	2079	2079	-1.571	0.000
713	2080	2080	-1.769	0.000
714	2081	2081	-1.478	0.000
715	2082	2082	-1.672	0.000
716	2083	2083	-1.769	0.000
717	2084	2084	-1.854	0.000
718	2085	2085	-1.834	0.000
719	2086	2086	-2.050	0.000
720	2087	2087	-2.154	0.000
721	2088	2088	-2.198	0.000

722	2089	2089	-2.321	0.000
723	2090	2090	-2.359	0.000
724	2091	2091	-2.279	0.000
725	2092	2092	-2.328	0.000
726	2093	2093	-2.521	0.000
727	2094	2094	-2.577	0.000
728	2095	2095	-2.649	0.000
729	2096	2096	-2.712	0.000
730	2097	2097	-2.715	0.000
731	2098	2098	-2.915	0.000
732	2099	2099	-2.865	0.000
733	2100	2100	-3.011	0.000

734

735 FLEET - (used)

736	*veh_type	%petrol	%diesel
737	1	69.90	30.10
738	2	0.30	99.70
739	3	0.00	100.00
740	4	0.00	100.00
741	5	0.00	100.00
742	6	0.00	100.00
743	7	0.00	100.00

744

745 FLEET - (std)

746	*veh_type	%Petrol	%Diesel	%Electric
747	1	59.27	40.73	0.01
748	2	5.86	94.14	0.00
749	3	5.86	94.14	0.00
750	4	0.00	100.00	0.00
751	5	0.00	100.00	0.00
752	6	0.00	100.00	0.00
753	7	0.00	100.00	0.00
754	8	0.00	100.00	0.00

755

756 FLEET\_CHANGES - (used)

757 \*% p.a.

758	*Start_yr	End_yr	Veh_type	%Change_petrol	%Change_diesel
759	2012	2015	1	-2.642	5.437
760	2016	2020	1	0.473	-0.820
761	2021	2025	1	-0.662	1.150
762	2026	2030	1	-0.884	1.389
763	2012	2015	2	-9.640	0.025
764	2016	2020	2	-60.000	0.040
765	2021	2025	2	0.000	0.000
766	2026	2030	2	0.000	0.000

767

768 FLEET\_CHANGES - (std)

769 \*% p.a.

770	*Start_yr	End_yr	Veh_type	%Change_Petrol	%Change_Diesel	%Change_Electric
771	2011	2011	1	-3.810	5.477	502.540
772	2012	2012	1	-3.966	5.188	100.000
773	2013	2013	1	-4.130	4.932	50.000
774	2014	2014	1	-4.308	4.700	33.333
775	2015	2015	1	-4.502	4.489	25.000
776	2016	2016	1	-1.777	1.335	97.788
777	2017	2017	1	-1.809	1.317	49.441
778	2018	2018	1	-1.842	1.300	33.084
779	2019	2019	1	-1.877	1.283	24.859
780	2020	2020	1	-1.913	1.267	19.910
781	2021	2021	1	0.323	-0.826	32.794
782	2022	2022	1	0.322	-0.833	24.695
783	2023	2023	1	0.321	-0.840	19.804
784	2024	2024	1	0.320	-0.847	16.531
785	2025	2025	1	0.319	-0.854	14.186
786	2026	2026	1	0.021	-1.060	21.755
787	2027	2027	1	0.021	-1.071	17.868
788	2028	2028	1	0.021	-1.083	15.159
789	2029	2029	1	0.021	-1.095	13.164

790	2030	2030	1	0.021	-1.107	11.632
791	2011	2011	2	-7.579	0.472	0.000
792	2012	2012	2	-8.200	0.470	0.000
793	2013	2013	2	-8.932	0.468	0.000
794	2014	2014	2	-9.809	0.465	0.000
795	2015	2015	2	-10.875	0.463	0.000
796	2016	2016	2	-9.634	0.364	0.000
797	2017	2017	2	-10.661	0.363	0.000
798	2018	2018	2	-11.933	0.361	0.000
799	2019	2019	2	-13.550	0.360	0.000
800	2020	2020	2	-15.674	0.359	0.000
801	2021	2021	2	-8.979	0.173	0.000
802	2022	2022	2	-9.865	0.172	0.000
803	2023	2023	2	-10.945	0.172	0.000
804	2024	2024	2	-12.290	0.172	0.000
805	2025	2025	2	-14.012	0.171	0.000
806	2026	2026	2	-4.888	0.051	0.000
807	2027	2027	2	-5.139	0.051	0.000
808	2028	2028	2	-5.418	0.051	0.000
809	2029	2029	2	-5.728	0.051	0.000
810	2030	2030	2	-6.076	0.051	0.000
811	2011	2011	3	-7.579	0.472	0.000
812	2012	2012	3	-8.200	0.470	0.000
813	2013	2013	3	-8.932	0.468	0.000
814	2014	2014	3	-9.809	0.465	0.000
815	2015	2015	3	-10.875	0.463	0.000
816	2016	2016	3	-9.634	0.364	0.000
817	2017	2017	3	-10.661	0.363	0.000
818	2018	2018	3	-11.933	0.361	0.000
819	2019	2019	3	-13.550	0.360	0.000
820	2020	2020	3	-15.674	0.359	0.000
821	2021	2021	3	-8.979	0.173	0.000
822	2022	2022	3	-9.865	0.172	0.000
823	2023	2023	3	-10.945	0.172	0.000
824	2024	2024	3	-12.290	0.172	0.000
825	2025	2025	3	-14.012	0.171	0.000
826	2026	2026	3	-4.888	0.051	0.000
827	2027	2027	3	-5.139	0.051	0.000
828	2028	2028	3	-5.418	0.051	0.000
829	2029	2029	3	-5.728	0.051	0.000
830	2030	2030	3	-6.076	0.051	0.000

831								
832	FUEL_CONSUMPTION - (used)							
833	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel		
	cut-off_speed(km/h)							
834	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140	
835	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140	
836	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
837	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
838	3	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96	
839	4	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96	
840	5	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96	

841								
842	FUEL_CONSUMPTION - (std)							
843	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel		
	cut-off_speed(km/h)							
844	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140	
845	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140	
846	1	3	0.0000	0.12564	0.00000E+00	0.00000E+00	140	
847	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
848	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
849	3	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140	
850	3	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140	
851	4	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96	
852	5	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96	
853	6	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96	

854									
855	FUEL EFFICIENCY - (used)								
856	*%	p.a.							

	*Start_yr	End_yr	veh_type	fuel_type	change
857					
858	2012	2012	1	1	-0.46
859	2012	2012	1	2	0.09
860	2013	2013	1	1	-0.42
861	2013	2013	1	2	0.07
862	2014	2020	1	1	2.48
863	2014	2020	1	2	2.92
864	2021	2025	1	1	2.37
865	2021	2025	1	2	1.62
866	2026	2030	1	1	0.92
867	2026	2030	1	2	0.77
868	2012	2012	2	2	0.20
869	2013	2013	2	2	0.18
870	2014	2020	2	2	3.25
871	2021	2025	2	2	0.67
872	2026	2030	2	2	0.27
873	2012	2012	3	2	0.43
874	2013	2013	3	2	0.38
875	2014	2020	3	2	-1.67
876	2021	2025	3	2	0.07
877	2026	2030	3	2	0.01
878	2012	2012	4	2	0.43
879	2013	2013	4	2	0.38
880	2014	2020	4	2	-1.67
881	2021	2025	4	2	0.07
882	2026	2030	4	2	0.01
883	2012	2012	5	2	0.32
884	2013	2013	5	2	0.34
885	2014	2020	5	2	-0.64
886	2021	2025	5	2	0.03
887	2026	2030	5	2	-0.02
888	2012	2012	6	2	0.00
889	2013	2013	6	2	0.00
890	2014	2020	6	2	0.00
891	2021	2025	6	2	0.00
892	2026	2030	6	2	0.00
893	2012	2012	7	2	0.00
894	2013	2013	7	2	0.00
895	2014	2020	7	2	0.00
896	2021	2025	7	2	0.00
897	2026	2030	7	2	0.00

	FUEL EFFICIENCY - (std)				
	*% p.a.				
	*Start_yr	End_yr	veh_type	fuel_type	change
898					
899					
900					
901					
902	2011	2015	1	1	1.81
903	2011	2015	1	2	2.23
904	2011	2015	1	3	-0.10
905	2011	2015	2	1	0.11
906	2011	2015	2	2	2.71
907	2011	2015	3	1	0.11
908	2011	2015	3	2	2.71
909	2016	2020	1	1	3.32
910	2016	2020	1	2	2.22
911	2016	2020	1	3	0.02
912	2016	2020	2	1	2.35
913	2016	2020	2	2	2.35
914	2016	2020	3	1	2.35
915	2016	2020	3	2	2.35
916	2021	2025	1	1	3.16
917	2021	2025	1	2	2.02
918	2021	2025	1	3	0.12
919	2021	2025	2	1	2.85
920	2021	2025	2	2	1.65
921	2021	2025	3	1	2.85
922	2021	2025	3	2	1.65
923	2026	2030	1	1	1.56
924	2026	2030	1	2	1.19
925	2026	2030	1	3	0.00

926	2026	2030	2	1	2.40
927	2026	2030	2	2	0.74
928	2026	2030	3	1	2.40
929	2026	2030	3	2	0.74
930	2031	2035	1	1	0.57
931	2031	2035	1	2	0.52
932	2031	2035	1	3	-0.08
933	2031	2035	2	1	0.54
934	2031	2035	2	2	0.22
935	2031	2035	3	1	0.54
936	2031	2035	3	2	0.22
937	2036	2100	1	1	0.00
938	2036	2100	1	2	0.00
939	2036	2100	1	3	0.00
940	2036	2100	2	1	0.00
941	2036	2100	2	2	0.00
942	2036	2100	3	1	0.00
943	2036	2100	3	2	0.00

NON\_FUEL\_VOC - (used)

	*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw
946	1	6.265	171.493	5.507	0.000
947	1	6.265	171.493	5.507	0.000
948	2	9.099	70.308	10.327	0.000
949	3	10.020	393.702	0.000	0.000
950	3	10.020	393.702	0.000	0.000
951	4	19.491	758.888	0.000	0.000
952	5	45.458	1036.494	0.000	0.000
953	6	0.000	0.000	0.000	0.000
954	7	0.000	0.000	0.000	0.000

NON\_FUEL\_VOC - (std)

	*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw
955	1	4.966	135.946	3.846	0.000
956	1	4.966	135.946	3.846	0.000
957	1	1.157	135.946	1.157	0.000
958	2	7.213	47.113	7.213	0.000
959	2	7.213	47.113	7.213	0.000
960	3	7.213	47.113	7.213	0.000
961	3	7.213	47.113	7.213	0.000
962	4	6.714	263.817	0.000	0.000
963	5	13.061	508.525	0.000	0.000
964	6	30.461	694.547	0.000	0.000

NON\_FUEL\_VOC\_CHANGES - (used)

	*% p.a.	*Start_yr	End_yr	veh_type	gnf
970		2012	2080	1	0.000
971		2012	2080	2	0.000
972		2012	2080	3	0.000
973		2012	2080	4	0.000
974		2012	2080	5	0.000

NON\_FUEL\_VOC\_CHANGES - (std)

	*% p.a.	*Start_yr	End_yr	veh_type	gnf
975		2011	2100	1	0.000
976		2011	2100	2	0.000
977		2011	2100	3	0.000
978		2011	2100	4	0.000
979		2011	2100	5	0.000
980		2011	2100	6	0.000
981		2011	2100	7	0.000
982		2011	2100	8	0.000

NON\_FUEL\_TAX\_RATES - (used)

	*% submode	final	intermediate
990	1	21.0	0.0

995	2	21.0	0.0
996	3	21.0	0.0
997	4	21.0	0.0
998	5	21.0	0.0
999	6	21.0	0.0
1000	7	21.0	0.0

1001  
1002 NON\_FUEL\_TAX\_RATES - (std)

1003 \*%  
1004 \*submode            final            intermediate  
1005    1            17.5            0.0  
1006    2            17.5            0.0  
1007    3            17.5            0.0  
1008    4            17.5            0.0  
1009    5            17.5            0.0  
1010    6            17.5            0.0  
1011    7            0.0            0.0  
1012    8            0.0            0.0

1013  
1014 NON\_FUEL\_TAX\_RATES\_CHANGES - (used)

1015 \*% change p.a.  
1016 \*Start\_yr            End\_yr            Submode            final            intermediate  
1017 2012            2012            1            5.7            7.9  
1018 2013            2080            1            0.0            0.0  
1019 2012            2012            2            7.9            10.3  
1020 2013            2080            2            0.0            0.0  
1021 2012            2012            3            7.9            10.3  
1022 2013            2080            3            0.0            0.0  
1023 2012            2012            4            7.9            10.3  
1024 2013            2080            4            0.0            0.0  
1025 2012            2012            5            7.9            10.3  
1026 2013            2080            5            0.0            0.0  
1027 2012            2012            6            7.9            10.3  
1028 2013            2080            6            0.0            0.0  
1029 2012            2012            7            0.0            0.0  
1030 2013            2080            7            0.0            0.0

1031  
1032 NON\_FUEL\_TAX\_RATES\_CHANGES - (std)

1033 \*% change p.a.  
1034 \*Start\_yr            End\_yr            Submode            final            intermediate  
1035 2011            2011            1            14.3            0.0  
1036 2011            2011            2            14.3            0.0  
1037 2011            2011            3            14.3            0.0  
1038 2011            2011            4            14.3            0.0  
1039 2011            2011            5            14.3            0.0  
1040 2011            2011            6            14.3            0.0  
1041 2011            2011            7            0.0            0.0  
1042 2011            2011            8            0.0            0.0  
1043 2012            2100            1            0.0            0.0  
1044 2012            2100            2            0.0            0.0  
1045 2012            2100            3            0.0            0.0  
1046 2012            2100            4            0.0            0.0  
1047 2012            2100            5            0.0            0.0  
1048 2012            2100            6            0.0            0.0  
1049 2012            2100            7            0.0            0.0  
1050 2012            2100            8            0.0            0.0

1051  
1052 DEFAULT\_PURPOSE\_SPLIT - (used)

1053 \*Vtype/submode            purpose            Period1    Period2    Period3    Period4    Period5  
1054    1            1            13.3       16.9       12.0  
1055    1            2            44.2       36.7       42.9  
1056    1            3            42.5       46.4       45.1  
1057    2            1            41.3       50.3       40.2  
1058    2            2            45.2       35.1       45.1  
1059    2            3            13.5       14.6       14.7  
1060    3            1            76.7       81.4       75.6  
1061    3            2            16.1       11.1       17.0  
1062    3            3            7.2       7.5       7.4  
1063    4            1            82.5       86.9       79.7



1064	4	2	11.7	7.8	13.2
1065	4	3	5.8	5.3	7.1
1066	5	1	10.2	10.2	10.2
1067	5	2	18.9	18.9	18.9
1068	5	3	70.8	70.8	70.9
1069	6	1	10.2	10.2	10.2
1070	6	2	18.9	18.9	18.9
1071	6	3	70.8	70.8	70.9
1072	7	1	10.2	10.2	10.2
1073	7	2	18.9	18.9	18.9
1074	7	3	70.8	70.8	70.9

1075

1076 DEFAULT\_PURPOSE\_SPLIT - (std)

*Vtype/submode	purpose	Period1	Period2	Period3	Period4	Period5	
1077	1	16.5	11.8	16.5	12.9	3.5	
1078	1	2	44.0	41.3	11.8	38.5	7.9
1079	1	3	39.5	46.9	71.7	48.6	88.6
1080	2	1	0.0	0.0	0.0	0.0	0.0
1081	2	2	0.0	0.0	0.0	0.0	0.0
1082	2	3	100.0	100.0	100.0	100.0	100.0
1083	3	1	100.0	100.0	100.0	100.0	100.0
1084	3	2	0.0	0.0	0.0	0.0	0.0
1085	3	3	0.0	0.0	0.0	0.0	0.0
1086	4	1	100.0	100.0	100.0	100.0	100.0
1087	4	2	0.0	0.0	0.0	0.0	0.0
1088	4	3	0.0	0.0	0.0	0.0	0.0
1089	5	1	100.0	100.0	100.0	100.0	100.0
1090	5	2	0.0	0.0	0.0	0.0	0.0
1091	5	3	0.0	0.0	0.0	0.0	0.0
1092	6	1	1.4	2.3	1.7	2.3	0.5
1093	6	2	18.4	25.9	6.5	35.4	6.1
1094	6	3	80.2	71.8	91.8	62.3	93.4
1095	7	1	4.5	5.2	3.2	2.5	0.7
1096	7	2	50.1	45.9	10.7	54.7	7.6
1097	7	3	45.4	48.9	86.1	42.8	91.7
1098	8	1	17.1	15.7	15.8	17.7	1.8
1099	8	2	31.2	38.1	5.5	38.6	2.8
1100	8	3	51.7	46.2	78.7	43.7	95.4

1102

1103 DEFAULT\_PERSON\_FACTORS - (used)

*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2..		
1104	1	1	1.00	1.00	1.00	
1105	1	1	2	0.26	0.25	0.26
1106	1	2	1	1.00	1.00	1.00
1107	1	2	2	0.23	0.22	0.23
1108	1	3	1	1.00	1.00	1.00
1109	1	3	2	0.66	0.65	0.68
1110	2	1	1	1.00	1.00	1.00
1111	2	1	2	0.37	0.32	0.38
1112	2	2	1	1.00	1.00	1.00
1113	2	2	2	0.40	0.41	0.40
1114	2	3	1	1.00	1.00	1.00
1115	2	3	2	0.49	0.45	0.48
1116	3	1	1	1.00	1.00	1.00
1117	3	1	2	0.09	0.09	0.09
1118	3	2	1	1.00	1.00	1.00
1119	3	2	2	0.24	0.28	0.24
1120	3	3	1	1.00	1.00	1.00
1121	3	3	2	0.26	0.33	0.27
1122	4	1	1	1.00	1.00	1.00
1123	4	1	2	0.03	0.03	0.03
1124	4	2	1	1.00	1.00	1.00
1125	4	2	2	0.11	0.14	0.08
1126	4	3	1	1.00	1.00	1.00
1127	4	3	2	0.11	0.12	0.16
1128	5	1	1	1.00	1.00	1.00
1129	5	1	2	0.35	0.35	0.35
1130	5	2	1	1.00	1.00	1.00
1131	5	2	2	1.50	1.50	1.50

1133	5	3	1	1.00	1.00	1.00
1134	5	3	2	8.35	8.35	8.35

1135

1136 DEFAULT\_PERSON\_FACTORS - (std)

1137	*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2..
1138	1	1	1	1.00	1.00
	1.00	1.00	1.00	1.00	
1139	1	1	2	0.13	0.15
	0.16	0.17	0.31		
1140	1	2	1	1.00	1.00
	1.00	1.00	1.00		
1141	1	2	2	0.13	0.14
	0.15	0.15	0.21		
1142	1	3	1	1.00	1.00
	1.00	1.00	1.00		
1143	1	3	2	0.71	0.79
	0.82	0.79	1.12		
1144	2	2	1	1.00	1.00
	1.00	1.00	1.00		
1145	2	2	2	0.46	0.46
	0.46	0.46	1.03		
1146	2	3	1	1.00	1.00
	1.00	1.00	1.00		
1147	2	3	2	0.46	0.46
	0.46	0.46	1.03		
1148	3	1	1	1.00	1.00
	1.00	1.00	1.00		
1149	3	1	2	0.20	0.20
	0.20	0.20	0.26		
1150	4	1	1	1.00	1.00
	1.00	1.00	1.00		
1151	5	1	1	1.00	1.00
	1.00	1.00	1.00		

1152

1153 DEFAULT\_PERSON\_FACTORS\_CHANGE - (used)

1154 \*% change p.a.

1155	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3	
	ChangePer4	ChangePer5							
1156	2011	2080		1	1	2	0.00	0.00	0.00
1157	2011	2080		1	2	2	0.00	0.00	0.00

1158

1159 DEFAULT\_PERSON\_FACTORS\_CHANGE - (std)

1160 \*% change p.a.

1161	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3
	ChangePer4	ChangePer5						
1162	2011	2036		1	1	2	0.00	0.00
	0.00	0.00	0.00					
1163	2011	2036		1	2	2	0.00	0.00
	0.00	0.00	0.00					
1164	2011	2036		1	3	2	0.00	0.00
	0.00	0.00	0.00					

1165

1166 INPUT\_SUMMARY

1167 Run name N25 Waterford to Glenmore - Red  
 1168 DM scheme Do **Min**  
 1169 DS scheme Red

1170

1171 Economic parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Teal\Economics\_Input\_TUBAv1.9.8  
 (Oct2020).txt

1172 Scheme parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Red\TUBA\_Scheme\_Input\_Red\_30year\_v1.9.8\_SPL\_1\_0.txt

1173

1174 First year of scheme costs 2020  
 1175 First Appraisal Year 2030

1176	Last Appraisal Year	2059
1177	Modelled years	2030 2045 2059
1178		
1179	Time period	Total hours
1180	AM Peak	646
1181	Inter Peak	2424
1182	PM Peak	640
1183	Total	3710

1184

1185

1186 Note: All monetary values are in 2011 market prices. All monetary values discounted to 2011 unless otherwise stated.

1187

1188 DM\_SCHEME\_COSTS

1189 Do minimum scheme costs. Undiscounted £000s

1190	Mode	Year	Prep.	Superv.	Constr.	Land
	Maint.	Oper.	Grant/Sub.	Dev._Cont		
1191	Road	2020	0	0	0	0
	0	0	0	0		
1192	Road	2021	0	0	0	0
	0	0	0	0		
1193	Road	2022	0	0	0	0
	0	0	0	0		
1194	Road	2023	0	0	0	0
	0	0	0	0		
1195	Road	2024	0	0	0	0
	0	0	0	0		
1196	Road	2025	0	0	0	0
	0	0	0	0		
1197	Road	2026	0	0	0	0
	0	0	0	0		
1198	Road	2027	0	0	0	0
	0	0	0	0		
1199	Road	2028	0	0	0	0
	0	0	0	0		
1200	Road	2029	0	0	0	0
	0	0	0	0		
1201	Road	2030	0	0	0	0
	0	0	0	0		
1202	Road	2031	0	0	0	0
	0	0	0	0		
1203	Road	2032	0	0	0	0
	0	0	0	0		
1204	Road	2033	0	0	0	0
	0	0	0	0		
1205	Road	2034	0	0	0	0
	0	0	0	0		
1206	Road	2035	0	0	0	0
	0	0	0	0		
1207	Road	2036	0	0	0	0
	0	0	0	0		
1208	Road	2037	0	0	0	0
	0	0	0	0		
1209	Road	2038	0	0	0	0
	0	0	0	0		
1210	Road	2039	0	0	0	0
	0	0	0	0		
1211	Road	2040	0	0	0	0
	0	0	0	0		
1212	Road	2041	0	0	0	0
	0	0	0	0		
1213	Road	2042	0	0	0	0
	0	0	0	0		
1214	Road	2043	0	0	0	0
	0	0	0	0		
1215	Road	2044	0	0	0	0
	0	0	0	0		
1216	Road	2045	0	0	0	0
	0	0	0	0		

1217	Road	2046	0	0	0	0	0
1218	Road	2047	0	0	0	0	0
1219	Road	2048	0	0	0	0	0
1220	Road	2049	0	0	0	0	0
1221	Road	2050	0	0	0	0	0
1222	Road	2051	0	0	0	0	0
1223	Road	2052	0	0	0	0	0
1224	Road	2053	0	0	0	0	0
1225	Road	2054	0	0	0	0	0
1226	Road	2055	0	0	0	0	0
1227	Road	2056	0	0	0	0	0
1228	Road	2057	0	0	0	0	0
1229	Road	2058	0	0	0	0	0
1230	Road	2059	0	0	0	0	0
1231	Bus	2020	0	0	0	0	0
1232	Bus	2021	0	0	0	0	0
1233	Bus	2022	0	0	0	0	0
1234	Bus	2023	0	0	0	0	0
1235	Bus	2024	0	0	0	0	0
1236	Bus	2025	0	0	0	0	0
1237	Bus	2026	0	0	0	0	0
1238	Bus	2027	0	0	0	0	0
1239	Bus	2028	0	0	0	0	0
1240	Bus	2029	0	0	0	0	0
1241	Bus	2030	0	0	0	0	0
1242	Bus	2031	0	0	0	0	0
1243	Bus	2032	0	0	0	0	0
1244	Bus	2033	0	0	0	0	0
1245	Bus	2034	0	0	0	0	0
1246	Bus	2035	0	0	0	0	0
1247	Bus	2036	0	0	0	0	0
1248	Bus	2037	0	0	0	0	0
1249	Bus	2038	0	0	0	0	0
1250	Bus	2039	0	0	0	0	0
1251	Bus	2040	0	0	0	0	0

1252	0	0	0	0	0	0	0
	Bus	2041	0	0	0	0	0
	0	0	0	0	0	0	0
1253	Bus	2042	0	0	0	0	0
	0	0	0	0	0	0	0
1254	Bus	2043	0	0	0	0	0
	0	0	0	0	0	0	0
1255	Bus	2044	0	0	0	0	0
	0	0	0	0	0	0	0
1256	Bus	2045	0	0	0	0	0
	0	0	0	0	0	0	0
1257	Bus	2046	0	0	0	0	0
	0	0	0	0	0	0	0
1258	Bus	2047	0	0	0	0	0
	0	0	0	0	0	0	0
1259	Bus	2048	0	0	0	0	0
	0	0	0	0	0	0	0
1260	Bus	2049	0	0	0	0	0
	0	0	0	0	0	0	0
1261	Bus	2050	0	0	0	0	0
	0	0	0	0	0	0	0
1262	Bus	2051	0	0	0	0	0
	0	0	0	0	0	0	0
1263	Bus	2052	0	0	0	0	0
	0	0	0	0	0	0	0
1264	Bus	2053	0	0	0	0	0
	0	0	0	0	0	0	0
1265	Bus	2054	0	0	0	0	0
	0	0	0	0	0	0	0
1266	Bus	2055	0	0	0	0	0
	0	0	0	0	0	0	0
1267	Bus	2056	0	0	0	0	0
	0	0	0	0	0	0	0
1268	Bus	2057	0	0	0	0	0
	0	0	0	0	0	0	0
1269	Bus	2058	0	0	0	0	0
	0	0	0	0	0	0	0
1270	Bus	2059	0	0	0	0	0
	0	0	0	0	0	0	0

1271							
1272	DS_SCHEME_COSTS						
1273	Do something scheme costs. Undiscounted £000s						
1274	Mode	Year	Prep.	Superv.	Constr.	Land	
	Maint.	Oper.	Grant/Sub.	Dev._Cont			
1275	Road	2020	0	0	0	0	0
	0	0	0	0	0	0	0
1276	Road	2021	0	0	0	0	0
	0	0	0	0	0	0	0
1277	Road	2022	0	0	0	0	0
	0	0	0	0	0	0	0
1278	Road	2023	0	0	0	0	0
	0	0	0	0	0	0	0
1279	Road	2024	0	0	0	0	0
	0	0	0	0	0	0	0
1280	Road	2025	0	0	0	0	0
	0	0	0	0	0	0	0
1281	Road	2026	0	0	0	0	0
	0	0	0	0	0	0	0
1282	Road	2027	6145	0	40595	9445	
	0	0	0	0	0	0	
1283	Road	2028	1229	4655	85624	9445	
	0	0	0	0	0	0	
1284	Road	2029	819	4655	44347	0	
	0	0	0	0	0	0	
1285	Road	2030	0	0	0	0	
	447	0	0	0	0	0	
1286	Road	2031	0	0	0	0	
	447	0	0	0	0	0	
1287	Road	2032	0	0	0	0	

1288	447	0	0	0	0	0	0
	Road	2033	0	0	0	0	0
1289	447	0	0	0	0	0	0
	Road	2034	0	0	0	0	0
1290	447	0	0	0	0	0	0
	Road	2035	0	0	0	0	0
1291	447	0	0	0	0	0	0
	Road	2036	0	0	0	0	0
1292	447	0	0	0	0	0	0
	Road	2037	0	0	0	0	0
1293	447	0	0	0	0	0	0
	Road	2038	0	0	0	0	0
1294	447	0	0	0	0	0	0
	Road	2039	0	0	0	0	0
1295	447	0	0	0	0	0	0
	Road	2040	0	0	0	0	0
1296	447	0	0	0	0	0	0
	Road	2041	0	0	0	0	0
1297	447	0	0	0	0	0	0
	Road	2042	0	0	0	0	0
1298	447	0	0	0	0	0	0
	Road	2043	0	0	0	0	0
1299	447	0	0	0	0	0	0
	Road	2044	0	0	0	0	0
1300	447	0	0	0	0	0	0
	Road	2045	0	0	0	0	0
1301	447	0	0	0	0	0	0
	Road	2046	0	0	0	0	0
1302	447	0	0	0	0	0	0
	Road	2047	0	0	0	0	0
1303	447	0	0	0	0	0	0
	Road	2048	0	0	0	0	0
1304	447	0	0	0	0	0	0
	Road	2049	0	0	0	0	0
1305	447	0	0	0	0	0	0
	Road	2050	0	0	0	0	0
1306	447	0	0	0	0	0	0
	Road	2051	0	0	0	0	0
1307	447	0	0	0	0	0	0
	Road	2052	0	0	0	0	0
1308	447	0	0	0	0	0	0
	Road	2053	0	0	0	0	0
1309	447	0	0	0	0	0	0
	Road	2054	0	0	0	0	0
1310	447	0	0	0	0	0	0
	Road	2055	0	0	0	0	0
1311	447	0	0	0	0	0	0
	Road	2056	0	0	0	0	0
1312	447	0	0	0	0	0	0
	Road	2057	0	0	0	0	0
1313	447	0	0	0	0	0	0
	Road	2058	0	0	0	0	0
1314	582	0	0	0	0	0	0
	Bus	2020	0	0	0	0	0
1315	0	0	0	0	0	0	0
1316	0	0	0	0	0	0	0
	Bus	2021	0	0	0	0	0
1317	0	0	0	0	0	0	0
	Bus	2022	0	0	0	0	0
1318	0	0	0	0	0	0	0
	Bus	2023	0	0	0	0	0
1319	0	0	0	0	0	0	0
	Bus	2024	0	0	0	0	0
1320	0	0	0	0	0	0	0
	Bus	2025	0	0	0	0	0
1321	0	0	0	0	0	0	0
	Bus	2026	0	0	0	0	0



contributions and delays) and differences. £000s.

	Mode	Year	DM_scheme_costs	DS_scheme_costs	Difference
1358	Road	2020	0	0	0
1359	Road	2021	0	0	0
1360	Road	2022	0	0	0
1361	Road	2023	0	0	0
1362	Road	2024	0	0	0
1363	Road	2025	0	0	0
1364	Road	2026	0	0	0
1365	Road	2027	0	29998	29998
1366	Road	2028	0	51827	51827
1367	Road	2029	0	24593	24593
1368	Road	2030	0	212	212
1369	Road	2031	0	204	204
1370	Road	2032	0	196	196
1371	Road	2033	0	188	188
1372	Road	2034	0	181	181
1373	Road	2035	0	174	174
1374	Road	2036	0	168	168
1375	Road	2037	0	161	161
1376	Road	2038	0	155	155
1377	Road	2039	0	149	149
1378	Road	2040	0	143	143
1379	Road	2041	0	138	138
1380	Road	2042	0	132	132
1381	Road	2043	0	127	127
1382	Road	2044	0	122	122
1383	Road	2045	0	118	118
1384	Road	2046	0	113	113
1385	Road	2047	0	109	109
1386	Road	2048	0	105	105
1387	Road	2049	0	101	101
1388	Road	2050	0	97	97
1389	Road	2051	0	94	94
1390	Road	2052	0	91	91
1391	Road	2053	0	88	88
1392	Road	2054	0	85	85
1393	Road	2055	0	82	82
1394	Road	2056	0	79	79
1395	Road	2057	0	76	76
1396	Road	2058	0	74	74
1397	Road	2059	0	93	93
1398	Bus	2020	0	0	0
1399	Bus	2021	0	0	0
1400	Bus	2022	0	0	0
1401	Bus	2023	0	0	0
1402	Bus	2024	0	0	0
1403	Bus	2025	0	0	0
1404	Bus	2026	0	0	0
1405	Bus	2027	0	0	0
1406	Bus	2028	0	0	0
1407	Bus	2029	0	0	0
1408	Bus	2030	0	0	0
1409	Bus	2031	0	0	0
1410	Bus	2032	0	0	0
1411	Bus	2033	0	0	0
1412	Bus	2034	0	0	0
1413	Bus	2035	0	0	0
1414	Bus	2036	0	0	0
1415	Bus	2037	0	0	0
1416	Bus	2038	0	0	0
1417	Bus	2039	0	0	0
1418	Bus	2040	0	0	0
1419	Bus	2041	0	0	0
1420	Bus	2042	0	0	0
1421	Bus	2043	0	0	0
1422	Bus	2044	0	0	0
1423	Bus	2045	0	0	0
1424	Bus	2046	0	0	0



1426	Bus	2047	0	0	0
1427	Bus	2048	0	0	0
1428	Bus	2049	0	0	0
1429	Bus	2050	0	0	0
1430	Bus	2051	0	0	0
1431	Bus	2052	0	0	0
1432	Bus	2053	0	0	0
1433	Bus	2054	0	0	0
1434	Bus	2055	0	0	0
1435	Bus	2056	0	0	0
1436	Bus	2057	0	0	0
1437	Bus	2058	0	0	0
1438	Bus	2059	0	0	0
1439	Road	Total	0	110272	110272
1440	Bus	Total	0	0	0

1441

1442 TRIP\_MATRIX\_TOTALS

1443 Annualised total trip numbers (thousands)

1444	Submode	Year	Time period	DO MIN	DO SOM
1445	Car	2030	AM Peak	4719	4719
1446	Car	2030	Inter Peak	15931	15931
1447	Car	2030	PM Peak	4822	4822
1448	Car	2030	All	25472	25472
1449	Car	2045	AM Peak	4859	4859
1450	Car	2045	Inter Peak	16387	16387
1451	Car	2045	PM Peak	4962	4962
1452	Car	2045	All	26208	26208
1453	Car	2059	AM Peak	4861	4861
1454	Car	2059	Inter Peak	16428	16428
1455	Car	2059	PM Peak	4963	4963
1456	Car	2059	All	26252	26252
1457	OGV2	2030	AM Peak	287	287
1458	OGV2	2030	Inter Peak	1018	1018
1459	OGV2	2030	PM Peak	236	236
1460	OGV2	2030	All	1541	1541
1461	OGV2	2045	AM Peak	339	339
1462	OGV2	2045	Inter Peak	1209	1209
1463	OGV2	2045	PM Peak	279	279
1464	OGV2	2045	All	1828	1828
1465	OGV2	2059	AM Peak	361	361
1466	OGV2	2059	Inter Peak	1292	1292
1467	OGV2	2059	PM Peak	297	297
1468	OGV2	2059	All	1950	1950
1469	All	2030	AM Peak	5006	5006
1470	All	2030	Inter Peak	16948	16948
1471	All	2030	PM Peak	5059	5059
1472	All	2030	All	27013	27013
1473	All	2045	AM Peak	5198	5198
1474	All	2045	Inter Peak	17596	17596
1475	All	2045	PM Peak	5241	5241
1476	All	2045	All	28035	28035
1477	All	2059	AM Peak	5221	5221
1478	All	2059	Inter Peak	17721	17721
1479	All	2059	PM Peak	5260	5260
1480	All	2059	All	28202	28202

1481

1482 DM&DS\_USER\_COSTS

1483 Total value of user costs, DM and DS. £000s.

1484	Mode	Year	DMtot_time	DMtot_charge	DMtot_fuel	DMtot_nonfuel
	DStot_time	DStot_charge	DStot_fuel	DStot_nonfuel		
1485	Road	2030	104727	0	19837	20654
	103192	0	19727	20514		
1486	Road	2045	86732	0	12186	12416
	85344	0	12116	12328		
1487	Road	2059	73347	0	7656	7725
	72091	0	7611	7669		

1488

1489 FUEL\_CONSUMPTION

1490 Total fuel consumption, DM and DS. kilounits.

			Do minimum		Do something	
	Submode	Year	petrol	diesel	petrol	diesel
1491						
1492	Car	2030	11160	5939	11116	5909
1493	Car	2045	11511	6130	11466	6098
1494	Car	2059	11549	6151	11503	6118
1495	OGV2	2030	0	19097	0	18966
1496	OGV2	2045	0	22533	0	22376
1497	OGV2	2059	0	24009	0	23841
1498	All	2030	11160	25035	11116	24875
1499	All	2045	11511	28663	11466	28474
1500	All	2059	11549	30160	11503	29959
1501	Car	Total	342809	182521	341460	181577
1502	OGV2	Total	0	659576	0	654984
1503	All	Total	342809	842097	341460	836560

1505  
1506 CO2\_EMISSIONS\_UNTRADED

			Emissions (tonnes) (£000s, low central)			cost cost (£000s, high)	
	Submode	Year	DM	DS	Increase	DM	DM
	DS	Increase	DM	DS	Increase	DM	DM
	DS	Increase					
1507							
1508	Car	2030	40102	39928	-174	1902	
1509	1894	-8	381	379	-2	381	
1510	379	-2					
1510	Car	2045	41374	41192	-183	2266	
1511	2256	-10	218	217	-1	218	
1511	217	-1					
1511	Car	2059	41512	41327	-185	2728	
1512	2715	-12	133	132	-1	133	
1512	132	-1					
1512	OGV2	2030	48926	48591	-335	2321	
1513	2305	-16	464	461	-3	464	
1513	461	-3					
1513	OGV2	2045	57730	57327	-403	3161	
1514	3139	-22	304	302	-2	304	
1514	302	-2					
1514	OGV2	2059	61512	61080	-432	4042	
1515	4013	-28	196	195	-1	196	
1515	195	-1					
1515	All	2030	89027	88518	-509	4223	
1516	4199	-24	845	840	-5	845	
1516	840	-5					
1516	All	2031	89699	89185	-514	4296	
1517	4272	-25	819	814	-5	819	
1517	814	-5					
1517	All	2032	90371	89852	-519	4370	
1518	4345	-25	793	789	-5	793	
1518	789	-5					
1518	All	2033	91043	90519	-524	4445	
1519	4419	-26	768	764	-4	768	
1519	764	-4					
1519	All	2034	91715	91185	-530	4521	
1520	4495	-26	744	740	-4	744	
1520	740	-4					
1520	All	2035	92387	91852	-535	4598	
1521	4571	-27	721	717	-4	721	
1521	717	-4					
1521	All	2036	93058	92519	-540	4676	
1522	4648	-27	698	694	-4	698	
1522	694	-4					
1522	All	2037	93730	93185	-545	4755	
1523	4727	-28	676	672	-4	676	
1523	672	-4					
1523	All	2038	94402	93852	-550	4835	
1524	4807	-28	655	651	-4	655	
1524	651	-4					
1524	All	2039	95074	94519	-555	4916	
1524	4887	-29	634	630	-4	634	

1525	630	-4				
	All	2040	95746	95185	-560	4998
	4969	-29	614	610	-4	614
	610	-4				
1526	All	2041	96417	95852	-565	5082
	5052	-30	595	591	-3	595
	591	-3				
1527	All	2042	97089	96519	-570	5166
	5136	-30	576	572	-3	576
	572	-3				
1528	All	2043	97761	97186	-576	5252
	5221	-31	557	554	-3	557
	554	-3				
1529	All	2044	98433	97852	-581	5339
	5308	-31	540	536	-3	540
	536	-3				
1530	All	2045	99105	98519	-586	5427
	5395	-32	522	519	-3	522
	519	-3				
1531	All	2046	99385	98797	-588	5495
	5462	-33	504	501	-3	504
	501	-3				
1532	All	2047	99665	99074	-590	5563
	5530	-33	486	483	-3	486
	483	-3				
1533	All	2048	99944	99352	-592	5633
	5599	-33	468	466	-3	468
	466	-3				
1534	All	2049	100224	99630	-595	5703
	5669	-34	452	449	-3	452
	449	-3				
1535	All	2050	100504	99908	-597	5802
	5767	-34	438	435	-3	438
	435	-3				
1536	All	2051	100784	100185	-599	5902
	5867	-35	424	421	-3	424
	421	-3				
1537	All	2052	101064	100463	-601	6004
	5968	-36	411	408	-2	411
	408	-2				
1538	All	2053	101344	100741	-604	6108
	6072	-36	398	396	-2	398
	396	-2				
1539	All	2054	101624	101018	-606	6214
	6177	-37	386	383	-2	386
	383	-2				
1540	All	2055	101904	101296	-608	6321
	6283	-38	374	371	-2	374
	371	-2				
1541	All	2056	102184	101574	-610	6430
	6392	-38	362	360	-2	362
	360	-2				
1542	All	2057	102464	101852	-612	6541
	6502	-39	351	349	-2	351
	349	-2				
1543	All	2058	102744	102129	-615	6654
	6615	-40	340	338	-2	340
	338	-2				
1544	All	2059	103024	102407	-617	6769
	6729	-41	329	327	-2	329
	327	-2				
1545	Car	Total	1232082	1226656	-5427	68119
	67818	-300	7024	6993	-31	7024
	6993	-31				
1546	OGV2	Total	1689834	1678069	-11766	93921
	93266	-654	9453	9387	-66	9453
	9387	-66				
1547	All	Total	2921917	2904724	-17192	162039
	161085	-955	16477	16380	-97	16477



1572	All	2044	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1573	All	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1574	All	2046	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1575	All	2047	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1576	All	2048	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1577	All	2049	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1578	All	2050	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1579	All	2051	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1580	All	2052	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1581	All	2053	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1582	All	2054	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1583	All	2055	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1584	All	2056	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1585	All	2057	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1586	All	2058	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1587	All	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1588	Car	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1589	OGV2	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1590	All	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0

1591  
1592 CO2\_EMISSIONS\_BY\_TIME\_PERIOD\_UNTRADED

		Emissions (tonnes)				cost	
		(£000s, low)		(£000s, high)		cost	
		central)				(£000s, high)	
1594	Submode	Year	DM	DS	Increase	DM	DM
	DS	Increase	DM	DS	Increase	DM	DM
	DS	Increase					
1595	AM Peak	2030	17616	17507	-109	836	
	831	-5	167	166	-1	167	
	166	-1					
1596	AM Peak	2045	19478	19352	-126	1067	

	1060	-7	103	102	-1	103
	102	-1				
1597	AM Peak	2059	20145	20012	-133	1324
	1315	-9	64	64	-0	64
	64	-0				
1598	Inter Peak	2030	55393	55100	-293	2628
	2614	-14	526	523	-3	526
	523	-3				
1599	Inter Peak	2045	61964	61632	-332	3393
	3375	-18	327	325	-2	327
	325	-2				
1600	Inter Peak	2059	64617	64269	-348	4246
	4223	-23	206	205	-1	206
	205	-1				
1601	PM Peak	2030	16019	15912	-107	760
	755	-5	152	151	-1	152
	151	-1				
1602	PM Peak	2045	17662	17535	-127	967
	960	-7	93	92	-1	93
	92	-1				
1603	PM Peak	2059	18262	18126	-135	1200
	1191	-9	58	58	-0	58
	58	-0				
1604	AM Peak	Total	574452	570750	-3702	31847
	31641	-206	3243	3222	-21	3243
	3222	-21				
1605	Inter Peak	Total	1826246	1816475	-9771	101299
	100757	-542	10290	10235	-55	10290
	10235	-55				
1606	PM Peak	Total	521219	517500	-3719	28893
	28686	-207	2943	2923	-21	2943
	2923	-21				

1607

1608 NOTE: The cost of any EU Allowances (EUAs) purchased to cover traded emissions (i.e. emissions from sectors covered by the EU Emissions Trading System)

1609 will be reflected in the purchase price of traded sector goods (such as electricity).

1610 Since the purchase price is used in the costs, considered in transport appraisal,

1611 the cost of the relevant EUAs will be included in the cost benefit analysis,

1612 "internalising" the costs of emissions from traded sectors.

1613 The CO2 EMISSIONS BY TIME PERIOD TRADED reported in the table below are therefore provided for information purposes only - they are not included in the

1614 Economic Efficiency of the Transport System (TEE) table.

1615 For further information, please refer to TAG Unit A-3 para. 4.1.5 and 4.2.9

1615 CO2\_EMISSIONS\_BY\_TIME\_PERIOD\_TRADED

1616	Submode	Year	Emissions (tonnes)			cost	
			DM	DS	Increase	cost (£000s, low)	cost (£000s, high)
1617	DS	Increase	DM	DS	Increase	DM	DM
1618	DS	Increase	DM	DS	Increase	DM	DM
	AM Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1619	AM Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1620	AM Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1621	Inter Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1622	Inter Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1623	Inter Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					

1624	PM Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1625	PM Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1626	PM Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1627	AM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1628	Inter Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1629	PM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					

1630  
1631 MODE  
1632 User benefits and changes in revenues by mode, all years. £000s.

1633	Mode	Year	User	User_Charges	Vehicle_Operating_Cost	
1634	Operator_Rev	Indirect	Time	PT_fares_(pri	Fuel	Non_fuel
			PT_fares_(pri	Taxes		
1635	Road	2030	1536	0	111	140
	0	-60				
1636	Road	2031	1526	0	107	136
	0	-58				
1637	Road	2032	1517	0	104	132
	0	-57				
1638	Road	2033	1508	0	101	128
	0	-55				
1639	Road	2034	1498	0	98	124
	0	-53				
1640	Road	2035	1488	0	95	121
	0	-52				
1641	Road	2036	1479	0	92	117
	0	-50				
1642	Road	2037	1469	0	90	113
	0	-49				
1643	Road	2038	1459	0	87	110
	0	-47				
1644	Road	2039	1449	0	84	107
	0	-46				
1645	Road	2040	1439	0	82	103
	0	-44				
1646	Road	2041	1429	0	79	100
	0	-43				
1647	Road	2042	1419	0	77	97
	0	-42				
1648	Road	2043	1408	0	75	94
	0	-40				
1649	Road	2044	1398	0	72	91
	0	-39				
1650	Road	2045	1388	0	70	88
	0	-38				
1651	Road	2046	1374	0	68	85
	0	-37				
1652	Road	2047	1359	0	65	82
	0	-35				
1653	Road	2048	1345	0	63	79
	0	-34				
1654	Road	2049	1331	0	61	77
	0	-33				
1655	Road	2050	1324	0	59	74
	0	-32				
1656	Road	2051	1316	0	57	72
	0	-31				

1657	Road	2052	1309	0	55	70
	0	-30				
1658	Road	2053	1301	0	54	68
	0	-29				
1659	Road	2054	1294	0	52	66
	0	-28				
1660	Road	2055	1286	0	51	64
	0	-27				
1661	Road	2056	1279	0	49	62
	0	-26				
1662	Road	2057	1271	0	48	60
	0	-26				
1663	Road	2058	1263	0	46	58
	0	-25				
1664	Road	2059	1256	0	45	56
	0	-24				
1665	Road	Total	41717	0	2198	2777
	0	-1191				

1666

1667 SUBMODE

1668 User benefits and changes in revenues by submode/vehicle type, modelled years and total. £000s.

1669 Submode Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1670 Time PT\_fares\_(pri PT\_fares\_(pri Fuel Non\_fuel  
Taxes

1671 Car 2030 1230 0 42 63  
0 -25

1672 Car 2045 1092 0 24 36  
0 -14

1673 Car 2059 990 0 15 22  
0 -9

1674 OGV2 2030 306 0 68 77  
0 -35

1675 OGV2 2045 296 0 46 52  
0 -24

1676 OGV2 2059 266 0 30 34  
0 -15

1677 All 2030 1536 0 111 140  
0 -60

1678 All 2045 1388 0 70 88  
0 -38

1679 All 2059 1256 0 45 56  
0 -24

1680 Car Total 33000 0 785 1173  
0 -460

1681 OGV2 Total 8717 0 1413 1603  
0 -731

1682 All Total 41717 0 2198 2777  
0 -1191

1683

1684 PERSON\_TYPES

1685 User benefits and changes in revenues by person type, modelled years and total. £000s.

1686 Person\_type Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1687 Time PT\_fares\_(pri PT\_fares\_(pri Fuel Non\_fuel  
Taxes

1688 All 2030 1536 0 111 140  
0 -60

1689 All 2045 1388 0 70 88  
0 -38

1690 All 2059 1256 0 45 56  
0 -24

1691 All Total 41717 0 2198 2777  
0 -1191

1692

1693 PURPOSE

1694 User benefits and changes in revenues by trip purpose, modelled years and total. £000s.

1695 Purpose Year User User\_Charges Vehicle\_Operating\_Cost



1696	Operator_Rev	Indirect	Time PT_fares_(pri PT_fares_(pri		Fuel	Non_fuel
1697	Business	2030	709	0	64	98
	0	-33				
1698	Business	2045	653	0	42	65
	0	-22				
1699	Business	2059	591	0	27	42
	0	-14				
1700	Commuting	2030	354	0	24	20
	0	-14				
1701	Commuting	2045	315	0	14	11
	0	-8				
1702	Commuting	2059	285	0	9	7
	0	-5				
1703	Other	2030	473	0	23	22
	0	-13				
1704	Other	2045	420	0	14	12
	0	-8				
1705	Other	2059	380	0	9	8
	0	-5				
1706	Business	Total	19536	0	1305	2015
	0	-677				
1707	Commuting	Total	9504	0	455	357
	0	-260				
1708	Other	Total	12678	0	438	405
	0	-254				
1709						
1710	PERIOD					
1711	User benefits and changes in revenues by time period, modelled years and total. £000s.					
1712	Period	Year	User	User_Charges	Vehicle_Operating_Cost	
1713	Operator_Rev	Indirect	Time PT_fares_(pri PT_fares_(pri		Fuel	Non_fuel
1714	AM Peak	2030	430	0	24	30
	0	-13				
1715	AM Peak	2045	395	0	15	19
	0	-8				
1716	AM Peak	2059	358	0	10	12
	0	-5				
1717	Inter Peak	2030	676	0	63	81
	0	-34				
1718	Inter Peak	2045	600	0	40	51
	0	-21				
1719	Inter Peak	2059	545	0	25	32
	0	-13				
1720	PM Peak	2030	430	0	24	29
	0	-13				
1721	PM Peak	2045	392	0	15	18
	0	-8				
1722	PM Peak	2059	353	0	10	12
	0	-5				
1723	AM Peak	Total	11831	0	473	605
	0	-257				
1724	Inter Peak	Total	18138	0	1244	1600
	0	-671				
1725	PM Peak	Total	11748	0	481	572
	0	-263				
1726						
1727	NON MONETISED TIME BENEFITS BY TIME SAVING					
1728	Time benefits (thousands of person hrs) by size of time saving					
1729	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins
	to 2 mins	2 to 5 mins	> 5 mins			
1730	Car	Business	2030	0		-0
	-1	11	7	0		
1731	Car	Business	2045	0		-0
	-1	12	8	0		
1732	Car	Business	2059	0		0
	-1	13	9	0		

1733	Car	Business	Total	0	-0
	-22	359	247	0	
1734	Car	Commuting	2030	0	-0
	-2	26	25	0	
1735	Car	Commuting	2045	0	-0
	-2	29	28	0	
1736	Car	Commuting	2059	0	0
	-2	31	31	0	
1737	Car	Commuting	Total	0	-0
	-53	860	832	0	
1738	Car	Other	2030	0	-0
	-3	41	34	0	
1739	Car	Other	2045	0	-0
	-3	46	38	0	
1740	Car	Other	2059	0	0
	-3	50	42	0	
1741	Car	Other	Total	0	-0
	-86	1378	1138	0	
1742	OGV2	Business	2030	0	0
	-0	9	4	0	
1743	OGV2	Business	2045	0	0
	-0	11	5	0	
1744	OGV2	Business	2059	0	0
	-0	12	6	0	
1745	OGV2	Business	Total	0	0
	-2	329	145	0	
1746	OGV2	Commuting	2030	0	0
	-0	1	1	0	
1747	OGV2	Commuting	2045	0	0
	-0	1	1	0	
1748	OGV2	Commuting	2059	0	0
	-0	1	1	0	
1749	OGV2	Commuting	Total	0	0
	-0	36	24	0	
1750	OGV2	Other	2030	0	0
	-0	1	0	0	
1751	OGV2	Other	2045	0	0
	-0	1	0	0	
1752	OGV2	Other	2059	0	0
	-0	1	1	0	
1753	OGV2	Other	Total	0	0
	-0	23	13	0	
1754					
1755	MONETISED TIME BENEFITS BY TIME SAVING				
1756	Time benefits (£000s) by size of time saving				
1757	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins
	to 2 mins	2 to 5 mins	> 5 mins		-2 to 0 mins
					0
1758	Car	Business	2030	0	-0
	-18	250	172	0	
1759	Car	Business	2045	0	-0
	-13	220	151	0	
1760	Car	Business	2059	0	0
	-12	198	138	0	
1761	Car	Business	Total	0	-1
	-421	6655	4586	0	
1762	Car	Commuting	2030	0	-0
	-14	187	181	0	
1763	Car	Commuting	2045	0	-0
	-10	165	159	0	
1764	Car	Commuting	2059	0	0
	-9	148	145	0	
1765	Car	Commuting	Total	0	-1
	-311	4989	4827	0	
1766	Car	Other	2030	0	-0
	-20	270	223	0	
1767	Car	Other	2045	0	-0
	-14	238	196	0	
1768	Car	Other	2059	0	0
	-13	214	179	0	

1769	Car	Other	Total	0	-1				
	-454	7194	5939	0					
1770	OGV2	Business	2030	0	0				
	-1	221	86	0					
1771	OGV2	Business	2045	0	0				
	-1	205	92	0					
1772	OGV2	Business	2059	0	0				
	-2	182	86	0					
1773	OGV2	Business	Total	0	0				
	-43	6094	2666	0					
1774	OGV2	Commuting	2030	0	0				
	0	0	0	0					
1775	OGV2	Commuting	2045	0	0				
	0	0	0	0					
1776	OGV2	Commuting	2059	0	0				
	0	0	0	0					
1777	OGV2	Commuting	Total	0	0				
	0	0	0	0					
1778	OGV2	Other	2030	0	0				
	0	0	0	0					
1779	OGV2	Other	2045	0	0				
	0	0	0	0					
1780	OGV2	Other	2059	0	0				
	0	0	0	0					
1781	OGV2	Other	Total	0	0				
	0	0	0	0					
1782									
1783	TOTAL BENEFITS BY TIME SAVING								
1784	Total benefits (£000s) by size of time saving								
1785	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins	0 mins	0	
	to 2 mins	2 to 5 mins	> 5 mins						
1786	Car	Business	2030	0	-0				
	-19	269	181	0					
1787	Car	Business	2045	0	-0				
	-13	231	157	0					
1788	Car	Business	2059	0	0				
	-12	205	142	0					
1789	Car	Business	Total	0	-1				
	-429	7005	4768	0					
1790	Car	Commuting	2030	0	-0				
	-13	210	194	0					
1791	Car	Commuting	2045	0	-0				
	-9	179	166	0					
1792	Car	Commuting	2059	0	0				
	-8	156	150	0					
1793	Car	Commuting	Total	0	-0				
	-305	5420	5062	0					
1794	Car	Other	2030	0	-0				
	-20	298	236	0					
1795	Car	Other	2045	0	-0				
	-14	254	203	0					
1796	Car	Other	2059	0	0				
	-12	224	183	0					
1797	Car	Other	Total	0	-1				
	-446	7709	6177	0					
1798	OGV2	Business	2030	0	0				
	-1	322	120	0					
1799	OGV2	Business	2045	0	0				
	-1	271	117	0					
1800	OGV2	Business	2059	0	0				
	-2	224	103	0					
1801	OGV2	Business	Total	0	0				
	-49	8140	3420	0					
1802	OGV2	Commuting	2030	0	0				
	-0	4	2	0					
1803	OGV2	Commuting	2045	0	0				
	-0	3	2	0					
1804	OGV2	Commuting	2059	0	0				
	-0	2	1	0					

1805	OGV2	Commuting	Total	0	0
	-0	89	50	0	
1806	OGV2	Other	2030	0	0
	-0	3	1	0	
1807	OGV2	Other	2045	0	0
	-0	2	1	0	
1808	OGV2	Other	2059	0	0
	-0	1	1	0	
1809	OGV2	Other	Total	0	0
	-0	57	26	0	

1810

1811 NON MONETISED TIME BENEFITS BY DISTANCE

1812 Time benefits (thousands of person hrs) by distance

1813 Vehicle type Purpose Year < 1 kms 1 to 5 kms 5 to 10 kms  
10 to 15 kms 15 to 20 kms 20 to 50 kms 50 to 100 kms >100 kms

1814	Car	Business	2030	17	0	0
	0	0	0	0	0	0
1815	Car	Business	2045	20	0	0
	0	0	0	0	0	0
1816	Car	Business	2059	21	0	0
	0	0	0	0	0	0
1817	Car	Business	Total	584	0	0
	0	0	0	0	0	0
1818	Car	Commuting	2030	48	0	0
	0	0	0	0	0	0
1819	Car	Commuting	2045	55	0	0
	0	0	0	0	0	0
1820	Car	Commuting	2059	60	0	0
	0	0	0	0	0	0
1821	Car	Commuting	Total	1639	0	0
	0	0	0	0	0	0
1822	Car	Other	2030	72	0	0
	0	0	0	0	0	0
1823	Car	Other	2045	82	0	0
	0	0	0	0	0	0
1824	Car	Other	2059	89	0	0
	0	0	0	0	0	0
1825	Car	Other	Total	2430	0	0
	0	0	0	0	0	0
1826	OGV2	Business	2030	0	0	0
	0	0	0	11	2	0
1827	OGV2	Business	2045	0	0	0
	-0	0	0	14	2	0
1828	OGV2	Business	2059	0	-0	0
	-0	0	0	16	2	0
1829	OGV2	Business	Total	0	0	0
	-0	0	0	420	51	0
1830	OGV2	Commuting	2030	0	0	0
	0	0	0	1	0	0
1831	OGV2	Commuting	2045	0	0	0
	-0	0	0	2	0	0
1832	OGV2	Commuting	2059	0	-0	0
	-0	0	0	2	0	0
1833	OGV2	Commuting	Total	0	0	0
	-0	0	0	53	6	0
1834	OGV2	Other	2030	0	0	0
	0	0	0	1	0	0
1835	OGV2	Other	2045	0	0	0
	-0	0	0	1	0	0
1836	OGV2	Other	2059	0	-0	0
	-0	0	0	1	0	0
1837	OGV2	Other	Total	0	0	0
	-0	0	0	31	4	0

1838

1839 MONETISED TIME BENEFITS BY DISTANCE

1840 Time benefits (£000s) by distance

1841 Vehicle type Purpose Year < 1 kms 1 to 5 kms 5 to 10 kms  
10 to 15 kms 15 to 20 kms 20 to 50 kms 50 to 100 kms >100 kms

1842	Car	Business	2030	404	0	0
------	-----	----------	------	-----	---	---

1843	0	0	0	0	0	0	0
1843	Car	Business	2045	358	0	0	0
1844	0	0	0	0	0	0	0
1844	Car	Business	2059	325	0	0	0
1845	0	0	0	0	0	0	0
1845	Car	Business	Total	10819	0	0	0
1846	0	0	0	0	0	0	0
1846	Car	Commuting	2030	354	0	0	0
1847	0	0	0	0	0	0	0
1847	Car	Commuting	2045	315	0	0	0
1848	0	0	0	0	0	0	0
1848	Car	Commuting	2059	285	0	0	0
1849	0	0	0	0	0	0	0
1849	Car	Commuting	Total	9504	0	0	0
1850	0	0	0	0	0	0	0
1850	Car	Other	2030	473	0	0	0
1851	0	0	0	0	0	0	0
1851	Car	Other	2045	420	0	0	0
1852	0	0	0	0	0	0	0
1852	Car	Other	2059	380	0	0	0
1853	0	0	0	0	0	0	0
1853	Car	Other	Total	12678	0	0	0
1854	0	0	0	0	0	0	0
1854	OGV2	Business	2030	0	0	0	0
1855	0	0	0	267	38	0	0
1855	OGV2	Business	2045	0	0	0	0
1856	-0	0	0	264	31	0	0
1856	OGV2	Business	2059	0	-0	0	0
1857	-0	0	0	240	26	0	0
1857	OGV2	Business	Total	0	0	0	0
1858	-0	2	9	7758	949	0	0
1858	OGV2	Commuting	2030	0	0	0	0
1859	0	0	0	0	0	0	0
1859	OGV2	Commuting	2045	0	0	0	0
1860	0	0	0	0	0	0	0
1860	OGV2	Commuting	2059	0	0	0	0
1861	0	0	0	0	0	0	0
1861	OGV2	Commuting	Total	0	0	0	0
1862	0	0	0	0	0	0	0
1862	OGV2	Other	2030	0	0	0	0
1863	0	0	0	0	0	0	0
1863	OGV2	Other	2045	0	0	0	0
1864	0	0	0	0	0	0	0
1864	OGV2	Other	2059	0	0	0	0
1865	0	0	0	0	0	0	0
1865	OGV2	Other	Total	0	0	0	0
1866	0	0	0	0	0	0	0

1866							
1867 TOTAL BENEFITS BY DISTANCE							
1868 Total benefits (£000s) by distance							
1869	Vehicle type	Purpose	Year	< 1 kms	1 to 5 kms	5 to 10 kms	10 kms
	10 to 15 kms	15 to 20 kms	20 to 50 kms	50 to 100 kms		>100 kms	
1870	Car	Business	2030	431	0	0	0
1871	0	0	0	0	0	0	0
1871	Car	Business	2045	374	0	0	0
1872	0	0	0	0	0	0	0
1872	Car	Business	2059	335	0	0	0
1873	0	0	0	0	0	0	0
1873	Car	Business	Total	11343	0	0	0
1874	0	0	0	0	0	0	0
1874	Car	Commuting	2030	390	0	0	0
1875	0	0	0	0	0	0	0
1875	Car	Commuting	2045	336	0	0	0
1876	0	0	0	0	0	0	0
1876	Car	Commuting	2059	298	0	0	0
1877	0	0	0	0	0	0	0
1877	Car	Commuting	Total	10177	0	0	0
1878	0	0	0	0	0	0	0
1878	Car	Other	2030	514	0	0	0

1879	Car	Other	2045	443	0	0
	0	0	0	0	0	0
1880	Car	Other	2059	394	0	0
	0	0	0	0	0	0
1881	Car	Other	Total	13438	0	0
	0	0	0	0	0	0
1882	OGV2	Business	2030	0	0	0
	0	0	0	385	54	0
1883	OGV2	Business	2045	0	0	0
	-0	0	0	345	41	0
1884	OGV2	Business	2059	0	-0	0
	-0	0	0	293	32	0
1885	OGV2	Business	Total	0	0	0
	-0	2	10	10243	1257	0
1886	OGV2	Commuting	2030	0	0	0
	0	0	0	6	1	0
1887	OGV2	Commuting	2045	0	0	0
	-0	0	0	4	0	0
1888	OGV2	Commuting	2059	0	-0	0
	-0	0	0	3	0	0
1889	OGV2	Commuting	Total	0	0	0
	-0	0	0	124	15	0
1890	OGV2	Other	2030	0	0	0
	0	0	0	4	0	0
1891	OGV2	Other	2045	0	0	0
	-0	0	0	2	0	0
1892	OGV2	Other	2059	0	-0	0
	-0	0	0	2	0	0
1893	OGV2	Other	Total	0	0	0
	0	0	0	74	9	0

1894	SENSITIVITY				
1895	Total user benefits as a percentage of total DM user costs				
1896	Modelled Years				
1897	Mode	2030	2045	2059	
1898	Road	1.23%	1.39%	1.53%	

1900 Economy: Economic Efficiency of the Transport System (TEE)

1901	Consumer - Commuting user benefits						
1902	Road						
1903	Bus			All Modes			
1904	Travel Time			9504			
	9504		0				
1905	Vehicle operating costs			811			
	811		0				
1906	User charges			0			
	0		0				
1907	During Construction & Maintenance						
	0		0				
1908	NET CONSUMER - COMMUTING BENEFITS			10315			
	10315		0				
1909	Consumer - Other user benefits						
1910	Road						
1911	Bus			All Modes			
1912	Travel Time			12678			
	12678		0				
1913	Vehicle operating costs			843			
	843		0				
1914	User charges			0			
	0		0				
1915	During Construction & Maintenance						
	0		0				
1916	NET CONSUMER - OTHER BENEFITS			13521			
	13521		0				
1917	Business			All Modes	Road	Personal	Road Freight Bus
1918	Personal	Bus Freight					
	Travel Time			19536		10819	

1919	8717	0	0		
	Vehicle operating costs			3320	525
	2795	0	0		
1920	User charges			0	0
	0	0	0		
1921	During Construction & Maintenance			0	0
	0	0	0		
1922	Subtotal			22855	11343
	11512	0	0		
1923					
1924	Private Sector Provider Impacts				
1925	Revenue			0	
	0		0		
1926	Operating costs			0	
	0		0		
1927	Investment costs			0	
	0		0		
1928	Grant/subsidy			0	
	0		0		
1929	Subtotal			0	
	0		0		
1930					
1931	Other business Impacts				
1932	Developer contributions			0	
	0		0		
1933	NET BUSINESS IMPACT			22855	
1934					
1935	TOTAL				
1936	Present Value of Transport Economic				
1937	Efficiency Benefits (TEE)			46691	
1938					

Note: Benefits appear as positive numbers, while costs appear as negative numbers.  
Note: All entries are present values discounted to 2011, in 2011 prices

1941	Public Accounts				
1942	Local Government Funding	ALL MODES	Road		
1943	Bus				
1944	Revenue	0	0	0	
1945	Operating Costs	0	0	0	
1946	Investment Costs	0	0	0	
1947	Developer Contributions	0	0	0	
1948	Grant/Subsidy Payments	0	0	0	
1949	NET IMPACT	0	0	0	
1950					
1951	Central Government Funding: Transport	ALL MODES	Road		
1952	Bus				
1953	Revenue	0	0	0	
1954	Operating costs	3855	3855	0	
1955	Investment costs	106418	106418	0	
1956	Developer Contributions	0	0	0	
1957	Grant/Subsidy Payments	0	0	0	
1958	NET IMPACT	110272	110272	0	
1959	Central Government Funding: Non-Transport				
1960					
1961	Indirect Tax Revenues	1191	1191	0	
1962					
1963	TOTALS				
1964	Broad Transport Budget	110272	110272	0	
1965	Wider Public Finances	1191	1191	0	
1966					

Note: Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.

Note: All entries are present values discounted to 2011, in 2011 prices

1970 Analysis of Monetised Costs and Benefits

1971  
1972 Greenhouse Gases

1974	Economic Efficiency: Consumer Users (Commuting)	10315
1975	Economic Efficiency: Consumer Users (Other)	13521
1976	Economic Efficiency: Business Users and Providers	22855
1977	Wider Public Finances (Indirect Taxation Revenues)	-1191
1978	Present Value of Benefits (PVB)	45597
1979		
1980	Broad Transport Budget	110272
1981	Present Value of Costs (PVC)	110272
1982		
1983	OVERALL IMPACTS	
1984	Net Present Value (NPV)	-64675
1985	Benefit to Cost Ratio (BCR)	0.413
1986		
1987	Note: This table includes costs and benefits which are regularly or occasionally presented in monetised form in	
1988	transport appraisals, together with some where monetisation is in prospect. There may also be other significant	
1989	costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis	
1990	presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.	
1991		
1992		
1993	TUBA Run Information	
1994	- calculations completed	
1995		
1996	File Summary	
1997	- Scheme File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Red\TUBA_Scheme_Input_Red_30year_v1.9.8_SPL_1_0.txt	
1998	- Economic File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Teal\Economics_Input_TUBAv1.9.8 (Oct2020).txt	
1999	- Output File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Red\TUBA_Scheme_Input_Red_30year_v1.9.8_SPL_1_0.out	
2000		
2001	Elapsed time : 0hrs 0mins 5sec	
2002		
2003		



1 Transport User Benefit Appraisal TUBA (64-BIT) 1.9.8(1xA) - Interim  
2 Program run on Mon Nov 16, 2020 at 17:51:08  
3

4 ERRORS AND WARNINGS  
5 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
year 2080 is ignored  
6 Warning: Table DEFAULT\_PERSON\_FACTORS\_CHANGE: data defined from horizon year 2059 to  
year 2080 is ignored  
7 3 Warnings found  
8  
9

10 TUBA ECONOMICS FILE DIFFERENCES

11  
12 PARAMETERS - (used)  
13 TUBA\_version 1.9.8  
14 base\_year 2011  
15 pres\_val\_year 2011  
16 GDP\_base 100.00 0.00 0.00  
17 av\_ind\_tax 18.30 0.00 0.00  
18 nt\_carbdxvalues 20.00 20.00 20.00  
19

20 PARAMETERS - (std)  
21 TUBA\_version 1.9.8  
22 base\_year 2010  
23 pres\_val\_year 2010  
24 GDP\_base 100.00 0.00 0.00  
25 av\_ind\_tax 19.00 0.00 0.00  
26 nt\_carbdxvalues 26.60 79.80 53.20  
27 t\_carbdxvalues 11.80 11.80 11.80  
28

29 VEHICLE\_TYPE/SUBMODE - (used)

*no.	mode	new_mode	P&R	type	description
1	1	N	N	per	
	Car				
2	1	N	N	per	
	LGV				
3	1	N	N	fre	
	OGV1				
4	1	N	N	fre	
	OGV2				
5	2	N	N	per	
	Bus				
6	3	N	N	per	Light
	Rail				
7	3	N	N	per	Heavy
	Rail				

38  
39 VEHICLE\_TYPE/SUBMODE - (std)

*no.	mode	new_mode	P&R	type	description
1	1	N	N	per	
	Car				
2	1	N	N	per	LGV
	Personal				
3	1	N	N	fre	LGV
	Freight				
4	1	N	N	fre	
	OGV1				
5	1	N	N	fre	
	OGV2				
6	2	N	N	per	
	Bus				
7	3	N	N	per	Light
	Rail				
8	3	N	N	per	Heavy
	rail				

49  
50 FUEL\_TYPE - (used)

*no.	name
1	petrol

51  
52

```

53         2      diesel
54
55 FUEL_TYPE - (std)
56 *no.      name
57     1      Petrol
58     2      Diesel
59     3      Electric
60
61 TIME_PERIODS - (used)
62 *no.      description      comments
63     1      AM Peak          (8-9)
64     2      Inter Peak       (Avg
65     3      PM Peak          (17-1
66
67 TIME_PERIODS - (std)
68 *no.      description      comments
69     1      AM peak          (7-10 weekdays)
70     2      PM peak          (4-7 weekdays)
71     3      Inter-peak      (10-4 weekdays)
72     4      Off-peak        (7-7 weekdays)
73     5      Weekend         (weekend)
74
75 BREAKPOINTS - (used)
76 *description breakpoint1 breakpoint2 ..
77     Distance      1.0      5.0      10.0      15.0
78     20.0          50.0      100.0
79     TimeSaving    -5.0      -2.0      0.0      2.0
80     5.0
81
82 BREAKPOINTS - (std)
83 *description breakpoint1 breakpoint2 ..
84     Distance      1.0      5.0      10.0      25.0
85     50.0          100.0     200.0
86     TimeSaving    -5.0      -2.0      0.0      2.0
87     5.0
88
89 DISCOUNT_RATE - (used)
90 *% change p.a.
91 *Start_yr      End_yr      Rate
92     1           30      4.00
93     31          60      3.50
94     61          100     3.00
95
96 DISCOUNT_RATE - (std)
97 *% change p.a.
98 *Start_yr      End_yr      Rate
99     1           30      3.50
100    31          75      3.00
101    76          80      2.50
102
103 VALUE_OF_TIME_ALLOCATION - (used)
104 *Vtype/submode Purpose_type Person_type VOT_METHOD
105     1 1 1 3
106     1 2 1 3
107     1 3 1 3
108     1 1 2 3
109     1 2 2 3
110     1 3 2 3
111     3 1 1 3
112     3 2 1 3
113     3 3 1 3
114     3 1 2 3
115     3 2 2 3
116     3 3 2 3
117
118 VALUE_OF_TIME_ALLOCATION - (std)
119 *Vtype/submode Purpose_type Person_type VOT_METHOD
120     1 1 1 1
121     1 1 2 1

```

```

118         8   1   2   1
119
120 VALUE_OF_TIME_METHOD1 - (used)
121 *pence per hour
122 *Vtype/submode Person_type U_purpose1 U_purpose2 U_purpose3 .. xmid_purpose1
xmid_purpose2 xmis_purpose3 .. k_purpose1 k_purpose2 k_purpose3 ..
123
124 VALUE_OF_TIME_METHOD1 - (std)
125 *pence per hour
126 *Vtype/submode Person_type U_purpose1 U_purpose2 U_purpose3 .. xmid_purpose1
xmid_purpose2 xmis_purpose3 .. k_purpose1 k_purpose2 k_purpose3 ..
127     1           1           2480.0           0.0           0.0
128     67.0         0.0           0.0           67.0           0.0           0.0
129     1           2           2480.0           0.0           0.0           0.0
130     67.0         0.0           0.0           67.0           0.0           0.0
131     2           1           0.0           0.0           0.0           0.0
132     0.0          0.0           0.0           0.0           0.0           0.0
133     2           2           0.0           0.0           0.0           0.0
134     0.0          0.0           0.0           0.0           0.0           0.0
135     3           1           0.0           0.0           0.0           0.0
136     0.0          0.0           0.0           0.0           0.0           0.0
137     3           2           0.0           0.0           0.0           0.0
138     0.0          0.0           0.0           0.0           0.0           0.0
139     4           1           0.0           0.0           0.0           0.0
140     0.0          0.0           0.0           0.0           0.0           0.0
141     4           2           0.0           0.0           0.0           0.0
142     0.0          0.0           0.0           0.0           0.0           0.0
143     5           1           0.0           0.0           0.0           0.0
144     0.0          0.0           0.0           0.0           0.0           0.0
145     5           2           0.0           0.0           0.0           0.0
146     0.0          0.0           0.0           0.0           0.0           0.0
147     6           1           0.0           0.0           0.0           0.0
148     0.0          0.0           0.0           0.0           0.0           0.0
149     6           2           0.0           0.0           0.0           0.0
150     0.0          0.0           0.0           0.0           0.0           0.0
151     7           1           0.0           0.0           0.0           0.0
152     0.0          0.0           0.0           0.0           0.0           0.0
153     7           2           0.0           0.0           0.0           0.0
154     0.0          0.0           0.0           0.0           0.0           0.0
155     8           1           0.0           0.0           0.0           0.0
156     0.0          0.0           0.0           0.0           0.0           0.0
157     8           2           3647.0           0.0           0.0           0.0
158     107.0        0.0           0.0           64.0           0.0           0.0
159
160 VALUE_OF_TIME_METHOD2 - (used)
161 *pence per hour
162 *Vtype/submode Person_type 0_50km_purpose1 0_50km_purpose2 0_50km_purpose3 ..
50_100km_purpose1 50_100km_purpose2 50_100km_purpose3 .. 100_200km_purpose1
100_200km_purpose2 100_200km_purpose3 .. 200+km_purpose1 200+km_purpose2
200+km_purpose3..
163
164 VALUE_OF_TIME_METHOD2 - (std)
165 *pence per hour
166 *Vtype/submode Person_type 0_50km_purpose1 0_50km_purpose2 0_50km_purpose3 ..
50_100km_purpose1 50_100km_purpose2 50_100km_purpose3 .. 100_200km_purpose1
100_200km_purpose2 100_200km_purpose3 .. 200+km_purpose1 200+km_purpose2
200+km_purpose3..
167     1           1           842.0           0.0           0.0
168     1362.0       0.0           0.0           1849.0         0.0           0.0
169     2377.0       0.0           0.0
170     1           2           842.0           0.0           0.0
171     1362.0       0.0           0.0           1849.0         0.0           0.0
172     2377.0       0.0           0.0
173     2           1           0.0           0.0           0.0
174     0.0          0.0           0.0           0.0           0.0           0.0
175     0.0          0.0           0.0
176     2           2           0.0           0.0           0.0
177     0.0          0.0           0.0           0.0           0.0           0.0
178     0.0          0.0           0.0

```

155	3	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
156	3	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
157	4	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
158	4	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
159	5	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
160	5	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
161	6	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
162	6	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
163	7	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
164	7	2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
165	8	1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0			
166	8	2	842.0	0.0	0.0	
	1362.0	0.0	0.0	2372.0	0.0	0.0
	3422.0	0.0	0.0			

167

168 VALUE\_OF\_TIME\_METHOD3 - (used)

169 \*pence per hour

170 \*Vtype/submode Person\_type VOT\_purpose1 VOT\_purpose2 VOT\_purpose3 ..

171	1	1	2612.0	967.0	870.0	
172	1	2	2612.0	967.0	870.0	
173	2	1	2612.0	967.0	870.0	
174	2	2	2612.0	967.0	870.0	
175	3	1	2612.0	0.0	0.0	
176	3	2	2612.0	0.0	0.0	
177	4	1	2612.0	0.0	0.0	
178	4	2	2612.0	0.0	0.0	
179	5	1	2612.0	0.0	0.0	
180	5	2	2612.0	967.0	870.0	
181	6	1	2612.0	0.0	0.0	
182	6	2	2612.0	967.0	870.0	
183	7	1	2612.0	0.0	0.0	
184	7	2	2612.0	967.0	870.0	

185

186 VALUE\_OF\_TIME\_METHOD3 - (std)

187 \*pence per hour

188 \*Vtype/submode Person\_type VOT\_purpose1 VOT\_purpose2 VOT\_purpose3 ..

189	1	1	1486.0	995.0	454.0	
190	1	2	1486.0	995.0	454.0	
191	2	1	1024.0	995.0	454.0	
192	2	2	1024.0	995.0	454.0	
193	3	1	1024.0	0.0	0.0	
194	3	2	1024.0	0.0	0.0	
195	4	1	1206.0	0.0	0.0	
196	4	2	1206.0	0.0	0.0	
197	5	1	1206.0	0.0	0.0	
198	5	2	1206.0	0.0	0.0	
199	6	1	1232.0	0.0	0.0	

200	6	2	842.0	995.0	454.0
201	7	1	0.0	0.0	0.0
202	7	2	842.0	995.0	454.0
203	8	1	0.0	0.0	0.0
204	8	2	2452.0	995.0	454.0

205  
206 VALUE\_OF\_TIME\_GROWTH - (used)

207 \*% change p.a.

208 *Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
209 2012	2014	1.40	1.40	1.40	
210 2015	2019	3.60	3.60	3.60	
211 2020	2024	2.20	2.20	2.20	
212 2025	2100	2.30	2.30	2.30	

213  
214 VALUE\_OF\_TIME\_GROWTH - (std)

215 \*% change p.a.

216 *Start_yr	End_yr	VOT_Gr_purpose1	VOT_Gr_purpose2	VOT_Gr_purpose3	..
217 2011	2011	0.67	0.67	0.67	
218 2012	2012	0.64	0.64	0.64	
219 2013	2013	1.27	1.27	1.27	
220 2014	2014	2.29	2.29	2.29	
221 2015	2015	1.44	1.44	1.44	
222 2016	2016	1.26	1.26	1.26	
223 2017	2017	1.49	1.49	1.49	
224 2018	2018	1.40	1.40	1.40	
225 2019	2019	1.43	1.43	1.43	
226 2020	2020	1.45	1.45	1.45	
227 2021	2021	1.76	1.76	1.76	
228 2022	2022	1.77	1.77	1.77	
229 2023	2023	1.78	1.78	1.78	
230 2024	2024	1.89	1.89	1.89	
231 2025	2025	1.91	1.91	1.91	
232 2026	2026	1.93	1.93	1.93	
233 2027	2027	1.94	1.94	1.94	
234 2028	2028	1.96	1.96	1.96	
235 2029	2029	1.98	1.98	1.98	
236 2030	2030	1.99	1.99	1.99	
237 2031	2031	2.01	2.01	2.01	
238 2032	2032	2.02	2.02	2.02	
239 2033	2033	2.04	2.04	2.04	
240 2034	2034	2.15	2.15	2.15	
241 2035	2035	2.06	2.06	2.06	
242 2036	2036	2.07	2.07	2.07	
243 2037	2037	2.08	2.08	2.08	
244 2038	2038	2.09	2.09	2.09	
245 2039	2039	2.09	2.09	2.09	
246 2040	2040	2.09	2.09	2.09	
247 2041	2041	2.09	2.09	2.09	
248 2042	2042	2.11	2.11	2.11	
249 2043	2043	2.11	2.11	2.11	
250 2044	2044	2.11	2.11	2.11	
251 2045	2045	2.11	2.11	2.11	
252 2046	2046	2.21	2.21	2.21	
253 2047	2047	2.14	2.14	2.14	
254 2048	2048	2.14	2.14	2.14	
255 2049	2049	2.14	2.14	2.14	
256 2050	2050	2.14	2.14	2.14	
257 2051	2051	2.04	2.04	2.04	
258 2052	2052	2.07	2.07	2.07	
259 2053	2053	2.07	2.07	2.07	
260 2054	2054	2.07	2.07	2.07	
261 2055	2055	2.07	2.07	2.07	
262 2056	2056	2.07	2.07	2.07	
263 2057	2057	2.09	2.09	2.09	
264 2058	2058	2.19	2.19	2.19	
265 2059	2059	2.19	2.19	2.19	
266 2060	2060	2.29	2.29	2.29	
267 2061	2061	2.29	2.29	2.29	
268 2062	2062	2.30	2.30	2.30	

269	2063	2063	2.30	2.30	2.30
270	2064	2064	2.20	2.20	2.20
271	2065	2065	2.20	2.20	2.20
272	2066	2066	2.20	2.20	2.20
273	2067	2067	2.18	2.18	2.18
274	2068	2068	2.18	2.18	2.18
275	2069	2069	2.18	2.18	2.18
276	2070	2070	2.18	2.18	2.18
277	2071	2071	2.18	2.18	2.18
278	2072	2072	2.17	2.17	2.17
279	2073	2073	2.17	2.17	2.17
280	2074	2074	2.17	2.17	2.17
281	2075	2075	2.17	2.17	2.17
282	2076	2076	2.17	2.17	2.17
283	2077	2077	2.16	2.16	2.16
284	2078	2078	2.16	2.16	2.16
285	2079	2079	2.16	2.16	2.16
286	2080	2080	2.16	2.16	2.16
287	2081	2081	2.16	2.16	2.16
288	2082	2082	2.17	2.17	2.17
289	2083	2083	2.17	2.17	2.17
290	2084	2084	2.17	2.17	2.17
291	2085	2085	2.17	2.17	2.17
292	2086	2086	2.17	2.17	2.17
293	2087	2087	2.18	2.18	2.18
294	2088	2088	2.18	2.18	2.18
295	2089	2089	2.18	2.18	2.18
296	2090	2090	2.18	2.18	2.18
297	2091	2091	2.18	2.18	2.18
298	2092	2092	2.18	2.18	2.18
299	2093	2093	2.18	2.18	2.18
300	2094	2094	2.18	2.18	2.18
301	2095	2095	2.18	2.18	2.18
302	2096	2096	2.18	2.18	2.18
303	2097	2097	2.18	2.18	2.18
304	2098	2098	2.18	2.18	2.18
305	2099	2099	2.18	2.18	2.18
306	2100	2100	2.18	2.18	2.18

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AV\_IND\_TAX\_CHANGES - (used)

\*% change p.a.

*Start_yr	End_yr	Growth
2012	2080	0.00

AV\_IND\_TAX\_CHANGES - (std)

\*% change p.a.

*Start_yr	End_yr	Growth
2011	2050	0.00

CHARGE\_TAX\_RATES - (used)

\*%

*charge	final	intermediate
1	0.0	0.0
2	0.0	0.0
3	0.0	0.0
4	0.0	0.0
5	0.0	0.0
6	0.0	0.0
7	0.0	0.0

CHARGE\_TAX\_RATES - (std)

\*%

*charge	final	intermediate
1	0.0	0.0
2	0.0	0.0
3	0.0	0.0
4	0.0	0.0
5	17.5	0.0
6	0.0	0.0

338 7 17.5 0.0  
 339 8 17.5 0.0

340

341 CHARGE\_TAX\_RATES\_CHANGES - (used)

342 \*% change p.a.

343 *Start_yr	End_yr	charge	final	intermediate
344 2012	2080	1	0.00	0.00
345 2012	2080	2	0.00	0.00
346 2012	2080	3	0.00	0.00
347 2012	2080	4	0.00	0.00
348 2012	2080	5	0.00	0.00
349 2012	2080	6	0.00	0.00
350 2012	2080	7	0.00	0.00

351

352 CHARGE\_TAX\_RATES\_CHANGES - (std)

353 \*% change p.a.

354 *Start_yr	End_yr	charge	final	intermediate
355 2011	2011	1	0.00	0.00
356 2011	2011	2	0.00	0.00
357 2011	2011	3	0.00	0.00
358 2011	2011	4	0.00	0.00
359 2011	2011	5	14.29	0.00
360 2011	2011	6	0.00	0.00
361 2011	2011	7	14.29	0.00
362 2011	2011	8	14.29	0.00
363 2012	2100	1	0.00	0.00
364 2012	2100	2	0.00	0.00
365 2012	2100	3	0.00	0.00
366 2012	2100	4	0.00	0.00
367 2012	2100	5	0.00	0.00
368 2012	2100	6	0.00	0.00
369 2012	2100	7	0.00	0.00
370 2012	2100	8	0.00	0.00

371

372 FUEL\_COST - (used)

373 \*type resource (p/unit) duty(p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)

374 1	63.0	57.6	21.0	2230.00
375 2	70.0	46.6	21.0	2562.00

376

377 FUEL\_COST - (std)

378 \*type resource (p/unit) duty(p/unit) VAT(%) CO2\_grammes/unit  
 (unit=litre for fuel types 1 & 2; unit=KWH for electric)

379 1	42.5	57.0	17.5	2230.00
380 2	44.2	57.0	17.5	2562.00
381 3	11.5	0.0	5.0	372.00

382

383 FUEL\_COST\_CHANGES - (used)

384 \*% change p.a.

385 *Start_yr	End_yr	fuel_type	resource	duty	VAT
386 2012	2012	1	10.70	0.00	
2.00	0.00				
387 2012	2012	2	3.90	0.00	
0.00	0.00				
388 2013	2013	1	-5.70	0.00	
0.00	0.00				
389 2013	2013	2	-5.20	0.00	
0.00	0.00				
390 2014	2014	1	0.00	0.00	
0.00	0.00				
391 2014	2014	2	-3.30	0.00	
0.00	0.00				
392 2015	2015	1	-30.60	2.00	
0.00	0.00				
393 2015	2015	2	-32.60	2.90	
0.00	0.00				
394 2016	2080	1	0.00	0.00	
0.00	0.00				

395 2016 2080 2 0.00 0.00  
0.00 0.00

396

397 FUEL\_COST\_CHANGES - (std)

398 \*% change p.a.

399 \*Start\_yr End\_yr fuel\_type resource duty VAT  
CO2\_Den\_change

400 2011 2011 1 22.14 -0.37  
14.29 -0.84

401 2012 2012 1 1.99 -2.09  
0.00 -0.02

402 2013 2013 1 -3.44 -1.74  
0.00 -0.44

403 2014 2014 1 -11.68 -1.62  
0.00 -0.54

404 2015 2015 1 -29.94 -1.09  
0.00 0.00

405 2016 2016 1 7.91 -0.89  
0.00 0.00

406 2017 2017 1 2.98 -0.08  
0.00 -1.35

407 2018 2018 1 2.03 0.67  
0.00 -1.37

408 2019 2019 1 2.08 1.05  
0.00 -1.39

409 2020 2020 1 6.76 0.71  
0.00 -1.41

410 2021 2021 1 6.33 0.78  
0.00 0.00

411 2022 2022 1 5.95 0.72  
0.00 0.00

412 2023 2023 1 5.62 0.68  
0.00 0.00

413 2024 2024 1 5.32 0.68  
0.00 0.00

414 2025 2025 1 5.05 0.68  
0.00 0.00

415 2026 2026 1 0.00 0.68  
0.00 0.00

416 2027 2027 1 0.00 0.68  
0.00 0.00

417 2028 2028 1 0.00 0.68  
0.00 0.00

418 2029 2029 1 0.00 0.68  
0.00 0.00

419 2030 2030 1 0.00 0.68  
0.00 0.00

420 2031 2031 1 0.00 0.68  
0.00 0.00

421 2032 2032 1 0.00 0.68  
0.00 0.00

422 2033 2033 1 0.00 0.68  
0.00 0.00

423 2034 2034 1 0.00 0.68  
0.00 0.00

424 2035 2035 1 0.00 0.68  
0.00 0.00

425 2036 2036 1 0.00 0.68  
0.00 0.00

426 2037 2037 1 0.00 0.68  
0.00 0.00

427 2038 2038 1 0.00 0.68  
0.00 0.00

428 2039 2039 1 0.00 0.68  
0.00 0.00

429 2040 2040 1 0.00 0.68  
0.00 0.00

430 2041 2041 1 0.00 0.68  
0.00 0.00



431	2042	2042	1	0.00	0.68
	0.00	0.00			
432	2043	2043	1	0.00	0.68
	0.00	0.00			
433	2044	2044	1	0.00	0.68
	0.00	0.00			
434	2045	2045	1	0.00	0.68
	0.00	0.00			
435	2046	2046	1	0.00	0.68
	0.00	0.00			
436	2047	2047	1	0.00	0.68
	0.00	0.00			
437	2048	2048	1	0.00	0.68
	0.00	0.00			
438	2049	2049	1	0.00	0.68
	0.00	0.00			
439	2050	2050	1	0.00	0.68
	0.00	0.00			
440	2051	2051	1	0.00	0.68
	0.00	0.00			
441	2052	2052	1	0.00	0.68
	0.00	0.00			
442	2053	2053	1	0.00	0.68
	0.00	0.00			
443	2054	2054	1	0.00	0.68
	0.00	0.00			
444	2055	2055	1	0.00	0.68
	0.00	0.00			
445	2056	2056	1	0.00	0.68
	0.00	0.00			
446	2057	2057	1	0.00	0.68
	0.00	0.00			
447	2058	2058	1	0.00	0.68
	0.00	0.00			
448	2059	2059	1	0.00	0.68
	0.00	0.00			
449	2060	2060	1	0.00	0.68
	0.00	0.00			
450	2061	2061	1	0.00	0.68
	0.00	0.00			
451	2062	2062	1	0.00	0.68
	0.00	0.00			
452	2063	2063	1	0.00	0.68
	0.00	0.00			
453	2064	2064	1	0.00	0.68
	0.00	0.00			
454	2065	2065	1	0.00	0.68
	0.00	0.00			
455	2066	2066	1	0.00	0.68
	0.00	0.00			
456	2067	2067	1	0.00	0.68
	0.00	0.00			
457	2068	2068	1	0.00	0.68
	0.00	0.00			
458	2069	2069	1	0.00	0.68
	0.00	0.00			
459	2070	2070	1	0.00	0.68
	0.00	0.00			
460	2071	2071	1	0.00	0.68
	0.00	0.00			
461	2072	2072	1	0.00	0.68
	0.00	0.00			
462	2073	2073	1	0.00	0.68
	0.00	0.00			
463	2074	2074	1	0.00	0.68
	0.00	0.00			
464	2075	2075	1	0.00	0.68
	0.00	0.00			
465	2076	2076	1	0.00	0.68

	0.00	0.00			
466	2077	2077	1	0.00	0.68
	0.00	0.00			
467	2078	2078	1	0.00	0.68
	0.00	0.00			
468	2079	2079	1	0.00	0.68
	0.00	0.00			
469	2080	2080	1	0.00	0.68
	0.00	0.00			
470	2081	2081	1	0.00	0.68
	0.00	0.00			
471	2082	2082	1	0.00	0.68
	0.00	0.00			
472	2083	2083	1	0.00	0.68
	0.00	0.00			
473	2084	2084	1	0.00	0.68
	0.00	0.00			
474	2085	2085	1	0.00	0.68
	0.00	0.00			
475	2086	2086	1	0.00	0.68
	0.00	0.00			
476	2087	2087	1	0.00	0.68
	0.00	0.00			
477	2088	2088	1	0.00	0.68
	0.00	0.00			
478	2089	2089	1	0.00	0.68
	0.00	0.00			
479	2090	2090	1	0.00	0.68
	0.00	0.00			
480	2091	2091	1	0.00	0.68
	0.00	0.00			
481	2092	2092	1	0.00	0.68
	0.00	0.00			
482	2093	2093	1	0.00	0.68
	0.00	0.00			
483	2094	2094	1	0.00	0.68
	0.00	0.00			
484	2095	2095	1	0.00	0.68
	0.00	0.00			
485	2096	2096	1	0.00	0.68
	0.00	0.00			
486	2097	2097	1	0.00	0.68
	0.00	0.00			
487	2098	2098	1	0.00	0.68
	0.00	0.00			
488	2099	2099	1	0.00	0.68
	0.00	0.00			
489	2100	2100	1	0.00	0.68
	0.00	0.00			
490	2011	2011	2	26.82	-0.37
	14.29	0.19			
491	2012	2012	2	3.20	-2.09
	0.00	1.64			
492	2013	2013	2	-3.67	-1.74
	0.00	-0.44			
493	2014	2014	2	-11.26	-1.62
	0.00	0.15			
494	2015	2015	2	-30.27	-1.09
	0.00	0.00			
495	2016	2016	2	8.32	-0.89
	0.00	0.00			
496	2017	2017	2	3.12	-0.08
	0.00	-1.74			
497	2018	2018	2	2.12	0.67
	0.00	-1.77			
498	2019	2019	2	2.17	1.05
	0.00	-1.81			
499	2020	2020	2	7.06	0.71
	0.00	-1.84			

500	2021	2021	2	6.59	0.78
	0.00	0.00			
501	2022	2022	2	6.18	0.72
	0.00	0.00			
502	2023	2023	2	5.82	0.68
	0.00	0.00			
503	2024	2024	2	5.50	0.68
	0.00	0.00			
504	2025	2025	2	5.22	0.68
	0.00	0.00			
505	2026	2026	2	0.00	0.68
	0.00	0.00			
506	2027	2027	2	0.00	0.68
	0.00	0.00			
507	2028	2028	2	0.00	0.68
	0.00	0.00			
508	2029	2029	2	0.00	0.68
	0.00	0.00			
509	2030	2030	2	0.00	0.68
	0.00	0.00			
510	2031	2031	2	0.00	0.68
	0.00	0.00			
511	2032	2032	2	0.00	0.68
	0.00	0.00			
512	2033	2033	2	0.00	0.68
	0.00	0.00			
513	2034	2034	2	0.00	0.68
	0.00	0.00			
514	2035	2035	2	0.00	0.68
	0.00	0.00			
515	2036	2036	2	0.00	0.68
	0.00	0.00			
516	2037	2037	2	0.00	0.68
	0.00	0.00			
517	2038	2038	2	0.00	0.68
	0.00	0.00			
518	2039	2039	2	0.00	0.68
	0.00	0.00			
519	2040	2040	2	0.00	0.68
	0.00	0.00			
520	2041	2041	2	0.00	0.68
	0.00	0.00			
521	2042	2042	2	0.00	0.68
	0.00	0.00			
522	2043	2043	2	0.00	0.68
	0.00	0.00			
523	2044	2044	2	0.00	0.68
	0.00	0.00			
524	2045	2045	2	0.00	0.68
	0.00	0.00			
525	2046	2046	2	0.00	0.68
	0.00	0.00			
526	2047	2047	2	0.00	0.68
	0.00	0.00			
527	2048	2048	2	0.00	0.68
	0.00	0.00			
528	2049	2049	2	0.00	0.68
	0.00	0.00			
529	2050	2050	2	0.00	0.68
	0.00	0.00			
530	2051	2051	2	0.00	0.68
	0.00	0.00			
531	2052	2052	2	0.00	0.68
	0.00	0.00			
532	2053	2053	2	0.00	0.68
	0.00	0.00			
533	2054	2054	2	0.00	0.68
	0.00	0.00			
534	2055	2055	2	0.00	0.68

	0.00	0.00			
535	2056	2056	2	0.00	0.68
	0.00	0.00			
536	2057	2057	2	0.00	0.68
	0.00	0.00			
537	2058	2058	2	0.00	0.68
	0.00	0.00			
538	2059	2059	2	0.00	0.68
	0.00	0.00			
539	2060	2060	2	0.00	0.68
	0.00	0.00			
540	2061	2061	2	0.00	0.68
	0.00	0.00			
541	2062	2062	2	0.00	0.68
	0.00	0.00			
542	2063	2063	2	0.00	0.68
	0.00	0.00			
543	2064	2064	2	0.00	0.68
	0.00	0.00			
544	2065	2065	2	0.00	0.68
	0.00	0.00			
545	2066	2066	2	0.00	0.68
	0.00	0.00			
546	2067	2067	2	0.00	0.68
	0.00	0.00			
547	2068	2068	2	0.00	0.68
	0.00	0.00			
548	2069	2069	2	0.00	0.68
	0.00	0.00			
549	2070	2070	2	0.00	0.68
	0.00	0.00			
550	2071	2071	2	0.00	0.68
	0.00	0.00			
551	2072	2072	2	0.00	0.68
	0.00	0.00			
552	2073	2073	2	0.00	0.68
	0.00	0.00			
553	2074	2074	2	0.00	0.68
	0.00	0.00			
554	2075	2075	2	0.00	0.68
	0.00	0.00			
555	2076	2076	2	0.00	0.68
	0.00	0.00			
556	2077	2077	2	0.00	0.68
	0.00	0.00			
557	2078	2078	2	0.00	0.68
	0.00	0.00			
558	2079	2079	2	0.00	0.68
	0.00	0.00			
559	2080	2080	2	0.00	0.68
	0.00	0.00			
560	2081	2081	2	0.00	0.68
	0.00	0.00			
561	2082	2082	2	0.00	0.68
	0.00	0.00			
562	2083	2083	2	0.00	0.68
	0.00	0.00			
563	2084	2084	2	0.00	0.68
	0.00	0.00			
564	2085	2085	2	0.00	0.68
	0.00	0.00			
565	2086	2086	2	0.00	0.68
	0.00	0.00			
566	2087	2087	2	0.00	0.68
	0.00	0.00			
567	2088	2088	2	0.00	0.68
	0.00	0.00			
568	2089	2089	2	0.00	0.68
	0.00	0.00			

569	2090	2090	2	0.00	0.68	
	0.00	0.00				
570	2091	2091	2	0.00	0.68	
	0.00	0.00				
571	2092	2092	2	0.00	0.68	
	0.00	0.00				
572	2093	2093	2	0.00	0.68	
	0.00	0.00				
573	2094	2094	2	0.00	0.68	
	0.00	0.00				
574	2095	2095	2	0.00	0.68	
	0.00	0.00				
575	2096	2096	2	0.00	0.68	
	0.00	0.00				
576	2097	2097	2	0.00	0.68	
	0.00	0.00				
577	2098	2098	2	0.00	0.68	
	0.00	0.00				
578	2099	2099	2	0.00	0.68	
	0.00	0.00				
579	2100	2100	2	0.00	0.68	
	0.00	0.00				
580	2011	2011	3	4.95	0.00	
	0.00	-1.89				
581	2012	2012	3	4.01	0.00	
	0.00	-2.03				
582	2013	2013	3	5.45	0.00	
	0.00	-2.18				
583	2014	2014	3	3.88	0.00	
	0.00	-2.35				
584	2015	2015	3	-5.82	0.00	
	0.00	-2.54				
585	2016	2016	3	3.17	0.00	
	0.00	-2.74				
586	2017	2017	3	6.71	0.00	
	0.00	-2.98				
587	2018	2018	3	4.60	0.00	
	0.00	-3.23				
588	2019	2019	3	2.96	0.00	
	0.00	-3.52				
589	2020	2020	3	1.91	0.00	
	0.00	-3.85				
590	2021	2021	3	0.52	0.00	
	0.00	-4.22				
591	2022	2022	3	2.13	0.00	
	0.00	-4.65				
592	2023	2023	3	-0.64	0.00	
	0.00	-5.14				
593	2024	2024	3	2.55	0.00	
	0.00	-5.71				
594	2025	2025	3	4.49	0.00	
	0.00	-6.39				
595	2026	2026	3	0.01	0.00	
	0.00	-7.19				
596	2027	2027	3	2.37	0.00	
	0.00	-8.17				
597	2028	2028	3	-1.49	0.00	
	0.00	-9.38				
598	2029	2029	3	-1.58	0.00	0.00
	-10.92					
599	2030	2030	3	0.32	0.00	0.00
	-12.92					
600	2031	2031	3	0.00	0.00	
	0.00	-8.85				
601	2032	2032	3	0.00	0.00	
	0.00	-8.85				
602	2033	2033	3	0.00	0.00	
	0.00	-8.85				
603	2034	2034	3	0.00	0.00	

604	0.00	-8.85				
	2035	2035	3	0.00	0.00	
	0.00	-8.85				
605	2036	2036	3	0.00	0.00	
	0.00	-8.85				
606	2037	2037	3	0.00	0.00	
	0.00	-8.85				
607	2038	2038	3	0.00	0.00	
	0.00	-8.85				
608	2039	2039	3	0.00	0.00	
	0.00	-8.85				
609	2040	2040	3	0.00	0.00	
	0.00	-8.85				
610	2041	2041	3	0.00	0.00	0.00
	-11.07					
611	2042	2042	3	0.00	0.00	
	0.00	-0.85				
612	2043	2043	3	0.00	0.00	0.00
	-11.10					
613	2044	2044	3	0.00	0.00	0.00
	-11.60					
614	2045	2045	3	0.00	0.00	
	0.00	1.50				
615	2046	2046	3	0.00	0.00	
	0.00	-8.95				
616	2047	2047	3	0.00	0.00	
	0.00	-7.43				
617	2048	2048	3	0.00	0.00	
	0.00	1.12				
618	2049	2049	3	0.00	0.00	
	0.00	-9.46				
619	2050	2050	3	0.00	0.00	
	0.00	-0.90				
620	2051	2100	3	0.00	0.00	
	0.00	0.00				

621						
622	CARBDX_VALUE_CHANGES - (used)					
623	*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be defined, not both					
624	*same growth applies to low, central and high CO2 values					
625	*Start_yr	End_yr	Rel. (%)	<b>Abs. (£/tonne/year)</b>		
626	2012	2019	0.000	0.000		
627	2020	2020	60.000	0.000		
628	2021	2021	21.900	0.000		
629	2022	2022	17.900	0.000		
630	2023	2023	13.000	0.000		
631	2024	2024	13.500	0.000		
632	2025	2025	11.900	0.000		
633	2026	2026	10.600	0.000		
634	2027	2027	9.600	0.000		
635	2028	2028	7.500	0.000		
636	2029	2029	8.100	0.000		
637	2030	2030	7.500	0.000		
638	2031	2100	5.000	0.000		

639						
640	CARBDX_VALUE_CHANGES - (std)					
641	*relative (%p.a.) or absolute (£p.a.) growth; either absolute or relative may be defined, not both					
642	*same growth applies to low, central and high CO2 values					
643	*Start_yr	End_yr	Rel. (%)	<b>Abs. (£/tonne/year)</b>		
644	2011	2011	1.500	0.000		
645	2012	2012	1.500	0.000		
646	2013	2013	1.500	0.000		
647	2014	2014	1.500	0.000		
648	2015	2015	1.500	0.000		
649	2016	2016	1.500	0.000		
650	2017	2017	1.500	0.000		
651	2018	2018	1.500	0.000		
652	2019	2019	1.500	0.000		

653	2020	2020	1.500	0.000
654	2021	2021	1.667	0.000
655	2022	2022	1.639	0.000
656	2023	2023	1.613	0.000
657	2024	2024	1.587	0.000
658	2025	2025	1.563	0.000
659	2026	2026	1.538	0.000
660	2027	2027	1.515	0.000
661	2028	2028	1.493	0.000
662	2029	2029	1.471	0.000
663	2030	2030	1.449	0.000
664	2031	2031	9.286	0.000
665	2032	2032	8.497	0.000
666	2033	2033	7.831	0.000
667	2034	2034	7.263	0.000
668	2035	2035	6.771	0.000
669	2036	2036	6.341	0.000
670	2037	2037	5.963	0.000
671	2038	2038	5.628	0.000
672	2039	2039	5.328	0.000
673	2040	2040	5.058	0.000
674	2041	2041	4.815	0.000
675	2042	2042	4.594	0.000
676	2043	2043	4.392	0.000
677	2044	2044	4.207	0.000
678	2045	2045	4.037	0.000
679	2046	2046	3.881	0.000
680	2047	2047	3.736	0.000
681	2048	2048	3.601	0.000
682	2049	2049	3.476	0.000
683	2050	2050	3.359	0.000
684	2051	2051	2.501	0.000
685	2052	2052	2.265	0.000
686	2053	2053	2.165	0.000
687	2054	2054	2.056	0.000
688	2055	2055	1.856	0.000
689	2056	2056	1.779	0.000
690	2057	2057	1.589	0.000
691	2058	2058	1.446	0.000
692	2059	2059	1.330	0.000
693	2060	2060	1.201	0.000
694	2061	2061	0.673	0.000
695	2062	2062	0.618	0.000
696	2063	2063	0.401	0.000
697	2064	2064	0.283	0.000
698	2065	2065	0.079	0.000
699	2066	2066	0.033	0.000
700	2067	2067	-0.193	0.000
701	2068	2068	-0.302	0.000
702	2069	2069	-0.461	0.000
703	2070	2070	-0.585	0.000
704	2071	2071	-0.609	0.000
705	2072	2072	-0.738	0.000
706	2073	2073	-0.837	0.000
707	2074	2074	-1.033	0.000
708	2075	2075	-1.037	0.000
709	2076	2076	-1.310	0.000
710	2077	2077	-1.316	0.000
711	2078	2078	-1.493	0.000
712	2079	2079	-1.571	0.000
713	2080	2080	-1.769	0.000
714	2081	2081	-1.478	0.000
715	2082	2082	-1.672	0.000
716	2083	2083	-1.769	0.000
717	2084	2084	-1.854	0.000
718	2085	2085	-1.834	0.000
719	2086	2086	-2.050	0.000
720	2087	2087	-2.154	0.000
721	2088	2088	-2.198	0.000

722	2089	2089	-2.321	0.000
723	2090	2090	-2.359	0.000
724	2091	2091	-2.279	0.000
725	2092	2092	-2.328	0.000
726	2093	2093	-2.521	0.000
727	2094	2094	-2.577	0.000
728	2095	2095	-2.649	0.000
729	2096	2096	-2.712	0.000
730	2097	2097	-2.715	0.000
731	2098	2098	-2.915	0.000
732	2099	2099	-2.865	0.000
733	2100	2100	-3.011	0.000

734

735 FLEET - (used)

736	*veh_type	%petrol	%diesel	
737	1	69.90	30.10	
738	2	0.30	99.70	
739	3	0.00	100.00	
740	4	0.00	100.00	
741	5	0.00	100.00	
742	6	0.00	100.00	
743	7	0.00	100.00	

744

745 FLEET - (std)

746	*veh_type	%Petrol	%Diesel	%Electric
747	1	59.27	40.73	0.01
748	2	5.86	94.14	0.00
749	3	5.86	94.14	0.00
750	4	0.00	100.00	0.00
751	5	0.00	100.00	0.00
752	6	0.00	100.00	0.00
753	7	0.00	100.00	0.00
754	8	0.00	100.00	0.00

755

756 FLEET\_CHANGES - (used)

757	*% p.a.				
758	*Start_yr	End_yr	Veh_type	%Change_petrol	%Change_diesel
759	2012	2015	1	-2.642	5.437
760	2016	2020	1	0.473	-0.820
761	2021	2025	1	-0.662	1.150
762	2026	2030	1	-0.884	1.389
763	2012	2015	2	-9.640	0.025
764	2016	2020	2	-60.000	0.040
765	2021	2025	2	0.000	0.000
766	2026	2030	2	0.000	0.000

767

768 FLEET\_CHANGES - (std)

769	*% p.a.					
770	*Start_yr	End_yr	Veh_type	%Change_Petrol	%Change_Diesel	%Change_Electric
771	2011	2011	1	-3.810	5.477	502.540
772	2012	2012	1	-3.966	5.188	100.000
773	2013	2013	1	-4.130	4.932	50.000
774	2014	2014	1	-4.308	4.700	33.333
775	2015	2015	1	-4.502	4.489	25.000
776	2016	2016	1	-1.777	1.335	97.788
777	2017	2017	1	-1.809	1.317	49.441
778	2018	2018	1	-1.842	1.300	33.084
779	2019	2019	1	-1.877	1.283	24.859
780	2020	2020	1	-1.913	1.267	19.910
781	2021	2021	1	0.323	-0.826	32.794
782	2022	2022	1	0.322	-0.833	24.695
783	2023	2023	1	0.321	-0.840	19.804
784	2024	2024	1	0.320	-0.847	16.531
785	2025	2025	1	0.319	-0.854	14.186
786	2026	2026	1	0.021	-1.060	21.755
787	2027	2027	1	0.021	-1.071	17.868
788	2028	2028	1	0.021	-1.083	15.159
789	2029	2029	1	0.021	-1.095	13.164



790	2030	2030	1	0.021	-1.107	11.632
791	2011	2011	2	-7.579	0.472	0.000
792	2012	2012	2	-8.200	0.470	0.000
793	2013	2013	2	-8.932	0.468	0.000
794	2014	2014	2	-9.809	0.465	0.000
795	2015	2015	2	-10.875	0.463	0.000
796	2016	2016	2	-9.634	0.364	0.000
797	2017	2017	2	-10.661	0.363	0.000
798	2018	2018	2	-11.933	0.361	0.000
799	2019	2019	2	-13.550	0.360	0.000
800	2020	2020	2	-15.674	0.359	0.000
801	2021	2021	2	-8.979	0.173	0.000
802	2022	2022	2	-9.865	0.172	0.000
803	2023	2023	2	-10.945	0.172	0.000
804	2024	2024	2	-12.290	0.172	0.000
805	2025	2025	2	-14.012	0.171	0.000
806	2026	2026	2	-4.888	0.051	0.000
807	2027	2027	2	-5.139	0.051	0.000
808	2028	2028	2	-5.418	0.051	0.000
809	2029	2029	2	-5.728	0.051	0.000
810	2030	2030	2	-6.076	0.051	0.000
811	2011	2011	3	-7.579	0.472	0.000
812	2012	2012	3	-8.200	0.470	0.000
813	2013	2013	3	-8.932	0.468	0.000
814	2014	2014	3	-9.809	0.465	0.000
815	2015	2015	3	-10.875	0.463	0.000
816	2016	2016	3	-9.634	0.364	0.000
817	2017	2017	3	-10.661	0.363	0.000
818	2018	2018	3	-11.933	0.361	0.000
819	2019	2019	3	-13.550	0.360	0.000
820	2020	2020	3	-15.674	0.359	0.000
821	2021	2021	3	-8.979	0.173	0.000
822	2022	2022	3	-9.865	0.172	0.000
823	2023	2023	3	-10.945	0.172	0.000
824	2024	2024	3	-12.290	0.172	0.000
825	2025	2025	3	-14.012	0.171	0.000
826	2026	2026	3	-4.888	0.051	0.000
827	2027	2027	3	-5.139	0.051	0.000
828	2028	2028	3	-5.418	0.051	0.000
829	2029	2029	3	-5.728	0.051	0.000
830	2030	2030	3	-6.076	0.051	0.000

831	FUEL_CONSUMPTION - (used)						
832	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel	
833	cut-off_speed(km/h)						
834	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140
835	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140
836	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140
837	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140
838	3	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96
839	4	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96
840	5	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96

841	FUEL_CONSUMPTION - (std)						
842	*veh_type	fuel_type	a_fuel	b_fuel	c_fuel	d_fuel	
843	cut-off_speed(km/h)						
844	1	1	1.1193	0.04400	-0.81383E-04	0.24491E-05	140
845	1	2	0.4921	0.06218	-0.59098E-03	0.46469E-05	140
846	1	3	0.0000	0.12564	0.00000E+00	0.00000E+00	140
847	2	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140
848	2	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140
849	3	1	1.9508	0.03453	0.67987E-04	0.37149E-05	140
850	3	2	1.3969	0.03348	-0.22998E-03	0.76732E-05	140
851	4	2	1.8129	0.32678	-0.49478E-02	0.42584E-04	96
852	5	2	2.8933	0.60348	-0.86369E-02	0.65103E-04	96
853	6	2	5.9801	0.24528	-0.30650E-02	0.30615E-04	96

854	FUEL EFFICIENCY - (used)						
855	*% p.a.						
856							

	*Start_yr	End_yr	veh_type	fuel_type	change
857	2012	2012	1	1	-0.46
858	2012	2012	1	2	0.09
859	2013	2013	1	1	-0.42
860	2013	2013	1	2	0.07
861	2014	2020	1	1	2.48
862	2014	2020	1	2	2.92
863	2021	2025	1	1	2.37
864	2021	2025	1	2	1.62
865	2026	2030	1	1	0.92
866	2026	2030	1	2	0.77
867	2012	2012	2	2	0.20
868	2013	2013	2	2	0.18
869	2014	2020	2	2	3.25
870	2021	2025	2	2	0.67
871	2026	2030	2	2	0.27
872	2012	2012	3	2	0.43
873	2013	2013	3	2	0.38
874	2014	2020	3	2	-1.67
875	2021	2025	3	2	0.07
876	2026	2030	3	2	0.01
877	2012	2012	4	2	0.43
878	2013	2013	4	2	0.38
879	2014	2020	4	2	-1.67
880	2021	2025	4	2	0.07
881	2026	2030	4	2	0.01
882	2012	2012	5	2	0.32
883	2013	2013	5	2	0.34
884	2014	2020	5	2	-0.64
885	2021	2025	5	2	0.03
886	2026	2030	5	2	-0.02
887	2012	2012	6	2	0.00
888	2013	2013	6	2	0.00
889	2014	2020	6	2	0.00
890	2021	2025	6	2	0.00
891	2026	2030	6	2	0.00
892	2012	2012	7	2	0.00
893	2013	2013	7	2	0.00
894	2014	2020	7	2	0.00
895	2021	2025	7	2	0.00
896	2026	2030	7	2	0.00

FUEL EFFICIENCY - (std)					
*% p.a.					
	*Start_yr	End_yr	veh_type	fuel_type	change
898	2011	2015	1	1	1.81
899	2011	2015	1	2	2.23
900	2011	2015	1	3	-0.10
901	2011	2015	2	1	0.11
902	2011	2015	2	2	2.71
903	2011	2015	3	1	0.11
904	2011	2015	3	2	2.71
905	2016	2020	1	1	3.32
906	2016	2020	1	2	2.22
907	2016	2020	1	3	0.02
908	2016	2020	2	1	2.35
909	2016	2020	2	2	2.35
910	2016	2020	3	1	2.35
911	2016	2020	3	2	2.35
912	2021	2025	1	1	3.16
913	2021	2025	1	2	2.02
914	2021	2025	1	3	0.12
915	2021	2025	2	1	2.85
916	2021	2025	2	2	1.65
917	2021	2025	3	1	2.85
918	2021	2025	3	2	1.65
919	2026	2030	1	1	1.56
920	2026	2030	1	2	1.19
921	2026	2030	1	3	0.00

926	2026	2030	2	1	2.40
927	2026	2030	2	2	0.74
928	2026	2030	3	1	2.40
929	2026	2030	3	2	0.74
930	2031	2035	1	1	0.57
931	2031	2035	1	2	0.52
932	2031	2035	1	3	-0.08
933	2031	2035	2	1	0.54
934	2031	2035	2	2	0.22
935	2031	2035	3	1	0.54
936	2031	2035	3	2	0.22
937	2036	2100	1	1	0.00
938	2036	2100	1	2	0.00
939	2036	2100	1	3	0.00
940	2036	2100	2	1	0.00
941	2036	2100	2	2	0.00
942	2036	2100	3	1	0.00
943	2036	2100	3	2	0.00

NON\_FUEL\_VOC - (used)

	*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw
946	1	6.265	171.493	5.507	0.000
947	1	6.265	171.493	5.507	0.000
948	2	9.099	70.308	10.327	0.000
949	3	10.020	393.702	0.000	0.000
950	3	10.020	393.702	0.000	0.000
951	4	19.491	758.888	0.000	0.000
952	5	45.458	1036.494	0.000	0.000
953	6	0.000	0.000	0.000	0.000
954	7	0.000	0.000	0.000	0.000

NON\_FUEL\_VOC - (std)

	*veh_type	a_nonfuel_wrk	b_nonfuel_wrk	a_nonfuel_nw	b_nonfuel_nw
955	1	4.966	135.946	3.846	0.000
956	1	4.966	135.946	3.846	0.000
957	1	1.157	135.946	1.157	0.000
958	2	7.213	47.113	7.213	0.000
959	2	7.213	47.113	7.213	0.000
960	3	7.213	47.113	7.213	0.000
961	3	7.213	47.113	7.213	0.000
962	4	6.714	263.817	0.000	0.000
963	5	13.061	508.525	0.000	0.000
964	6	30.461	694.547	0.000	0.000

NON\_FUEL\_VOC\_CHANGES - (used)

	*% p.a.	*Start_yr	End_yr	veh_type	gnf
970		2012	2080	1	0.000
971		2012	2080	2	0.000
972		2012	2080	3	0.000
973		2012	2080	4	0.000
974		2012	2080	5	0.000

NON\_FUEL\_VOC\_CHANGES - (std)

	*% p.a.	*Start_yr	End_yr	veh_type	gnf
975		2011	2100	1	0.000
976		2011	2100	2	0.000
977		2011	2100	3	0.000
978		2011	2100	4	0.000
979		2011	2100	5	0.000
980		2011	2100	6	0.000
981		2011	2100	7	0.000
982		2011	2100	8	0.000

NON\_FUEL\_TAX\_RATES - (used)

	*% submode	final	intermediate
990	1	21.0	0.0

995	2	21.0	0.0
996	3	21.0	0.0
997	4	21.0	0.0
998	5	21.0	0.0
999	6	21.0	0.0
1000	7	21.0	0.0

1001  
1002 NON\_FUEL\_TAX\_RATES - (std)

1003 \*%  
1004 \*submode            final            intermediate  
1005    1            17.5            0.0  
1006    2            17.5            0.0  
1007    3            17.5            0.0  
1008    4            17.5            0.0  
1009    5            17.5            0.0  
1010    6            17.5            0.0  
1011    7            0.0            0.0  
1012    8            0.0            0.0

1013  
1014 NON\_FUEL\_TAX\_RATES\_CHANGES - (used)

1015 \*% change p.a.  
1016 \*Start\_yr            End\_yr            Submode            final            intermediate  
1017    2012            2012            1            5.7            7.9  
1018    2013            2080            1            0.0            0.0  
1019    2012            2012            2            7.9            10.3  
1020    2013            2080            2            0.0            0.0  
1021    2012            2012            3            7.9            10.3  
1022    2013            2080            3            0.0            0.0  
1023    2012            2012            4            7.9            10.3  
1024    2013            2080            4            0.0            0.0  
1025    2012            2012            5            7.9            10.3  
1026    2013            2080            5            0.0            0.0  
1027    2012            2012            6            7.9            10.3  
1028    2013            2080            6            0.0            0.0  
1029    2012            2012            7            0.0            0.0  
1030    2013            2080            7            0.0            0.0

1031  
1032 NON\_FUEL\_TAX\_RATES\_CHANGES - (std)

1033 \*% change p.a.  
1034 \*Start\_yr            End\_yr            Submode            final            intermediate  
1035    2011            2011            1            14.3            0.0  
1036    2011            2011            2            14.3            0.0  
1037    2011            2011            3            14.3            0.0  
1038    2011            2011            4            14.3            0.0  
1039    2011            2011            5            14.3            0.0  
1040    2011            2011            6            14.3            0.0  
1041    2011            2011            7            0.0            0.0  
1042    2011            2011            8            0.0            0.0  
1043    2012            2100            1            0.0            0.0  
1044    2012            2100            2            0.0            0.0  
1045    2012            2100            3            0.0            0.0  
1046    2012            2100            4            0.0            0.0  
1047    2012            2100            5            0.0            0.0  
1048    2012            2100            6            0.0            0.0  
1049    2012            2100            7            0.0            0.0  
1050    2012            2100            8            0.0            0.0

1051  
1052 DEFAULT\_PURPOSE\_SPLIT - (used)

1053 \*Vtype/submode            purpose            Period1    Period2    Period3    Period4    Period5  
1054    1            1            13.3       16.9       12.0  
1055    1            2            44.2       36.7       42.9  
1056    1            3            42.5       46.4       45.1  
1057    2            1            41.3       50.3       40.2  
1058    2            2            45.2       35.1       45.1  
1059    2            3            13.5       14.6       14.7  
1060    3            1            76.7       81.4       75.6  
1061    3            2            16.1       11.1       17.0  
1062    3            3            7.2       7.5       7.4  
1063    4            1            82.5       86.9       79.7

1064	4	2	11.7	7.8	13.2
1065	4	3	5.8	5.3	7.1
1066	5	1	10.2	10.2	10.2
1067	5	2	18.9	18.9	18.9
1068	5	3	70.8	70.8	70.9
1069	6	1	10.2	10.2	10.2
1070	6	2	18.9	18.9	18.9
1071	6	3	70.8	70.8	70.9
1072	7	1	10.2	10.2	10.2
1073	7	2	18.9	18.9	18.9
1074	7	3	70.8	70.8	70.9

1075

1076 DEFAULT\_PURPOSE\_SPLIT - (std)

*Vtype/submode	purpose	Period1	Period2	Period3	Period4	Period5	
1077	1	16.5	11.8	16.5	12.9	3.5	
1078	1	2	44.0	41.3	11.8	38.5	7.9
1079	1	3	39.5	46.9	71.7	48.6	88.6
1080	2	1	0.0	0.0	0.0	0.0	0.0
1081	2	2	0.0	0.0	0.0	0.0	0.0
1082	2	3	100.0	100.0	100.0	100.0	100.0
1083	3	1	100.0	100.0	100.0	100.0	100.0
1084	3	2	0.0	0.0	0.0	0.0	0.0
1085	3	3	0.0	0.0	0.0	0.0	0.0
1086	4	1	100.0	100.0	100.0	100.0	100.0
1087	4	2	0.0	0.0	0.0	0.0	0.0
1088	4	3	0.0	0.0	0.0	0.0	0.0
1089	5	1	100.0	100.0	100.0	100.0	100.0
1090	5	2	0.0	0.0	0.0	0.0	0.0
1091	5	3	0.0	0.0	0.0	0.0	0.0
1092	6	1	1.4	2.3	1.7	2.3	0.5
1093	6	2	18.4	25.9	6.5	35.4	6.1
1094	6	3	80.2	71.8	91.8	62.3	93.4
1095	7	1	4.5	5.2	3.2	2.5	0.7
1096	7	2	50.1	45.9	10.7	54.7	7.6
1097	7	3	45.4	48.9	86.1	42.8	91.7
1098	8	1	17.1	15.7	15.8	17.7	1.8
1099	8	2	31.2	38.1	5.5	38.6	2.8
1100	8	3	51.7	46.2	78.7	43.7	95.4

1102

1103 DEFAULT\_PERSON\_FACTORS - (used)

*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2..		
1104	1	1	1.00	1.00	1.00	
1105	1	1	2	0.26	0.25	0.26
1106	1	2	1	1.00	1.00	1.00
1107	1	2	2	0.23	0.22	0.23
1108	1	3	1	1.00	1.00	1.00
1109	1	3	2	0.66	0.65	0.68
1110	2	1	1	1.00	1.00	1.00
1111	2	1	2	0.37	0.32	0.38
1112	2	2	1	1.00	1.00	1.00
1113	2	2	2	0.40	0.41	0.40
1114	2	3	1	1.00	1.00	1.00
1115	2	3	2	0.49	0.45	0.48
1116	3	1	1	1.00	1.00	1.00
1117	3	1	2	0.09	0.09	0.09
1118	3	2	1	1.00	1.00	1.00
1119	3	2	2	0.24	0.28	0.24
1120	3	3	1	1.00	1.00	1.00
1121	3	3	2	0.26	0.33	0.27
1122	4	1	1	1.00	1.00	1.00
1123	4	1	2	0.03	0.03	0.03
1124	4	2	1	1.00	1.00	1.00
1125	4	2	2	0.11	0.14	0.08
1126	4	3	1	1.00	1.00	1.00
1127	4	3	2	0.11	0.12	0.16
1128	5	1	1	1.00	1.00	1.00
1129	5	1	2	0.35	0.35	0.35
1130	5	2	1	1.00	1.00	1.00
1131	5	2	2	1.50	1.50	1.50

1133	5	3	1	1.00	1.00	1.00
1134	5	3	2	8.35	8.35	8.35

1135

1136 DEFAULT\_PERSON\_FACTORS - (std)

1137	*Vtype/submode	purpose	person_type	FactorPer1	FactorPer2..
1138	1	1	1	1.00	1.00
	1.00	1.00	1.00	1.00	
1139	1	1	2	0.13	0.15
	0.16	0.17	0.31		
1140	1	2	1	1.00	1.00
	1.00	1.00	1.00		
1141	1	2	2	0.13	0.14
	0.15	0.15	0.21		
1142	1	3	1	1.00	1.00
	1.00	1.00	1.00		
1143	1	3	2	0.71	0.79
	0.82	0.79	1.12		
1144	2	2	1	1.00	1.00
	1.00	1.00	1.00		
1145	2	2	2	0.46	0.46
	0.46	0.46	1.03		
1146	2	3	1	1.00	1.00
	1.00	1.00	1.00		
1147	2	3	2	0.46	0.46
	0.46	0.46	1.03		
1148	3	1	1	1.00	1.00
	1.00	1.00	1.00		
1149	3	1	2	0.20	0.20
	0.20	0.20	0.26		
1150	4	1	1	1.00	1.00
	1.00	1.00	1.00		
1151	5	1	1	1.00	1.00
	1.00	1.00	1.00		

1152

1153 DEFAULT\_PERSON\_FACTORS\_CHANGE - (used)

1154 \*% change p.a.

1155	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3
	ChangePer4	ChangePer5						
1156	2011	2080	1	1	2	0.00	0.00	0.00
1157	2011	2080	1	2	2	0.00	0.00	0.00

1158

1159 DEFAULT\_PERSON\_FACTORS\_CHANGE - (std)

1160 \*% change p.a.

1161	*Start_yr	End_yr	Submode	Purpose	Person_type	ChangePer1	ChangePer2	ChangePer3
	ChangePer4	ChangePer5						
1162	2011	2036	1	1	2	0.00	0.00	
	0.00	0.00	0.00					
1163	2011	2036	1	2	2	0.00	0.00	
	0.00	0.00	0.00					
1164	2011	2036	1	3	2	0.00	0.00	
	0.00	0.00	0.00					

1165

1166 INPUT\_SUMMARY

1167 Run name N25 Waterford to Glenmore - Teal  
 1168 DM scheme Do **Min**  
 1169 DS scheme Teal

1170

1171 Economic parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Teal\Economics\_Input\_TUBAv1.9.8  
 (Oct2020).txt

1172 Scheme parameter file G:\PROJECTS\300539 N25 Waterford to Glenmore Phases  
 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT \_ oct  
 2020\Teal\TUBA\_Scheme\_Input\_Teal\_30year\_v1.9.8\_SPL\_1\_0.txt

1173

1174 First year of scheme costs 2020  
 1175 First Appraisal Year 2030

1176	Last Appraisal Year	2059
1177	Modelled years	2030 2045 2059
1178		
1179	Time period	Total hours
1180	AM Peak	646
1181	Inter Peak	2424
1182	PM Peak	640
1183	Total	3710

1184

1185

1186 Note: All monetary values are in 2011 market prices. All monetary values discounted to 2011 unless otherwise stated.

1187

1188 DM\_SCHEME\_COSTS

1189 Do minimum scheme costs. Undiscounted £000s

1190	Mode	Year	Prep.	Superv.	Constr.	Land
	Maint.	Oper.	Grant/Sub.	Dev._Cont		
1191	Road	2020	0	0	0	0
	0	0	0	0		
1192	Road	2021	0	0	0	0
	0	0	0	0		
1193	Road	2022	0	0	0	0
	0	0	0	0		
1194	Road	2023	0	0	0	0
	0	0	0	0		
1195	Road	2024	0	0	0	0
	0	0	0	0		
1196	Road	2025	0	0	0	0
	0	0	0	0		
1197	Road	2026	0	0	0	0
	0	0	0	0		
1198	Road	2027	0	0	0	0
	0	0	0	0		
1199	Road	2028	0	0	0	0
	0	0	0	0		
1200	Road	2029	0	0	0	0
	0	0	0	0		
1201	Road	2030	0	0	0	0
	0	0	0	0		
1202	Road	2031	0	0	0	0
	0	0	0	0		
1203	Road	2032	0	0	0	0
	0	0	0	0		
1204	Road	2033	0	0	0	0
	0	0	0	0		
1205	Road	2034	0	0	0	0
	0	0	0	0		
1206	Road	2035	0	0	0	0
	0	0	0	0		
1207	Road	2036	0	0	0	0
	0	0	0	0		
1208	Road	2037	0	0	0	0
	0	0	0	0		
1209	Road	2038	0	0	0	0
	0	0	0	0		
1210	Road	2039	0	0	0	0
	0	0	0	0		
1211	Road	2040	0	0	0	0
	0	0	0	0		
1212	Road	2041	0	0	0	0
	0	0	0	0		
1213	Road	2042	0	0	0	0
	0	0	0	0		
1214	Road	2043	0	0	0	0
	0	0	0	0		
1215	Road	2044	0	0	0	0
	0	0	0	0		
1216	Road	2045	0	0	0	0
	0	0	0	0		

1217	Road 0	2046 0	0	0	0	0	0	0
1218	Road 0	2047 0	0	0	0	0	0	0
1219	Road 0	2048 0	0	0	0	0	0	0
1220	Road 0	2049 0	0	0	0	0	0	0
1221	Road 0	2050 0	0	0	0	0	0	0
1222	Road 0	2051 0	0	0	0	0	0	0
1223	Road 0	2052 0	0	0	0	0	0	0
1224	Road 0	2053 0	0	0	0	0	0	0
1225	Road 0	2054 0	0	0	0	0	0	0
1226	Road 0	2055 0	0	0	0	0	0	0
1227	Road 0	2056 0	0	0	0	0	0	0
1228	Road 0	2057 0	0	0	0	0	0	0
1229	Road 0	2058 0	0	0	0	0	0	0
1230	Road 0	2059 0	0	0	0	0	0	0
1231	Bus 0	2020 0	0	0	0	0	0	0
1232	Bus 0	2021 0	0	0	0	0	0	0
1233	Bus 0	2022 0	0	0	0	0	0	0
1234	Bus 0	2023 0	0	0	0	0	0	0
1235	Bus 0	2024 0	0	0	0	0	0	0
1236	Bus 0	2025 0	0	0	0	0	0	0
1237	Bus 0	2026 0	0	0	0	0	0	0
1238	Bus 0	2027 0	0	0	0	0	0	0
1239	Bus 0	2028 0	0	0	0	0	0	0
1240	Bus 0	2029 0	0	0	0	0	0	0
1241	Bus 0	2030 0	0	0	0	0	0	0
1242	Bus 0	2031 0	0	0	0	0	0	0
1243	Bus 0	2032 0	0	0	0	0	0	0
1244	Bus 0	2033 0	0	0	0	0	0	0
1245	Bus 0	2034 0	0	0	0	0	0	0
1246	Bus 0	2035 0	0	0	0	0	0	0
1247	Bus 0	2036 0	0	0	0	0	0	0
1248	Bus 0	2037 0	0	0	0	0	0	0
1249	Bus 0	2038 0	0	0	0	0	0	0
1250	Bus 0	2039 0	0	0	0	0	0	0
1251	Bus	2040	0	0	0	0	0	0



1252	0	0	0	0	0	0	0
	Bus	2041	0	0	0	0	0
	0	0	0	0	0	0	0
1253	Bus	2042	0	0	0	0	0
	0	0	0	0	0	0	0
1254	Bus	2043	0	0	0	0	0
	0	0	0	0	0	0	0
1255	Bus	2044	0	0	0	0	0
	0	0	0	0	0	0	0
1256	Bus	2045	0	0	0	0	0
	0	0	0	0	0	0	0
1257	Bus	2046	0	0	0	0	0
	0	0	0	0	0	0	0
1258	Bus	2047	0	0	0	0	0
	0	0	0	0	0	0	0
1259	Bus	2048	0	0	0	0	0
	0	0	0	0	0	0	0
1260	Bus	2049	0	0	0	0	0
	0	0	0	0	0	0	0
1261	Bus	2050	0	0	0	0	0
	0	0	0	0	0	0	0
1262	Bus	2051	0	0	0	0	0
	0	0	0	0	0	0	0
1263	Bus	2052	0	0	0	0	0
	0	0	0	0	0	0	0
1264	Bus	2053	0	0	0	0	0
	0	0	0	0	0	0	0
1265	Bus	2054	0	0	0	0	0
	0	0	0	0	0	0	0
1266	Bus	2055	0	0	0	0	0
	0	0	0	0	0	0	0
1267	Bus	2056	0	0	0	0	0
	0	0	0	0	0	0	0
1268	Bus	2057	0	0	0	0	0
	0	0	0	0	0	0	0
1269	Bus	2058	0	0	0	0	0
	0	0	0	0	0	0	0
1270	Bus	2059	0	0	0	0	0
	0	0	0	0	0	0	0

1271							
1272	DS_SCHEME_COSTS						
1273	Do something scheme costs. Undiscounted £000s						
1274	Mode	Year	Prep.	Superv.	Constr.	Land	
	Maint.	Oper.	Grant/Sub.	Dev._Cont			
1275	Road	2020	0	0	0	0	0
	0	0	0	0	0	0	0
1276	Road	2021	0	0	0	0	0
	0	0	0	0	0	0	0
1277	Road	2022	0	0	0	0	0
	0	0	0	0	0	0	0
1278	Road	2023	0	0	0	0	0
	0	0	0	0	0	0	0
1279	Road	2024	0	0	0	0	0
	0	0	0	0	0	0	0
1280	Road	2025	0	0	0	0	0
	0	0	0	0	0	0	0
1281	Road	2026	0	0	0	0	0
	0	0	0	0	0	0	0
1282	Road	2027	5615	0	37288	9956	
	0	0	0	0	0	0	
1283	Road	2028	1123	4254	78649	9956	
	0	0	0	0	0	0	
1284	Road	2029	749	4254	40734	0	
	0	0	0	0	0	0	
1285	Road	2030	0	0	0	0	
	442	0	0	0	0	0	
1286	Road	2031	0	0	0	0	
	442	0	0	0	0	0	
1287	Road	2032	0	0	0	0	

1288	442	0	0	0	0	0	0
	Road	2033	0	0	0	0	0
1289	442	0	0	0	0	0	0
	Road	2034	0	0	0	0	0
1290	442	0	0	0	0	0	0
	Road	2035	0	0	0	0	0
1291	442	0	0	0	0	0	0
	Road	2036	0	0	0	0	0
1292	442	0	0	0	0	0	0
	Road	2037	0	0	0	0	0
1293	442	0	0	0	0	0	0
	Road	2038	0	0	0	0	0
1294	442	0	0	0	0	0	0
	Road	2039	0	0	0	0	0
1295	442	0	0	0	0	0	0
	Road	2040	0	0	0	0	0
1296	442	0	0	0	0	0	0
	Road	2041	0	0	0	0	0
1297	442	0	0	0	0	0	0
	Road	2042	0	0	0	0	0
1298	442	0	0	0	0	0	0
	Road	2043	0	0	0	0	0
1299	442	0	0	0	0	0	0
	Road	2044	0	0	0	0	0
1300	442	0	0	0	0	0	0
	Road	2045	0	0	0	0	0
1301	442	0	0	0	0	0	0
	Road	2046	0	0	0	0	0
1302	442	0	0	0	0	0	0
	Road	2047	0	0	0	0	0
1303	442	0	0	0	0	0	0
	Road	2048	0	0	0	0	0
1304	442	0	0	0	0	0	0
	Road	2049	0	0	0	0	0
1305	442	0	0	0	0	0	0
	Road	2050	0	0	0	0	0
1306	442	0	0	0	0	0	0
	Road	2051	0	0	0	0	0
1307	442	0	0	0	0	0	0
	Road	2052	0	0	0	0	0
1308	442	0	0	0	0	0	0
	Road	2053	0	0	0	0	0
1309	442	0	0	0	0	0	0
	Road	2054	0	0	0	0	0
1310	442	0	0	0	0	0	0
	Road	2055	0	0	0	0	0
1311	442	0	0	0	0	0	0
	Road	2056	0	0	0	0	0
1312	442	0	0	0	0	0	0
	Road	2057	0	0	0	0	0
1313	442	0	0	0	0	0	0
	Road	2058	0	0	0	0	0
1314	442	0	0	0	0	0	0
	Road	2059	0	0	0	0	0
1315	575	0	0	0	0	0	0
	Bus	2020	0	0	0	0	0
1316	0	0	0	0	0	0	0
	Bus	2021	0	0	0	0	0
1317	0	0	0	0	0	0	0
	Bus	2022	0	0	0	0	0
1318	0	0	0	0	0	0	0
	Bus	2023	0	0	0	0	0
1319	0	0	0	0	0	0	0
	Bus	2024	0	0	0	0	0
1320	0	0	0	0	0	0	0
	Bus	2025	0	0	0	0	0
1321	0	0	0	0	0	0	0
	Bus	2026	0	0	0	0	0

1322	Bus	2027	0	0	0	0	0
	0	0	0	0	0	0	0
1323	Bus	2028	0	0	0	0	0
	0	0	0	0	0	0	0
1324	Bus	2029	0	0	0	0	0
	0	0	0	0	0	0	0
1325	Bus	2030	0	0	0	0	0
	0	0	0	0	0	0	0
1326	Bus	2031	0	0	0	0	0
	0	0	0	0	0	0	0
1327	Bus	2032	0	0	0	0	0
	0	0	0	0	0	0	0
1328	Bus	2033	0	0	0	0	0
	0	0	0	0	0	0	0
1329	Bus	2034	0	0	0	0	0
	0	0	0	0	0	0	0
1330	Bus	2035	0	0	0	0	0
	0	0	0	0	0	0	0
1331	Bus	2036	0	0	0	0	0
	0	0	0	0	0	0	0
1332	Bus	2037	0	0	0	0	0
	0	0	0	0	0	0	0
1333	Bus	2038	0	0	0	0	0
	0	0	0	0	0	0	0
1334	Bus	2039	0	0	0	0	0
	0	0	0	0	0	0	0
1335	Bus	2040	0	0	0	0	0
	0	0	0	0	0	0	0
1336	Bus	2041	0	0	0	0	0
	0	0	0	0	0	0	0
1337	Bus	2042	0	0	0	0	0
	0	0	0	0	0	0	0
1338	Bus	2043	0	0	0	0	0
	0	0	0	0	0	0	0
1339	Bus	2044	0	0	0	0	0
	0	0	0	0	0	0	0
1340	Bus	2045	0	0	0	0	0
	0	0	0	0	0	0	0
1341	Bus	2046	0	0	0	0	0
	0	0	0	0	0	0	0
1342	Bus	2047	0	0	0	0	0
	0	0	0	0	0	0	0
1343	Bus	2048	0	0	0	0	0
	0	0	0	0	0	0	0
1344	Bus	2049	0	0	0	0	0
	0	0	0	0	0	0	0
1345	Bus	2050	0	0	0	0	0
	0	0	0	0	0	0	0
1346	Bus	2051	0	0	0	0	0
	0	0	0	0	0	0	0
1347	Bus	2052	0	0	0	0	0
	0	0	0	0	0	0	0
1348	Bus	2053	0	0	0	0	0
	0	0	0	0	0	0	0
1349	Bus	2054	0	0	0	0	0
	0	0	0	0	0	0	0
1350	Bus	2055	0	0	0	0	0
	0	0	0	0	0	0	0
1351	Bus	2056	0	0	0	0	0
	0	0	0	0	0	0	0
1352	Bus	2057	0	0	0	0	0
	0	0	0	0	0	0	0
1353	Bus	2058	0	0	0	0	0
	0	0	0	0	0	0	0
1354	Bus	2059	0	0	0	0	0
	0	0	0	0	0	0	0

1355  
1356 PRESENT\_VALUE\_COSTS  
1357 Scheme investment and operating costs (i.e. excluding grant/subsidy, developer

contributions and delays) and differences. £000s.

	Mode	Year	DM_scheme_costs	DS_scheme_costs	Difference
1358	Road	2020	0	0	0
1359	Road	2021	0	0	0
1360	Road	2022	0	0	0
1361	Road	2023	0	0	0
1362	Road	2024	0	0	0
1363	Road	2025	0	0	0
1364	Road	2026	0	0	0
1365	Road	2027	0	28222	28222
1366	Road	2028	0	48247	48247
1367	Road	2029	0	22577	22577
1368	Road	2030	0	210	210
1369	Road	2031	0	202	202
1370	Road	2032	0	194	194
1371	Road	2033	0	186	186
1372	Road	2034	0	179	179
1373	Road	2035	0	172	172
1374	Road	2036	0	166	166
1375	Road	2037	0	159	159
1376	Road	2038	0	153	153
1377	Road	2039	0	147	147
1378	Road	2040	0	142	142
1379	Road	2041	0	136	136
1380	Road	2042	0	131	131
1381	Road	2043	0	126	126
1382	Road	2044	0	121	121
1383	Road	2045	0	116	116
1384	Road	2046	0	112	112
1385	Road	2047	0	108	108
1386	Road	2048	0	103	103
1387	Road	2049	0	99	99
1388	Road	2050	0	96	96
1389	Road	2051	0	93	93
1390	Road	2052	0	90	90
1391	Road	2053	0	87	87
1392	Road	2054	0	84	84
1393	Road	2055	0	81	81
1394	Road	2056	0	78	78
1395	Road	2057	0	76	76
1396	Road	2058	0	73	73
1397	Road	2059	0	92	92
1398	Bus	2020	0	0	0
1399	Bus	2021	0	0	0
1400	Bus	2022	0	0	0
1401	Bus	2023	0	0	0
1402	Bus	2024	0	0	0
1403	Bus	2025	0	0	0
1404	Bus	2026	0	0	0
1405	Bus	2027	0	0	0
1406	Bus	2028	0	0	0
1407	Bus	2029	0	0	0
1408	Bus	2030	0	0	0
1409	Bus	2031	0	0	0
1410	Bus	2032	0	0	0
1411	Bus	2033	0	0	0
1412	Bus	2034	0	0	0
1413	Bus	2035	0	0	0
1414	Bus	2036	0	0	0
1415	Bus	2037	0	0	0
1416	Bus	2038	0	0	0
1417	Bus	2039	0	0	0
1418	Bus	2040	0	0	0
1419	Bus	2041	0	0	0
1420	Bus	2042	0	0	0
1421	Bus	2043	0	0	0
1422	Bus	2044	0	0	0
1423	Bus	2045	0	0	0
1424	Bus	2046	0	0	0

1426	Bus	2047	0	0	0
1427	Bus	2048	0	0	0
1428	Bus	2049	0	0	0
1429	Bus	2050	0	0	0
1430	Bus	2051	0	0	0
1431	Bus	2052	0	0	0
1432	Bus	2053	0	0	0
1433	Bus	2054	0	0	0
1434	Bus	2055	0	0	0
1435	Bus	2056	0	0	0
1436	Bus	2057	0	0	0
1437	Bus	2058	0	0	0
1438	Bus	2059	0	0	0
1439	Road	Total	0	102858	102858
1440	Bus	Total	0	0	0

1441					
1442	TRIP_MATRIX_TOTALS				
1443	Annualised total trip numbers (thousands)				
1444	Submode	Year	Time period	DO MIN	DO SOM
1445	Car	2030	AM Peak	4719	4719
1446	Car	2030	Inter Peak	15931	15931
1447	Car	2030	PM Peak	4822	4822
1448	Car	2030	All	25472	25472
1449	Car	2045	AM Peak	4859	4859
1450	Car	2045	Inter Peak	16387	16387
1451	Car	2045	PM Peak	4962	4962
1452	Car	2045	All	26208	26208
1453	Car	2059	AM Peak	4861	4861
1454	Car	2059	Inter Peak	16428	16428
1455	Car	2059	PM Peak	4963	4963
1456	Car	2059	All	26252	26252
1457	OGV2	2030	AM Peak	287	287
1458	OGV2	2030	Inter Peak	1018	1018
1459	OGV2	2030	PM Peak	236	236
1460	OGV2	2030	All	1541	1541
1461	OGV2	2045	AM Peak	339	339
1462	OGV2	2045	Inter Peak	1209	1209
1463	OGV2	2045	PM Peak	279	279
1464	OGV2	2045	All	1828	1828
1465	OGV2	2059	AM Peak	361	361
1466	OGV2	2059	Inter Peak	1292	1292
1467	OGV2	2059	PM Peak	297	297
1468	OGV2	2059	All	1950	1950
1469	All	2030	AM Peak	5006	5006
1470	All	2030	Inter Peak	16948	16948
1471	All	2030	PM Peak	5059	5059
1472	All	2030	All	27013	27013
1473	All	2045	AM Peak	5198	5198
1474	All	2045	Inter Peak	17596	17596
1475	All	2045	PM Peak	5241	5241
1476	All	2045	All	28035	28035
1477	All	2059	AM Peak	5221	5221
1478	All	2059	Inter Peak	17721	17721
1479	All	2059	PM Peak	5260	5260
1480	All	2059	All	28202	28202

1481						
1482	DM&DS_USER_COSTS					
1483	Total value of user costs, DM and DS. £000s.					
1484	Mode	Year	DMtot_time	DMtot_charge	DMtot_fuel	DMtot_nonfuel
	DStot_time	DStot_charge	DStot_fuel	DStot_nonfuel		
1485	Road	2030	104727	0	19837	20654
	102991	0	19657	20447		
1486	Road	2045	86732	0	12186	12416
	85181	0	12074	12287		
1487	Road	2059	73347	0	7656	7725
	71957	0	7585	7644		

1488					
1489	FUEL_CONSUMPTION				
1490	Total fuel consumption, DM and DS. kilounits.				

			Do minimum		Do something	
	Submode	Year	petrol	diesel	petrol	diesel
1491						
1492	Car	2030	11160	5939	11082	5891
1493	Car	2045	11511	6130	11430	6080
1494	Car	2059	11549	6151	11468	6100
1495	OGV2	2030	0	19097	0	18891
1496	OGV2	2045	0	22533	0	22288
1497	OGV2	2059	0	24009	0	23747
1498	All	2030	11160	25035	11082	24783
1499	All	2045	11511	28663	11430	28368
1500	All	2059	11549	30160	11468	29848
1501	Car	Total	342809	182521	340402	181040
1502	OGV2	Total	0	659576	0	652415
1503	All	Total	342809	842097	340402	833456
1504						
1505						

1506 CO2\_EMISSIONS\_UNTRADED

			Emissions (tonnes) (£000s, low central)			cost cost (£000s, high)	
	Submode	Year	DM	DS	Increase	DM	DM
	DS	Increase	DM	DS	Increase	DM	DM
	DS	Increase					
1507							
1508	Car	2030	40102	39806	-296	1902	
1509	1888	-14	381	378	-3	381	
1510	378	-3					
1510	Car	2045	41374	41066	-308	2266	
1511	2249	-17	218	216	-2	218	
1511	216	-2					
1511	Car	2059	41512	41202	-310	2728	
1512	2707	-20	133	132	-1	133	
1512	132	-1					
1512	OGV2	2030	48926	48399	-527	2321	
1513	2296	-25	464	459	-5	464	
1513	459	-5					
1513	OGV2	2045	57730	57102	-628	3161	
1514	3127	-34	304	301	-3	304	
1514	301	-3					
1514	OGV2	2059	61512	60841	-671	4042	
1515	3998	-44	196	194	-2	196	
1515	194	-2					
1515	All	2030	89027	88205	-822	4223	
1516	4184	-39	845	837	-8	845	
1516	837	-8					
1516	All	2031	89699	88869	-830	4296	
1517	4257	-40	819	811	-8	819	
1517	811	-8					
1517	All	2032	90371	89534	-837	4370	
1518	4330	-40	793	786	-7	793	
1518	786	-7					
1518	All	2033	91043	90198	-845	4445	
1519	4404	-41	768	761	-7	768	
1519	761	-7					
1519	All	2034	91715	90862	-853	4521	
1520	4479	-42	744	737	-7	744	
1520	737	-7					
1520	All	2035	92387	91526	-860	4598	
1521	4555	-43	721	714	-7	721	
1521	714	-7					
1521	All	2036	93058	92191	-868	4676	
1522	4632	-44	698	692	-7	698	
1522	692	-7					
1522	All	2037	93730	92855	-875	4755	
1523	4710	-44	676	670	-6	676	
1523	670	-6					
1523	All	2038	94402	93519	-883	4835	
1524	4790	-45	655	649	-6	655	
1524	649	-6					
1524	All	2039	95074	94183	-891	4916	
1525	4870	-46	634	628	-6	634	

1525	628	-6				
	All	2040	95746	94847	-898	4998
	4951	-47	614	608	-6	614
	608	-6				
1526	All	2041	96417	95512	-906	5082
	5034	-48	595	589	-6	595
	589	-6				
1527	All	2042	97089	96176	-913	5166
	5118	-49	576	570	-5	576
	570	-5				
1528	All	2043	97761	96840	-921	5252
	5203	-49	557	552	-5	557
	552	-5				
1529	All	2044	98433	97504	-928	5339
	5289	-50	540	535	-5	540
	535	-5				
1530	All	2045	99105	98169	-936	5427
	5376	-51	522	517	-5	522
	517	-5				
1531	All	2046	99385	98445	-939	5495
	5443	-52	504	499	-5	504
	499	-5				
1532	All	2047	99665	98722	-942	5563
	5511	-53	486	481	-5	486
	481	-5				
1533	All	2048	99944	98999	-946	5633
	5579	-53	468	464	-4	468
	464	-4				
1534	All	2049	100224	99276	-949	5703
	5649	-54	452	447	-4	452
	447	-4				
1535	All	2050	100504	99552	-952	5802
	5747	-55	438	433	-4	438
	433	-4				
1536	All	2051	100784	99829	-955	5902
	5846	-56	424	420	-4	424
	420	-4				
1537	All	2052	101064	100106	-958	6004
	5947	-57	411	407	-4	411
	407	-4				
1538	All	2053	101344	100383	-962	6108
	6050	-58	398	394	-4	398
	394	-4				
1539	All	2054	101624	100659	-965	6214
	6155	-59	386	382	-4	386
	382	-4				
1540	All	2055	101904	100936	-968	6321
	6261	-60	374	370	-4	374
	370	-4				
1541	All	2056	102184	101213	-971	6430
	6369	-61	362	358	-3	362
	358	-3				
1542	All	2057	102464	101490	-974	6541
	6479	-62	351	347	-3	351
	347	-3				
1543	All	2058	102744	101766	-978	6654
	6591	-63	340	336	-3	340
	336	-3				
1544	All	2059	103024	102043	-981	6769
	6705	-64	329	326	-3	329
	326	-3				
1545	Car	Total	1232082	1222922	-9160	68119
	67612	-507	7024	6972	-52	7024
	6972	-52				
1546	OGV2	Total	1689834	1671488	-18346	93921
	92901	-1020	9453	9350	-102	9453
	9350	-102				
1547	All	Total	2921917	2894411	-27506	162039
	160513	-1527	16477	16322	-155	16477





1572	All	2044	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1573	All	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1574	All	2046	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1575	All	2047	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1576	All	2048	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1577	All	2049	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1578	All	2050	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1579	All	2051	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1580	All	2052	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1581	All	2053	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1582	All	2054	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1583	All	2055	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1584	All	2056	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1585	All	2057	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1586	All	2058	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1587	All	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1588	Car	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1589	OGV2	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
1590	All	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0

1591  
1592 CO2\_EMISSIONS\_BY\_TIME\_PERIOD\_UNTRADED

1593			Emissions (tonnes)			cost	
			(£000s, low)			cost (£000s, high)	
			central)			cost	cost
1594	Submode	Year	DM	DS	Increase	DM	DM
	DS	Increase	DM	DS	Increase	DM	DM
	DS	Increase					
1595	AM Peak	2030	17616	17445	-171	836	
	828	-8	167	166	-2	167	
	166	-2					
1596	AM Peak	2045	19478	19284	-195	1067	

	1056	-11	103	102	-1	103
	102	-1				
1597	AM Peak	2059	20145	19942	-203	1324
	1310	-13	64	64	-1	64
	64	-1				
1598	Inter Peak	2030	55393	54908	-485	2628
	2605	-23	526	521	-5	526
	521	-5				
1599	Inter Peak	2045	61964	61415	-549	3393
	3363	-30	327	324	-3	327
	324	-3				
1600	Inter Peak	2059	64617	64043	-575	4246
	4208	-38	206	205	-2	206
	205	-2				
1601	PM Peak	2030	16019	15853	-166	760
	752	-8	152	150	-2	152
	150	-2				
1602	PM Peak	2045	17662	17470	-192	967
	957	-11	93	92	-1	93
	92	-1				
1603	PM Peak	2059	18262	18059	-203	1200
	1187	-13	58	58	-1	58
	58	-1				
1604	AM Peak	Total	574452	568729	-5723	31847
	31529	-318	3243	3211	-32	3243
	3211	-32				
1605	Inter Peak	Total	1826246	1810099	-16147	101299
	100403	-896	10290	10200	-91	10290
	10200	-91				
1606	PM Peak	Total	521219	515583	-5636	28893
	28580	-313	2943	2912	-32	2943
	2912	-32				

1607

1608 NOTE: The cost of any EU Allowances (EUAs) purchased to cover traded emissions (i.e. emissions from sectors covered by the EU Emissions Trading System)

1609 will be reflected in the purchase price of traded sector goods (such as electricity).

1610 Since the purchase price is used in the costs, considered in transport appraisal,

1611 the cost of the relevant EUAs will be included in the cost benefit analysis,

1612 "internalising" the costs of emissions from traded sectors.

1613 The CO2 EMISSIONS BY TIME PERIOD TRADED reported in the table below are therefore provided for information purposes only - they are not included in the

1614 Economic Efficiency of the Transport System (TEE) table.

1615 For further information, please refer to TAG Unit A-3 para. 4.1.5 and 4.2.9

1615 CO2\_EMISSIONS\_BY\_TIME\_PERIOD\_TRADED

1616	Submode	Year	Emissions (tonnes)				cost	
			(£000s, low)		(£000s, high)			
1617	DS	Increase	DM	DS	Increase	DM	DM	
1618	AM Peak	2030	0	0	0	0	0	
	0	0	0	0	0	0	0	
	0	0						
1619	AM Peak	2045	0	0	0	0	0	
	0	0	0	0	0	0	0	
	0	0						
1620	AM Peak	2059	0	0	0	0	0	
	0	0	0	0	0	0	0	
	0	0						
1621	Inter Peak	2030	0	0	0	0	0	
	0	0	0	0	0	0	0	
	0	0						
1622	Inter Peak	2045	0	0	0	0	0	
	0	0	0	0	0	0	0	
	0	0						
1623	Inter Peak	2059	0	0	0	0	0	
	0	0	0	0	0	0	0	
	0	0						

1624	PM Peak	2030	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1625	PM Peak	2045	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1626	PM Peak	2059	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1627	AM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1628	Inter Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					
1629	PM Peak	Total	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0					

1630

1631 MODE

1632 User benefits and changes in revenues by mode, all years. £000s.

1633 Mode Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1634			Time	PT_fares_(pri		Fuel	Non_fuel
			PT_fares_(pri		Taxes		
1635	Road	2030	1737	0		180	207
	0	-98					
1636	Road	2031	1725	0		174	201
	0	-95					
1637	Road	2032	1712	0		169	195
	0	-92					
1638	Road	2033	1700	0		164	189
	0	-89					
1639	Road	2034	1688	0		159	183
	0	-87					
1640	Road	2035	1676	0		154	177
	0	-84					
1641	Road	2036	1663	0		149	172
	0	-81					
1642	Road	2037	1651	0		145	166
	0	-79					
1643	Road	2038	1639	0		140	161
	0	-77					
1644	Road	2039	1626	0		136	156
	0	-74					
1645	Road	2040	1614	0		132	151
	0	-72					
1646	Road	2041	1601	0		128	146
	0	-70					
1647	Road	2042	1589	0		124	142
	0	-67					
1648	Road	2043	1576	0		120	137
	0	-65					
1649	Road	2044	1564	0		116	133
	0	-63					
1650	Road	2045	1551	0		113	129
	0	-61					
1651	Road	2046	1534	0		109	124
	0	-59					
1652	Road	2047	1517	0		105	120
	0	-57					
1653	Road	2048	1500	0		101	115
	0	-55					
1654	Road	2049	1483	0		98	111
	0	-53					
1655	Road	2050	1474	0		95	108
	0	-51					
1656	Road	2051	1464	0		92	105
	0	-50					

1657	Road	2052	1455	0	89	101
	0	-48				
1658	Road	2053	1445	0	86	98
	0	-47				
1659	Road	2054	1436	0	84	95
	0	-45				
1660	Road	2055	1427	0	81	92
	0	-44				
1661	Road	2056	1417	0	78	89
	0	-43				
1662	Road	2057	1408	0	76	87
	0	-41				
1663	Road	2058	1399	0	74	84
	0	-40				
1664	Road	2059	1389	0	71	81
	0	-39				
1665	Road	Total	46661	0	3543	4057
	0	-1929				

1666

1667 SUBMODE

1668 User benefits and changes in revenues by submode/vehicle type, modelled years and total. £000s.

1669 Submode Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1670 Time PT\_fares\_(pri PT\_fares\_(pri Taxes Fuel Non\_fuel

1671 Car 2030 1388 0 72 105  
0 -42

1672 Car 2045 1216 0 42 60  
0 -25

1673 Car 2059 1088 0 25 37  
0 -15

1674 OGV2 2030 349 0 108 102  
0 -56

1675 OGV2 2045 335 0 71 69  
0 -37

1676 OGV2 2059 301 0 46 45  
0 -24

1677 All 2030 1737 0 180 207  
0 -98

1678 All 2045 1551 0 113 129  
0 -61

1679 All 2059 1389 0 71 81  
0 -39

1680 Car Total 36765 0 1338 1938  
0 -787

1681 OGV2 Total 9896 0 2205 2119  
0 -1142

1682 All Total 46661 0 3543 4057  
0 -1929

1683

1684 PERSON\_TYPES

1685 User benefits and changes in revenues by person type, modelled years and total. £000s.

1686 Person\_type Year User User\_Charges Vehicle\_Operating\_Cost  
Operator\_Rev Indirect

1687 Time PT\_fares\_(pri PT\_fares\_(pri Taxes Fuel Non\_fuel

1688 All 2030 1737 0 180 207  
0 -98

1689 All 2045 1551 0 113 129  
0 -61

1690 All 2059 1389 0 71 81  
0 -39

1691 All Total 46661 0 3543 4057  
0 -1929

1692

1693 PURPOSE

1694 User benefits and changes in revenues by trip purpose, modelled years and total. £000s.

1695 Purpose Year User User\_Charges Vehicle\_Operating\_Cost

1696	Operator_Rev	Indirect	Time PT_fares_(pri PT_fares_(pri		Fuel	Non_fuel
1697	Business	2030	806	0	101	132
	0	-53				
1698	Business	2045	735	0	66	86
	0	-34				
1699	Business	2059	660	0	43	56
	0	-22				
1700	Commuting	2030	397	0	39	35
	0	-23				
1701	Commuting	2045	349	0	24	20
	0	-14				
1702	Commuting	2059	312	0	15	12
	0	-8				
1703	Other	2030	533	0	39	40
	0	-23				
1704	Other	2045	467	0	23	23
	0	-13				
1705	Other	2059	418	0	14	14
	0	-8				
1706	Business	Total	21996	0	2057	2681
	0	-1067				
1707	Commuting	Total	10541	0	751	645
	0	-433				
1708	Other	Total	14124	0	735	731
	0	-429				
1709						
1710	PERIOD					
1711	User benefits and changes in revenues by time period, modelled years and total. £000s.					
1712	Period	Year	User	User_Charges	Vehicle_Operating_Cost	
1713	Operator_Rev	Indirect	Time PT_fares_(pri PT_fares_(pri		Fuel	Non_fuel
1714	AM Peak	2030	469	0	38	44
	0	-21				
1715	AM Peak	2045	423	0	24	27
	0	-13				
1716	AM Peak	2059	378	0	15	17
	0	-8				
1717	Inter Peak	2030	793	0	105	121
	0	-57				
1718	Inter Peak	2045	699	0	66	75
	0	-36				
1719	Inter Peak	2059	627	0	42	47
	0	-22				
1720	PM Peak	2030	474	0	37	42
	0	-20				
1721	PM Peak	2045	429	0	24	26
	0	-13				
1722	PM Peak	2059	384	0	15	17
	0	-8				
1723	AM Peak	Total	12686	0	740	865
	0	-404				
1724	Inter Peak	Total	21112	0	2066	2361
	0	-1119				
1725	PM Peak	Total	12863	0	737	830
	0	-406				
1726						
1727	NON MONETISED TIME BENEFITS BY TIME SAVING					
1728	Time benefits (thousands of person hrs) by size of time saving					
1729	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins
	to 2 mins	2 to 5 mins	> 5 mins			
1730	Car	Business	2030	0		-0
	-1	12	8	0		
1731	Car	Business	2045	0		-0
	-1	14	9	0		
1732	Car	Business	2059	0		0
	-1	15	10	0		

1733	Car	Business	Total	0	-0
	-23	409	267	0	
1734	Car	Commuting	2030	0	-0
	-2	29	27	0	
1735	Car	Commuting	2045	0	-0
	-2	33	30	0	
1736	Car	Commuting	2059	0	0
	-2	35	33	0	
1737	Car	Commuting	Total	0	-0
	-54	974	897	0	
1738	Car	Other	2030	0	-0
	-3	47	37	0	
1739	Car	Other	2045	0	-0
	-3	53	41	0	
1740	Car	Other	2059	0	0
	-3	56	45	0	
1741	Car	Other	Total	0	-0
	-88	1566	1226	0	
1742	OGV2	Business	2030	0	0
	-0	11	4	0	
1743	OGV2	Business	2045	0	0
	-0	13	5	0	
1744	OGV2	Business	2059	0	0
	-0	14	6	0	
1745	OGV2	Business	Total	0	0
	-2	379	158	0	
1746	OGV2	Commuting	2030	0	0
	-0	1	1	0	
1747	OGV2	Commuting	2045	0	0
	-0	1	1	0	
1748	OGV2	Commuting	2059	0	0
	-0	1	1	0	
1749	OGV2	Commuting	Total	0	0
	-0	41	26	0	
1750	OGV2	Other	2030	0	0
	-0	1	0	0	
1751	OGV2	Other	2045	0	0
	-0	1	0	0	
1752	OGV2	Other	2059	0	0
	-0	1	1	0	
1753	OGV2	Other	Total	0	0
	-0	26	14	0	
1754					
1755	MONETISED TIME BENEFITS BY TIME SAVING				
1756	Time benefits (£000s) by size of time saving				
1757	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins
	to 2 mins	2 to 5 mins	> 5 mins		-2 to 0 mins
					0
1758	Car	Business	2030	0	-0
	-18	289	187	0	
1759	Car	Business	2045	0	-0
	-13	251	163	0	
1760	Car	Business	2059	0	0
	-12	223	148	0	
1761	Car	Business	Total	0	-1
	-427	7586	4943	0	
1762	Car	Commuting	2030	0	-0
	-14	215	197	0	
1763	Car	Commuting	2045	0	-0
	-10	187	171	0	
1764	Car	Commuting	2059	0	0
	-9	166	155	0	
1765	Car	Commuting	Total	0	-1
	-318	5656	5204	0	
1766	Car	Other	2030	0	-0
	-20	311	242	0	
1767	Car	Other	2045	0	-0
	-14	271	211	0	
1768	Car	Other	2059	0	0
	-13	240	191	0	

1769	Car	Other	Total	0	-1				
	-461	8184	6402	0					
1770	OGV2	Business	2030	0	0				
	-1	255	95	0					
1771	OGV2	Business	2045	0	0				
	-1	236	100	0					
1772	OGV2	Business	2059	0	0				
	-2	210	94	0					
1773	OGV2	Business	Total	0	0				
	-44	7026	2914	0					
1774	OGV2	Commuting	2030	0	0				
	0	0	0	0					
1775	OGV2	Commuting	2045	0	0				
	0	0	0	0					
1776	OGV2	Commuting	2059	0	0				
	0	0	0	0					
1777	OGV2	Commuting	Total	0	0				
	0	0	0	0					
1778	OGV2	Other	2030	0	0				
	0	0	0	0					
1779	OGV2	Other	2045	0	0				
	0	0	0	0					
1780	OGV2	Other	2059	0	0				
	0	0	0	0					
1781	OGV2	Other	Total	0	0				
	0	0	0	0					
1782									
1783	TOTAL BENEFITS BY TIME SAVING								
1784	Total benefits (£000s) by size of time saving								
1785	Vehicle type	Purpose	Year	< -5 mins	-5 to -2 mins	-2 to 0 mins	0 mins	0	
	to 2 mins	2 to 5 mins	> 5 mins						
1786	Car	Business	2030	0	-0				
	-19	317	199	0					
1787	Car	Business	2045	0	-0				
	-14	267	170	0					
1788	Car	Business	2059	0	0				
	-12	233	152	0					
1789	Car	Business	Total	0	-1				
	-435	8107	5186	0					
1790	Car	Commuting	2030	0	-0				
	-13	257	219	0					
1791	Car	Commuting	2045	0	-0				
	-10	211	184	0					
1792	Car	Commuting	2059	0	0				
	-9	180	163	0					
1793	Car	Commuting	Total	0	-0				
	-312	6427	5608	0					
1794	Car	Other	2030	0	-0				
	-19	361	264	0					
1795	Car	Other	2045	0	-0				
	-14	299	223	0					
1796	Car	Other	2059	0	0				
	-13	257	199	0					
1797	Car	Other	Total	0	-1				
	-454	9107	6811	0					
1798	OGV2	Business	2030	0	0				
	-1	403	141	0					
1799	OGV2	Business	2045	0	0				
	-1	332	133	0					
1800	OGV2	Business	2059	0	0				
	-2	271	116	0					
1801	OGV2	Business	Total	0	0				
	-49	10012	3915	0					
1802	OGV2	Commuting	2030	0	0				
	-0	7	3	0					
1803	OGV2	Commuting	2045	0	0				
	-0	5	2	0					
1804	OGV2	Commuting	2059	0	0				
	-0	3	2	0					

1805	OGV2	Commuting	Total	0	0
	-0	143	71	0	
1806	OGV2	Other	2030	0	0
	-0	5	2	0	
1807	OGV2	Other	2045	0	0
	-0	3	1	0	
1808	OGV2	Other	2059	0	0
	-0	2	1	0	
1809	OGV2	Other	Total	0	0
	-0	92	37	0	

1810	NON MONETISED TIME BENEFITS BY DISTANCE						
1811	Time benefits (thousands of person hrs) by distance						
1812	Vehicle type	Purpose	Year	< 1 kms	1 to 5 kms	5 to 10 kms	
1813	10 to 15 kms	15 to 20 kms	20 to 50 kms	50 to 100 kms		>100 kms	
1814	Car	Business	2030	20	0	0	0
	0	0	0	0	0	0	0
1815	Car	Business	2045	22	0	0	0
	0	0	0	0	0	0	0
1816	Car	Business	2059	24	0	0	0
	0	0	0	0	0	0	0
1817	Car	Business	Total	652	0	0	0
	0	0	0	0	0	0	0
1818	Car	Commuting	2030	54	0	0	0
	0	0	0	0	0	0	0
1819	Car	Commuting	2045	61	0	0	0
	0	0	0	0	0	0	0
1820	Car	Commuting	2059	66	0	0	0
	0	0	0	0	0	0	0
1821	Car	Commuting	Total	1816	0	0	0
	0	0	0	0	0	0	0
1822	Car	Other	2030	81	0	0	0
	0	0	0	0	0	0	0
1823	Car	Other	2045	91	0	0	0
	0	0	0	0	0	0	0
1824	Car	Other	2059	98	0	0	0
	0	0	0	0	0	0	0
1825	Car	Other	Total	2704	0	0	0
	0	0	0	0	0	0	0
1826	OGV2	Business	2030	0	0	0	0
	0	0	0	13	2	0	0
1827	OGV2	Business	2045	0	0	0	0
	-0	0	0	16	2	0	0
1828	OGV2	Business	2059	0	-0	0	0
	-0	0	0	18	2	0	0
1829	OGV2	Business	Total	0	0	0	0
	-0	0	0	477	58	0	0
1830	OGV2	Commuting	2030	0	0	0	0
	0	0	0	2	0	0	0
1831	OGV2	Commuting	2045	0	0	0	0
	-0	0	0	2	0	0	0
1832	OGV2	Commuting	2059	0	-0	0	0
	-0	0	0	2	0	0	0
1833	OGV2	Commuting	Total	0	0	0	0
	-0	0	0	60	7	0	0
1834	OGV2	Other	2030	0	0	0	0
	0	0	0	1	0	0	0
1835	OGV2	Other	2045	0	0	0	0
	-0	0	0	1	0	0	0
1836	OGV2	Other	2059	0	-0	0	0
	-0	0	0	1	0	0	0
1837	OGV2	Other	Total	0	0	0	0
	-0	0	0	36	4	0	0

1838	MONETISED TIME BENEFITS BY DISTANCE						
1839	Time benefits (£000s) by distance						
1840	Vehicle type	Purpose	Year	< 1 kms	1 to 5 kms	5 to 10 kms	
1841	10 to 15 kms	15 to 20 kms	20 to 50 kms	50 to 100 kms		>100 kms	
1842	Car	Business	2030	457	0	0	0



1843	0	0	0	0	0	0	0
1843	Car	Business	2045	400	0	0	0
1844	0	0	0	0	0	0	0
1844	Car	Business	2059	358	0	0	0
1845	0	0	0	0	0	0	0
1845	Car	Business	Total	12101	0	0	0
1846	0	0	0	0	0	0	0
1846	Car	Commuting	2030	397	0	0	0
1847	0	0	0	0	0	0	0
1847	Car	Commuting	2045	349	0	0	0
1848	0	0	0	0	0	0	0
1848	Car	Commuting	2059	312	0	0	0
1849	0	0	0	0	0	0	0
1849	Car	Commuting	Total	10541	0	0	0
1850	0	0	0	0	0	0	0
1850	Car	Other	2030	533	0	0	0
1851	0	0	0	0	0	0	0
1851	Car	Other	2045	467	0	0	0
1852	0	0	0	0	0	0	0
1852	Car	Other	2059	418	0	0	0
1853	0	0	0	0	0	0	0
1853	Car	Other	Total	14124	0	0	0
1854	0	0	0	0	0	0	0
1854	OGV2	Business	2030	0	0	0	0
1855	0	0	0	0	0	0	0
1855	OGV2	Business	2045	0	0	0	0
1856	-0	0	0	299	36	0	0
1856	OGV2	Business	2059	0	-0	0	0
1857	-0	0	0	271	30	0	0
1857	OGV2	Business	Total	0	0	0	0
1858	-0	2	8	8803	1083	0	0
1858	OGV2	Commuting	2030	0	0	0	0
1859	0	0	0	0	0	0	0
1859	OGV2	Commuting	2045	0	0	0	0
1860	0	0	0	0	0	0	0
1860	OGV2	Commuting	2059	0	0	0	0
1861	0	0	0	0	0	0	0
1861	OGV2	Commuting	Total	0	0	0	0
1862	0	0	0	0	0	0	0
1862	OGV2	Other	2030	0	0	0	0
1863	0	0	0	0	0	0	0
1863	OGV2	Other	2045	0	0	0	0
1864	0	0	0	0	0	0	0
1864	OGV2	Other	2059	0	0	0	0
1865	0	0	0	0	0	0	0
1865	OGV2	Other	Total	0	0	0	0

1866	TOTAL BENEFITS BY DISTANCE							
1867	Total benefits (£000s) by distance							
1868	Vehicle type	Purpose	Year	< 1 kms	1 to 5 kms	5 to 10 kms	>10 kms	
1869	10 to 15 kms	15 to 20 kms	20 to 50 kms	50 to 100 kms				
1870	Car	Business	2030	497	0	0	0	
1871	0	0	0	0	0	0	0	
1871	Car	Business	2045	424	0	0	0	
1872	0	0	0	0	0	0	0	
1872	Car	Business	2059	373	0	0	0	
1873	0	0	0	0	0	0	0	
1873	Car	Business	Total	12856	0	0	0	
1874	0	0	0	0	0	0	0	
1874	Car	Commuting	2030	462	0	0	0	
1875	0	0	0	0	0	0	0	
1875	Car	Commuting	2045	385	0	0	0	
1876	0	0	0	0	0	0	0	
1876	Car	Commuting	2059	334	0	0	0	
1877	0	0	0	0	0	0	0	
1877	Car	Commuting	Total	11722	0	0	0	
1878	0	0	0	0	0	0	0	
1878	Car	Other	2030	606	0	0	0	

1879	Car	Other	2045	509	0	0
	0	0	0	0	0	0
1880	Car	Other	2059	443	0	0
	0	0	0	0	0	0
1881	Car	Other	Total	15462	0	0
	0	0	0	0	0	0
1882	OGV2	Business	2030	0	0	0
	0	0	0	474	68	0
1883	OGV2	Business	2045	0	0	0
	-0	0	0	414	49	0
1884	OGV2	Business	2059	0	-0	0
	-0	0	0	346	38	0
1885	OGV2	Business	Total	0	0	0
	-0	2	9	12338	1528	0
1886	OGV2	Commuting	2030	0	0	0
	0	0	0	9	1	0
1887	OGV2	Commuting	2045	0	0	0
	-0	0	0	6	1	0
1888	OGV2	Commuting	2059	0	-0	0
	-0	0	0	4	0	0
1889	OGV2	Commuting	Total	0	0	0
	-0	0	0	191	23	0
1890	OGV2	Other	2030	0	0	0
	0	0	0	5	1	0
1891	OGV2	Other	2045	0	0	0
	-0	0	0	4	0	0
1892	OGV2	Other	2059	0	-0	0
	-0	0	0	2	0	0
1893	OGV2	Other	Total	0	0	0
	0	0	0	114	14	0

1894

1895 SENSITIVITY

1896 Total user benefits as a percentage of total DM user costs

1897 Modelled Years

1898	Mode	2030	2045	2059
1899	Road	1.46%	1.61%	1.74%

1900

1901 Economy:Economic Efficiency of the Transport System(TEE)

1902

1903	Consumer - Commuting user benefits		All Modes
	Road	Bus	
1904	Travel Time		10541
	10541	0	
1905	Vehicle operating costs		1396
	1396	0	
1906	User charges		0
	0	0	
1907	During Construction & Maintenance		0
	0	0	
1908	NET CONSUMER - COMMUTING BENEFITS		11936
	11936	0	
1909			
1910	Consumer - Other user benefits		All Modes
	Road	Bus	
1911	Travel Time		14124
	14124	0	
1912	Vehicle operating costs		1466
	1466	0	
1913	User charges		0
	0	0	
1914	During Construction & Maintenance		0
	0	0	
1915	NET CONSUMER - OTHER BENEFITS		15590
	15590	0	
1916			
1917	Business		All Modes Road Personal Road Freight Bus
	Personal Bus Freight		
1918	Travel Time		21996 12101

1919	9896	0	0		
	Vehicle operating costs			4737	756
	3981	0	0		
1920	User charges			0	0
	0	0	0		
1921	During Construction & Maintenance			0	0
	0	0	0		
1922	Subtotal			26734	12856
	13877	0	0		

1923					
1924	Private Sector Provider Impacts				
1925	Revenue			0	
	0		0		
1926	Operating costs			0	
	0		0		
1927	Investment costs			0	
	0		0		
1928	Grant/subsidy			0	
	0		0		
1929	Subtotal			0	
	0		0		

1930					
1931	Other business Impacts				
1932	Developer contributions			0	
	0		0		
1933	NET BUSINESS IMPACT			26734	

1934					
1935	TOTAL				
1936	Present Value of Transport Economic				
1937	Efficiency Benefits (TEE)			54260	

1938

1939 Note: Benefits appear as positive numbers, while costs appear as negative numbers.

1940 Note: All entries are present values discounted to 2011, in 2011 prices

1941					
1942	Public Accounts				
1943	Local Government Funding	ALL MODES	Road		
	Bus				
1944	Revenue	0	0	0	
1945	Operating Costs	0	0	0	
1946	Investment Costs	0	0	0	
1947	Developer Contributions	0	0	0	
1948	Grant/Subsidy Payments	0	0	0	
1949	NET IMPACT	0	0	0	

1950					
1951	Central Government Funding: Transport	ALL MODES	Road		
	Bus				
1952	Revenue	0	0	0	
1953	Operating costs	3812	3812	0	
1954	Investment costs	99046	99046	0	
1955	Developer Contributions	0	0	0	
1956	Grant/Subsidy Payments	0	0	0	
1957	NET IMPACT	102858	102858	0	

1958					
1959	Central Government Funding: Non-Transport				
1960					
1961	Indirect Tax Revenues	1929	1929	0	
1962					
1963	TOTALS				
1964	Broad Transport Budget	102858	102858	0	
1965	Wider Public Finances	1929	1929	0	

1966

1967 Note: Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.

1968 Note: All entries are present values discounted to 2011, in 2011 prices

1969

1970 Analysis of Monetised Costs and Benefits

1971					
1972	Greenhouse Gases				155
1973					

1974	Economic Efficiency: Consumer Users (Commuting)	11936
1975	Economic Efficiency: Consumer Users (Other)	15590
1976	Economic Efficiency: Business Users and Providers	26734
1977	Wider Public Finances (Indirect Taxation Revenues)	-1929
1978	Present Value of Benefits (PVB)	52486
1979		
1980	Broad Transport Budget	102858
1981	Present Value of Costs (PVC)	102858
1982		
1983	OVERALL IMPACTS	
1984	Net Present Value (NPV)	-50372
1985	Benefit to Cost Ratio (BCR)	0.510
1986		
1987	Note: This table includes costs and benefits which are regularly or occasionally presented in monetised form in	
1988	transport appraisals, together with some <a href="#">where</a> monetisation is in prospect. There may also be other significant	
1989	costs and benefits, some of which cannot be presented in monetised form. <a href="#">Where</a> this is the case, the analysis	
1990	presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.	
1991		
1992		
1993	TUBA Run Information	
1994	- calculations completed	
1995		
1996	File Summary	
1997	- Scheme File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Teal\TUBA_Scheme_Input_Teal_30year_v1.9.8_SPL_1_0.txt	
1998	- Economic File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Teal\Economics_Input_TUBAv1.9.8 (Oct2020).txt	
1999	- Output File : G:\PROJECTS\300539 N25 Waterford to Glenmore Phases 1-4\Contract\Modelling\CBA\TUBA Runs\updated VoT _ oct 2020\Teal\TUBA_Scheme_Input_Teal_30year_v1.9.8_SPL_1_0.out	
2000		
2001	Elapsed time : 0hrs 0mins 5sec	
2002		
2003		

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