

Chichester Area Transport Model

Local Model Validation Report

On behalf of Chichester District Council



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Contents

1	Introdu	uction	1
	1.1	Purpose	1
	1.2	Background	1
	1.3	Adopted Local Plan	1
	1.4	Local Plan Review	2
	1.5	Current Model Overview	2
	1.6	Model Area	2
	1.7	Future Model Applications	4
	1.8	Report Structure	4
2	Model	Overview	5
	2.1	Introduction	5
	2.2	Previous Models	5
	2.3	Model Year and Time periods	6
	2.4	Vehicle Types (UC & VC) and Travel Purposes	6
	2.5	Network Development	6
	2.6	Zoning System	9
3	Survey	/ Data	12
	3.1	Overview	12
	3.2	2014 CATM Existing Data	12
	3.3	2014 CATM New Data	12
	3.4	2014 CATM New Journey Time Data	15
4	Matrix	Development	17
	4.1	Introduction	17
	4.2	Overview	17
	4.3	Matrix Estimation	18
5	Model	Assignment, Calibration and Validation Procedures	21
	5.1	Introduction	21
	5.2	Generalised Cost Parameters	21
	5.3	Network Calibration	21
	5.4	Matrix Calibration	24
6	Flow a 25	nd Journey Time Validation and Calibration Criteria and Acceptability Guidelines	\$
	6.1	Introduction	25
	6.2	Trip Matrix Validation	25
	6.3	Link Flow Validation and Calibration	25
	6.4	Journey Time Validation	26
7	Model	Calibration Results	27
	7.1	Introduction	27



	7.2	Flow Calibration Results	29
	7.3	Trip Length Distribution Calibration Results	30
8	Model	Validation Results	32
	8.1	Introduction	32
	8.2	Screenline Validation Results	32
	8.3	Link Flow Validation	37
	8.4	Turn Flow Validation	39
	8.5	Model Convergence	42
	8.6	Journey Time Validation	43
	8.7	Summary	47
9	Summa	ary	48
	9.1	Overview	48
	9.2	Conclusions	48

Figures

Figure 1.1 – CATM 2014 Network	3
Figure 2.1 – Detailed Highway Network	7
Figure 2.2 – Wider Highway Network	7
Figure 2.3 – CATM Simulation Area Zoning System	. 11
Figure 3.1 – Position of counts for the CATM	. 14
Figure 3.2 – Journey time routes for the CATM update	. 16
Figure 4.1 – Frozen Areas of Matrices in Matrix Estimation	. 18
Figure 7.1 – Calibration Counts Location	. 28
Figure 7.2 – AM Peak TLD Comparison	. 30
Figure 7.3 – IP Peak TLD Comparison	. 31
Figure 7.4 – PM Peak TLD Comparison	. 31
Figure 8.1 - Screenlines	. 33
Figure 8.2 – Validation Link Flow Counts Location	. 38
Figure 8.3 – Validation Turn Flow Counts Location	. 40
Figure 8.4 – Journey time routes for the CATM update	. 45

Tables

Table 2.1 – Default Turn Saturation Flows assumed (PCU/lane/hr)	9
Table 2.2 – Range Value Turn Saturation Flows assumed (PCU/lane/hr)	9
Table 4.1 – Linear Regression results of matrix estimation checks	19
Table 4.2 – Linear Regression results -indication of WebTAG compliance	20
Table 5.1 – Generalised Cost Parameters for 2014 in 2010 prices	21
Table 6.1 – Trip Matrix Screenline Validation	25
Table 6.2 – Link Flow Validation/Calibration	26
Table 6.3 – Journey Time Validation	26
Table 7.1 – Calibration Counts Summary	29
Table 8.1 – AM Peak Flow Validation (PCU/hr)	34
Table 8.2 – IP Peak Flow Validation (PCU/hr)	35
Table 8.3 – PM Peak Flow Validation (PCU/hr)	36
Table 8.4 – Link Flow Validation Summary	39
Table 8.5 – Turn Flow Validation Summary	41
Table 8.6 – Summary of Convergence Measures and Base Model Acceptable Values	42
Table 8.7 – Convergence Statistics	43
Table 8.8 – HE WebTris AM Journey Time Data for A27 Eastbound route	44
Table 8.9 – Journey Time Validation	46



Appendices

- Appendix A Trip Routing Checks
- Appendix B Calibration Counts
- Appendix C Flow Validation
- Appendix D Turn Flow Validation
- Appendix E Journey Time Validation

Glossary

AADT: Annual Average Daily Traffic, 12

- ATC: Automatic Traffic Count, 12, 13
- Buffer: Buffer network is a simplified version of the simulation network for away from our area of interest, 8
- Built trees: A tool to create possible trip routes between an origin and a destination zone, 18
- CATM: Chichester Area Transport Model, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 24, 26, 29, 36, 39, 42, 44, 45
- Centroid connectors: Are an imaginary roadway network links that connects the zone centroid to the roadway network at nodes, 9
- Chi-squared: A chi-squared test, also written as χ2 test, is any statistical hypothesis test where the sampling distribution of the test statistic is a chi-squared distribution when the null hypothesis is true. Without other qualification, 'chi-squared test' often is used as short for Pearson's chi-squared test, 22

Convergence: The seek for network stability (Wardrop's First Principle of Traffic Equilibrium or User Equilibrium), 4, 39, 44

Delta statistic or % gap: The difference between the costs along the chosen routes and those along the minimum cost routes, summed across the whole network, and expressed as a percentage of the minimum costs, usually known as 'Delta' or the '%GAP., 39

DfT: Department for Transport, 12, 13, 15

DIADEM: Dynamic Intergrated Assignment and Demand Modelling, 2, 5

- GEH: Geoffrey E. Havers statistic formula, 22, 23, 26, 27, 36, 38
- HE: Highways England, 2, 5, 9, 10, 12, 13, 15, 17, 18, 36, 41, 45
- HGV: Heavy Goods Vehicle, 2, 6, 18, 36
- IP: Inter Peak, 6, 18, 28, 32, 34, 40, 43, 45
- JTDB: Journey Time Database, 12
- JTS: Journey Time Survey, 12
- LGV: Light Goods Vehicle, 2, 6, 18, 26, 36, 38
- Link based: Geometrical details of a link, 8
- Link Flow: Number of PCU/hr, 22, 23, 27, 34, 35, 36
- LMVR: Local Model Validation Report, 15, 36
- Matrix estimation: Refine estimates of movements which have been synthesised, 4, 17, 21, 27, 45
- MCC: Manual Classified Count, 12
- MCTC: Manual Classified Turning Count, 12
- ME: Matrix Estimation, 17,18,19
- MIDAS: Motorway Incident Detection and Automatic Signalling, 13
- MTU: Modelling Traffic Units, 13
- OD: Origin / Destination, 5, 17, 19
- Origin/destination matrix: Is a matrix which is each cell represent the number of trips from origin (row) to the destination (column), 4, 5, 17, 21, 22, 27, 45
- P1X: SATURN Network Plotting Tool, 19
- PCU: Passenger Car Unit, 6, 9, 31, 32, 33
- PIJA: An input file used in the SATME2 matrix estimation program,19
- PPK: Price per Kilometre, 18
- PPM: Price per Minute, 18
- SATME2: Program in SATURN used to improve the fit between modelled and observed flows, 19



SATPIJA: Program in SATURN used in conjuction with SATME2 rogram to improve fit between modelled and observed flows, 19 Saturation flow: The number of vehicles that can sustain a link/junction, 9 SATURN: Simulation and Assignment of Traffic to Urban Road Networks, 2, 5, 9, 18, 19 SAVEIT: Parameter in SATURN SATURN that allows link costs used in the assignment tree build to be saved for subsequent analysis, 19 Screenline: Imaginery line providing a mean of comparing the results of a traffic assignment with traffic account data, 4, 22, 29, 45 SERTM: South East Region Traffic Model, 10, 17 Simulation: Network simulation is a technique whereby a software program models the behavior of a network by calculating the interaction between the different network entities, 5, 8, 9, 10, 12, 17, 45 TAG: Transport Analysis Guidance, 4, 9, 18, 19, 29, 39 TAME: Traffic Appraisal Modelling and Economics, 13 TLD: Trip Length Distribution, 27, 28 TRADS: Traffic Database System, 12 UC: User Class, 6 VC: Vehicle Class, 6 WebTAG: Web Based Transport Analysis Guidance, 4, 34, 39, 45 WSCC: West Sussex County Council, 12, 13



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1 Introduction

1.1 Purpose

1.1.1 The Chichester Area Transport Model (CATM) has been updated by PBA to investigate travel patterns in and around the Chichester area with a view to considering the changes that may occur to those patterns in response to the policies and strategy of the adopted Chichester Local Plan: Key Policies 2014-2029.

1.2 Background

- 1.2.1 PBA has been commissioned to undertake transport assessment to inform the preparation of the Chichester Local Plan Review: 2016-2035. The Local Plan Review will review the policies and strategy of the adopted Chichester Local Plan: Key Policies 2014-2029 whilst also seeking to meet the latest identified needs of the Plan Area through to 2035. Although the Council adopted the Chichester Local Plan 2014-2029, the examination concluded that the Plan fell short of meeting the full housing needs of the District outside of the South Downs National Park (the 'Plan Area'). The Inspector required that the Council commit to a review of the Local Plan within 5 years with the objective to ensure that housing needs are fully met. This work informs this review, to test the impact of the additional development needs (including housing) of the Plan Area.
- 1.2.2 The Local Model Validation Report (LMVR) is the first in a series of three reports, through which the preparation of the Chichester Local Plan Review:2016-2035 will be informed. The second report will be the Forecast Modelling 2035 Report which will compare the existing Local Plan to the proposed Local Plan developments. Last step is the creation of the Junction Mitigation Report, which will identify what junctions require mitigation and propose solutions.

1.3 Adopted Local Plan

- 1.3.1 The Chichester Local Plan: Key Policies 2014-2029 was adopted on 14th July 2015. The Plan sets out an overarching framework for the future of the plan area to 2029 and comprises a long term spatial vision, strategic objectives and spatial strategy. It also contains strategies for the settlement hubs and strategic and local development management policies, along with a monitoring framework.
- 1.3.2 The adopted Local Plan makes provision to deliver 7,388 homes over the period 2012 2029 equating to an average delivery of approximately 435 homes per year. A significant element of this housing is already identified through outstanding planning permissions with allowance also made for 'windfall' housing likely to come forward in small developments of less than 6 dwellings.
- 1.3.3 The remaining provision will be met through 4,750 homes of which:
 - The bulk of 3,250 will be at the Strategic Development Locations (SDLs) at West of Chichester, Shopwyke, Westhampnett/North East Chichester and Tangmere (see Policies 15 – 18)
 - 630 homes on strategic sites at the settlement hubs of East Wittering/ Bracklesham, Selsey and Southbourne (Policies 20, 23 and 24)
 - 860 homes to be brought forward on parish housing sites (Policy 5)



1.4 Local Plan Review

- 1.4.1 The Chichester Local Plan: Key Policies 2014-2029 was subject to examination by an independent Inspector appointed by the Secretary of State. Although the Local Plan was found sound and was subsequently adopted, the Inspector required the Council to undertake a review within 5 years to ensure sufficient housing would be planned to meet the longer term needs of the area. As such, there is a requirement to review the current adopted Local Plan to provide a new policy framework for planning and development in the Plan Area up to 2035. This will form the Chichester Local Plan Review 2016-2035.
- 1.4.2 In addition to the strategic sites provided for in the adopted Chichester Local Plan 2014-2029, a number of further strategic development locations are being considered. Combined with updated information about the development pipeline (to include windfalls and greenfield sites not allocated in the adopted Local Plan) these will be the subject of this transport assessment. The majority of the strategic growth envisaged is in the east-west corridor through the Plan Area (including significant growth at Southbourne), with more moderate development in the Manhood Peninsula including at Selsey and East Wittering.

1.5 Current Model Overview

- 1.5.1 The key modelling assessment tool will be the Highways England (HE) SATURN highway model known as the Chichester Area Transport Model (CATM). This model has been validated to a 2014 base year and consists of a SATURN (V11.3.10E) highway model and a DIADEM V 5.0 demand model. The key objective behind development of CATM 2014 model was to understand the impact of identified options to relieve congestion on A27 Chichester bypass. Full details of the model development and validation are provided in the A27 Chichester Local Model Validation Report, Highways England, July 2016.
- 1.5.2 A previous version of CATM, which was validated to a 2009 base year was used to provide the transport evidence for the adopted local plan up to 2029. More information on this model and the outputs from that study are provided in *Chichester District Council Local Plan Transport Study of Strategic Development Options and Sustainable Transport Measures, Jacobs, March 2013.*
- 1.5.3 A proportionate approach to modelling will be undertaken and this will utilise the SATURN highway model only. Further detail on the existing model and the modelling approach to assess the new allocations, is provided in the following sections of this report.

1.6 Model Area

- 1.6.1 The area covered by the model is shown in **Figure 1.1**. The updated model covers the same area with the previous CATM 2014 model but with a more detailed network along the A3(M) (highlighted in red), a detailed version of the A3(M)/A27 junction (highlighted in red), detailed network north of the A27, detailed network between the A27 and the A259 and detailed network south of Chichester at the wide area of West and East Wittering and Selsey.
- 1.6.2 CATM original highway network model and its updated version were developed using the established SATURN software. The model consists of an AM peak hour model (08:00 to 09:00), an average Inter Peak hour model (10:00 to 16:00) and a PM peak hour model (17:00 to 18:00). The model will consist of five user classes comprising car commute, car employer business, car other, Light Goods Vehicles (LGV) and Heavy Goods Vehicles (HGV). The peak hour model periods and vehicle classification was retained from the original HE CATM model.
- 1.6.3 We have extended the network in the areas highlighted red in **Figure 1.1** in order to include the network extents to take into account of the future strategic Local Plan developments, both employment and residential.



Figure 1.1 – CATM 2014 Network



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1.7 Future Model Applications

- 1.7.1 When considering the use of the CATM for future work the following should be considered:
 - Although it may appear to be desirable for the models to reflect the day to day variations, in practice models are tools with limited ability to capture all the intricate sensitivities inherent in a network like Chichester. The model represents average weekday conditions, and therefore it is not possible to replicate the day to day variability of route choices even though it may not be possible to match in every case, actual flows and journey times for specific competing routes. The model has therefore validated to replicate cordon and screenline flows by direction over individual link flows for example. The stability of the model is demonstrated through achieving acceptable convergence criteria demonstrating its robustness; and
 - Considering the compliance of the CATM with WebTAG validation criteria and guidelines, it is important to understand the purpose for which the model is required. Guidance notes on validation acceptability are provided in TAG Unit M3.1. As stated in the guidance, this doesn't quarantee that a model is 'fit for purpose' and likewise a failure to meet the specified validation standards, does not mean that a model is not 'fit for purpose'. A model that meets the specified validation standards may not be fit for the purposes and conversely, a model that fails to meet to some degree the validation standards may be useable for certain applications. On this basis, the validation of the CATM prioritises areas of the network at which interventions and developments are proposed. The use of matrix estimation, select link analysis matrices and manual matrix manipulation has been minimised to alter the prior and post matrices to meet calibration and validation standards. It should be noted that the model has been created to test schemes that are currently known and consideration to the suitability of the model for testing all future schemes should be taken before any new scheme is tested. The model may need to be updated and/or therefore be subject to local area reviews before testing each scheme and/or development proposal.

1.8 Report Structure

- 1.8.1 Following this introduction, this report is presented with the following structure:
 - Section 2 provides an overview of the highway assignment model;
 - Section 3 summarises the traffic data used in the model development;
 - Section 4 details the matrix development;
 - Section 5 outlines the assignment, calibration and validation procedures;
 - Section 6 outlines the calibration results;
 - Section 7 outlines the model validation results; and
 - Section 8 provides an overall summary.



2 Model Overview

2.1 Introduction

- 2.1.1 The CATM has been developed using SATURN version 11.4.06D. This software is suitable for developing the network and assignment of the matrix. The matrix building process has been carried out in Excel, with the final matrices output to SATURN format for assignment to the network.
- 2.1.2 One of the main benefits of using SATURN for the assignment process is that it is applicable to both urban and rural networks and can model peak hour congestion in sufficient detail. As a combined simulation and assignment model, SATURN also has the advantage that it enables detailed junction modelling.
- 2.1.3 The model in question is a highway assignment model only and does not include any multimodal or demand modelling. This is a proportionate and robust approach and represents the worst case scenario.
- 2.1.4 The assignment model predicts routes that drivers will choose and the way that traffic demand interacts with the available road capacity. The underlying principle used in the adopted assignment algorithm is Wardrop's First Principle of Traffic Equilibrium. Wardrop's First Principle states that:

"Traffic arranges itself on networks such that the cost of travel on all routes used between each OD pair is equal to the minimum cost of travel and all unused routes have equal or greater cost".

2.1.5 The aim of the assignment model is to reach equilibrium such that costs and flows are in balance under the assumption that individual users will seek to minimise their costs of travel through the network.

2.2 Previous Models

- 2.2.1 The key modelling assessment tool will be the Highways England (HE) SATURN highway model knows as the Chichester Area Transport Model (CATM). This model has been validated to a 2014 base year and consists of a SATURN (version 11.3.10E) highway model and a DIADEM v 5.0 demand model. The key objective behind development of CATM 2014 model was to understand the impact of identified options to relieve congestion on A27 Chichester bypass. Full details of the model development and validation are provided in *the A27 Chichester Local Model Validation Report, Highways England, July 2016.*
- 2.2.2 The highway model has a 2014 base year, having been calibrated and validated using count and journey time data from that year. The matrix development was predominantly informed by Mobile Phone data (collected for weeks commencing 7th and 14th July 2014), with checks made against other more traditional data sources including Census Travel to Work Data. The Traffic Volume Calibration and the Journey Time Validation was checked against data collected in June and November of 2014.
- 2.2.3 A previous version of CATM, which was validated to a 2009 base year was used to provide the transport evidence for the adopted local plan up to 2029. More information on this model and the outputs from that study are provided in *Chichester District Council – Local Plan Transport Study of Strategic Development Options and Sustainable Transport Measures, Jacobs, March 2013.*



2.3 Model Year and Time periods

- 2.3.1 This updated model has been developed with a base year of 2014 (based on the existing).
- 2.3.2 Three time periods have been represented within the model:
 - Weekday AM peak hour (0800-0900);
 - Weekday IP (inter-peak) hour (average hour 1000-1600); and
 - Weekday PM peak hour (1700-1800).

2.4 Vehicle Types (UC & VC) and Travel Purposes

- 2.4.1 The model has 5 user classes as follows:
 - UC1: Cars for commuting;
 - UC2: Cars for Employer's Business;
 - UC3: Cars for Other purposes;
 - UC4: Light Goods Vehicles (LGVs); and
 - UC5: Heavy Goods Vehicles (HGVs).
- 2.4.2 The model aggregates the user classes into "vehicle classes" for use in reporting. The results of the Base Year model will be reported by these vehicle classes, which can be summarised as:
 - Vehicle Class 1 (VC1): Cars;
 - Vehicle Class 2 (VC2): Light Goods Vehicles (LGVs); and
 - Vehicle Class 3 (VC3): Heavy Goods Vehicles (HGVs).

PCU Factors

- 2.4.3 Passenger Car Units (PCU) is used as the standard unit for demand and capacity within the model. This allows for the impact of large vehicles which take up more road space and take longer to clear junctions to be accounted for. The factors used within the CATM are:
 - Car 1.0;
 - Light Goods Vehicle (LGV) 1.0; and
 - Heavy Goods Vehicle (HGV) 2.3.

2.5 Network Development

Network Extent

2.5.1 The extent of the detailed highway network is shown in **Figure 2.1** and the wider modelled network is shown in **Figure 2.2**.



Figure 2.1 – Detailed Highway Network





Network Structure

- 2.5.2 The network within the detailed modelled area was coded in simulation, while the area covered by the wider model was coded in buffer.
- 2.5.3 In the simulation area, junctions are modelled in detail and this allows the effects of junction delays to be represented more realistically. In the buffer area, junctions are not explicitly modelled. Routeings and assignment of trips in the buffer network are determined by link based attributes and speed/flow relationships.
- 2.5.4 In developing the highway network, key highway link characteristics were included in the network coding. This includes attributes such as:
 - Link length;
 - Link type;
 - Link capacity;
 - Link cruise speed in kilometres per hour (Kph) initial coded as speed limits before being modified as necessary during the calibration/validation process;
 - Speed/flow relationship;
 - One way or two-way link operation as appropriate;
 - Bus lanes; and
 - Bus routes and frequencies using scheduled bus timetables from local services.

Junction Types and Saturation Flows

- 2.5.5 The CATM consists of various types of junctions including priority junctions, roundabouts and signal controlled junctions. Table 2.1 summarises the default turn saturation flows and Table 2.2 the range of the turn saturation flow values that have been assumed in the CATM subject to amendment as part of the calibration process. In order to maintain consistency with the HE CATM model, the same saturation flows were used.
- 2.5.6 Within the simulated urban area, the main delays to a journey predominantly result from traffic interaction at junctions. In between junctions within the simulation network, traffic is assumed to travel at uniform speeds.
- 2.5.7 During the process of model calibration, some junctions were revisited in order to improve the model performance but were kept within the bounds of the values detailed in **Table 2.2**.



Table 2.1 – Default Turn Saturation Flows assumed (PCU/lane/hr)

Movement	Saturation Flow Left	Saturation Flow Ahead	Saturation Flow Right
Major Arm – Unopposed movement without flare	1650	2000	1650
Major Arm – Opposed movement without flare		1250	1200
Minor Arm – Give way link without flare	1200	950	875
Major Arm – Unopposed movement with flare	1681	2038	1681
Major Arm – Opposed movement with flare		1274	1223
Minor Arm – Give way link with flare	1223	968	892

Table 2.2 – Range Value Turn Saturation Flows assumed (PCU/lane/hr)

Movement	Saturation Flow Left	Saturation Flow Ahead	Saturation Flow Right
Major Arm – Unopposed movement without flare	1400 to 1900	1700 to 2300	1400 to 1900
Major Arm – Opposed movement without flare		1050 to 1450	1000 to 1400
Minor Arm – Give way link without flare	1000 to 1400	800 to 1100	750 to 1000
Major Arm – Unopposed movement with flare	1450 to 1950	1750 to 2350	1450 to 1950
Major Arm – Opposed movement with flare		1100 to 1450	1050 to 1400
Minor Arm – Give way link with flare	1050 to 1400	800 to 1100	750 to 1050

Speed Flow Curves

2.5.8 Speed flow curves were used to model the flow delay relationships. The speed/flow relationships were derived from the TAG Unit M3.1 Appendix D, but adjusted to give values in PCUs, which, as mentioned before, is the traffic unit that SATURN uses. Speed/flow curves have also been used on the A3(M) and A27. For the update of CATM the same speed flow curve values have been used as in the original HE CATM model.

Zone Centroid Connectors

- 2.5.9 Centroid connectors enable the zones to be linked to the highway network. These are coded where possible using specific entry/exit junctions from local access roads onto the main road network from self-contained residential areas, business parks, retail areas and car parks for example.
- 2.5.10 Judgement is used to determine the number of centroid connectors required from each zone to represent locations where the traffic from the zones was likely to load.

2.6 Zoning System

2.6.1 The zoning system used for the CATM is based on 2011 Census geography with consistency between Census Output Areas, Districts and Counties maintained where possible. The zoning system has largely been retained from the HE CATM model which has included 257 zones. In anticipation of future Local Plan development zones, PBA has coded in eleven additional zones to accommodate future Local Plan trips, thus taking the number of zones in the updated model to 268. The future Local Plan zones have no trips in the base year.



- 2.6.2 The benefit of using a zoning system based on the 2011 Census geography is the ease of use and comparison with planning data, such as population and employment estimates in both the development of the base model and for model forecasting onwards.
- 2.6.3 The CATM comprises 257 zones of which Zones 1 to 212 represent the study area zones of Chichester and Arun District, 213 to 252 are External Zones and 253 to 268 are for future development. To better replicate trip distribution in the western area of the model, a comparison between the existing zone structure in CATM and those in SERTM was undertaken. This resulted in the combination of some SERTM zones and trips from these zones, were subsequently used to replace or add trips onto existing zones. As such this involved maintaining the matrices within the existing simulation network area so not to affect the overall validation in the area within Chichester.
- 2.6.4 The zoning system is shown in **Figure 2.3**.



Figure 2.3 – CATM Simulation Area Zoning System



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3 Survey Data

3.1 Overview

- 3.1.1 This section provides an overview of the data sources that has been used to update the CATM and includes both existing data and new data that has been collected. The types of existing and new collected data comprise:
 - Automatic Traffic Counts (ATC);
 - Manual Classified Turning Counts (MCTC);
 - Manual Classified Counts (MCC);
 - Journey Time Surveys (JTS);
 - Journey Time data (TrafficMaster and Bluetooth); and
 - Anonymised Mobile Phone Data;

3.2 2014 CATM Existing Data

- 3.2.1 The data described below can be found in the Highways England A27 Chichester Bypass Local Model Validation Report, July 2016.
- 3.2.2 The validated existing 2014 HE CATM obtained information from the following sources, namely:
 - Highways England (HE);
 - West Sussex County Council (WSCC); and
 - Department for Transport (DfT).
- 3.2.3 The information obtained included:
 - Permanent WSCC Automatic Traffic Counts (ATC);
 - Highways England TRADS Automatic Traffic Counts (ATC);
 - DfT Traffic Count Database Annual Daily Traffic (AADT); and
 - Highways England Journey Time Database (JTDB) data.

3.3 2014 CATM New Data

- 3.3.1 For the expansion of the simulation network and the implementation of the future development areas new datasets were used.
- 3.3.2 The new data derived from:
 - Highways England (HE);
 - West Sussex County Council (WSCC); and



- Department of Transport (DfT).
- 3.3.3 The information obtained included:
 - Highways England Motorway Incident Detection and Automatic Signalling Counts (MIDAS);
 - Highways England Traffic Monitoring Units Counts (MTU);
 - Highways England Traffic Appraisal, Modelling and Economics Counts (TAME);
 - Permanent WSCC Automatic Traffic Counts (ATC); and
 - TrafficMaster Journey Time Database.
- 3.3.4 The location of the counts used for the update process, (both 2014 HE CATM Existing data and 2014 CATM New Data) of the CATM is shown in **Figure 3.1**.



Figure 3.1 – Position of counts for the CATM



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3.4 2014 CATM New Journey Time Data

- 3.4.1 The Journey time data for the model update was sourced from the Traffic Master Data via Department of Transport (DfT) covering the period of June and November 2014.
- 3.4.2 Journey Time routes for validation were defined and the relevant time data for the AM peak hour (08:00 to 09:00), Inter Peak average hour (10:00 to 16:00) and PM peak hour (17:00 to 18:00) extracted from the full data for the study area. The data used was for the neutral weekdays Tuesday to Thursday.
- 3.4.3 The journey time routes 1 to 7 are from the original HE CATM LMVR and routes A27 and A259 are new routes included in the updated model to cover the corridor west from Chichester to Emsworth and Havant. All journey time routes are shown in **Figure 3.2**. As part of the calibration process, thorough sense checks of free flow speeds against posted limits were undertaken. This gave comfort that for those routes across the network for where journey time data was not readily available, reasonable and proportionate checks had been made.



Figure 3.2 – Journey time routes for the CATM update



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4 Matrix Development

4.1 Introduction

- 4.1.1 This section explains the methods used to develop the revised origin and destination (OD) demand matrices prior to them being assigned to the network. The approach taken is a pragmatic and proportionate approach, given the limited area over which the model requires extending and the purpose of the model update, to inform the Local Plan.
- 4.1.2 The matrices in the model have largely been retained from the original 2014 base year HE CATM model. The objective in the model update was to freeze or retain the HE CATM model matrices as far as possible, with effort concentrated on improving the matrices in the model extension areas to the west and south of Chichester.
- 4.1.3 To help support the extension of the western area, cordoned post matrix estimation matrices from the SERTM model were provided to PBA by HE's consultants of the model. For the purposes of extending the model to the west, these were assumed to inform the prior matrices. Whilst this approach is not a standard approach, it was felt that this was considered a proportionate approach given that the geographic scope of the extension to the west is very limited and the model is to be used for Local Plan testing only.
- 4.1.4 The original HE CATM model matrix building was largely informed by INRIX mobile phone data and hence the model update continues to be underpinned by this data. This section therefore concentrates on reporting the matrix update in the extended areas of the model including on the matrix estimation undertaken.

4.2 Overview

- 4.2.1 Having undertaken the extension of the network to the south and west, an initial check of model flows against observed flows at suitable locations of the extended model was undertaken. This identified that the existing volume of trips in the current matrices was underrepresented in order to achieve acceptable flow validation in the extended areas of the model.
- 4.2.2 Checks on trip distribution was also undertaken, initially using census travel to work data. These checks indicated that there were some issues of distribution from zones within the Southbourne area, for trips travelling west in particular.
- 4.2.3 To better replicate trip distribution in the western area of the model, a comparison between the existing zone structure/locations in CATM and those in SERTM was undertaken, this resulted in the combination of some SERTM zones and were subsequently used to replace or add trips onto existing zones for the western areas of the model only. As such, this involved maintaining the matrices within the existing simulation network area so not to affect the overall validation in the area within Chichester. The trips from the SERTM model were only used to improve the prior matrix in the western extended area of the model with the rest of the trips being retained from the original HE CATM model.
- 4.2.4 The SERTM matrices provided, are average hour for the peak period, therefore to maintain consistency with the time periods modelled and represented in the CATM, which are peak hour matrices, it has been necessary to factor up the SERTM peak period model. To do this, local ATC data has been interrogated to determine a peak period to peak hour factor for the AM and PM peak periods. This indicates that a factor of 1.07 applies to both periods, to represent peak hour. The inter peak SERTM matrices are average hour, which is consistent with the CATM model, therefore no further adjustments for this period were necessary.



4.2.5 Having created an amended matrix based on the additional zones, matrix estimation (ME) was undertaken to further refine the matrices in the extended model area based on the calibration counts.

4.3 Matrix Estimation

- 4.3.1 Once the prior matrix was complete it was necessary to undertake Matrix Estimation to obtain a better matrix fit to the observed traffic counts and a new post matrix fit for purpose in the extended model area. As part of this process some OD movements, specifically within the region of Chichester City Centre were 'frozen' so not to effect sections of the matrices that the HE calibration and flow validation achieved in the previous HE CATM and where possible improved. The frozen sections of the prior matrices also included zones to the east and north of Chichester for which network changes were not required as the HE CATM was deemed adequate in these areas for the purposes of testing the additional Local Plan development sites that are the subject of this model update. Figure 4-1 illustrates the areas that were frozen in the ME process and those areas that were subject to ME. The area shown in blues indicates where zones were frozen.
- 4.3.2 The frozen parts of the matrix during matrix estimation refers to all cells in the rows and columns related to the 'frozen' zones. This means that any cell that has an origin or destination zone or both zones labelled as frozen, was fixed to its prior matrix cell value.



Figure 4.1 – Frozen Areas of Matrices in Matrix Estimation

4.3.3 In line with good practice guide, the matrix estimation was only undertaken after thorough checks of the network coding, to avoid potential network errors from distorting the matrix estimation process.



- 4.3.4 The SATURN manual also advises that the prior matrix gives total flows across the counted links which are broadly correct; i.e. within ±10% is deemed a good target before matrix estimation is undertaken. These fundamental checks were undertaken before the ME process was undertaken.
- 4.3.5 The matrix estimation process itself was undertaken using SATURN's SATME2 program. The SATME2 module uses the best estimate of trip movements as contained in the prior matrices. The process adjusts the pattern of trip distribution and trip numbers to match a file of input traffic counts informing the ME process. SATME2 requires a 'PIJA' file each element of representing the proportion of trips (P) between a particular OD pair (ij) which uses the counted link (A). The PIJA data are obtained through SATURN's SATPIJA program following an assignment using the SAVEIT option. The SAVEIT parameter in SATURN allows link costs as used in the assignment tree build to be saved for subsequent analysis. The matrix estimation was undertaken using separate counts for cars, LGV and HGV's. The primary input to the calibration process were the traffic flows used as target counts for the matrix estimation process.
- 4.3.6 The following section summarises the model assignment, calibration and validation of the network and matrices of the revised model. Given the purpose of the model update as a tool to test the impacts of the Local Plan, a proportionate approach has been taken in reporting the outcome of the matrix estimation. This has been based predominantly by looking at the trip length distribution (TLD) between the prior and post ME matrices. The TLD is a key measure of assessing the impacts of ME and is included as a key check within WebTAG Unit M3.1 on Highway Assignment Modelling. The TLD results are reported in Section 7.3 as part of the model calibration results.
- 4.3.7 In addition to the TLD, Tables 4.1 and 4.2 below provide a summary on the matrix zonal cell values and matrix total trip ends (slope, intercept and R squared) in line with Table 5 of WebTAG Unit M3.1. A green tick indicates where the guidance is met and an orange cross indicates where it is not. In most cases, the guidance is met. Where it is not, it is generally just outside the required envelope. It is considered that the provided outputs adequately demonstrate that the matrix estimation process is not overly changing the prior matrices.

Measure	Significance Criteria	AM	IP	РМ
	Slope within 0.98 and 1.02	1.04	1.01	0.99
Matrix Zonal Cell Values	Intercept near zero	0.00	0.00	0.00
	R squared in excess of 0.95	0.94	0.98	0.98
	Slope within 0.98 and 1.02	1.02	1.00	0.98
Matrix Zonal Trip Ends (Rows)	Intercept near zero	0.66	0.89	1.08
	R squared in excess of 0.95	0.98	0.99	0.99
	Slope within 0.98 and 1.02	1.08	1.06	1.00
Matrix Zonal Trip Ends (Columns)	Intercept near zero	-9.52	-5.72	0.59
	R squared in excess of 0.95	0.99	0.99	0.99

Table 4.1 – Linear Regression results of matrix estimation checks



Table 4.2 – Linear Regression results -indication of WebTAG compliance

Measure	Significance Criteria	AM	IP	PM
	Slope within 0.98 and 1.02	х	\checkmark	\checkmark
Matrix Zonal Cell Values	Intercept near zero	\checkmark	\checkmark	\checkmark
	R squared in excess of 0.95	X	\checkmark	\checkmark
	Slope within 0.98 and 1.02	\checkmark	\checkmark	\checkmark
Matrix Zonal Trip Ends (Rows)	Intercept near zero	\checkmark	\checkmark	\checkmark
	R squared in excess of 0.95	\checkmark	\checkmark	\checkmark
	Slope within 0.98 and 1.02	x	x	\checkmark
Matrix Zonal Trip Ends (Columns)	Intercept near zero	\checkmark	\checkmark	\checkmark
	R squared in excess of 0.95	\checkmark	\checkmark	\checkmark



5 Model Assignment, Calibration and Validation Procedures

5.1 Introduction

5.1.1 Calibration of the network and matrices was undertaken to demonstrate that the model outputs provide a reasonable representation of observed traffic flows and behaviours in the updated model. The calibration process involved the refinement of the network detail to check that link lengths, link speeds and junction behaviour/operation are well represented. Junction parameters reviewed and amended as part of the calibration process include turn saturation flows and signal timings as appropriate.

5.2 Generalised Cost Parameters

5.2.1 Generalised cost parameters are used in the model network to determine the minimum cost routes by which traffic is assigned onto the network. Within SATURN, generalised cost parameters or coefficients are input by user class. The two parameters required are pence per minute (PPM) and pence per kilometre (PPK). TAG Unit M3-1, 2.8.1 provides the formula for the calculation. For the purposes of this model update, the parameters used in the HE CATM have been retained. These are shown in **Table 5.1**.

User Class	Class Type	АМ		IP		PM	
	Class Type	PPM	РРК	РРМ	РРК	PPM	PPK
1	Car Commute	13.52	6.73	13.42	6.73	13.23	6.73
2	Car Employer- Business	45.84	12.51	44.78	12.51	44.07	12.51
3	Car Other	17.25	6.73	17.93	6.73	18.45	6.73
4	LGV	21.84	15.23	21.84	15.23	21.84	15.23
5	HGV	41.8	39.45	41.80	39.45	41.80	39.45

Table 5.1 - Generalised Cost Parameters for 2014 in 2010 prices

5.3 Network Calibration

- 5.3.1 In order to verify that the modelled network represents correctly the existing situation, a number of checks were undertaken as part of the calibration process. These include the following:
 - Checks to verify that loading of zone connectors were reasonable;
 - Link lengths checks including verifying that directional distances were matched and where different, that the differences were reasonable;
 - Routeing checks through the network by using SATURN's 'built trees' facility;
 - Verifying that lane designation at junction were correctly coded;
 - Verifying of turn saturation flows at key junctions; and
 - Checks of free flow speeds against posted speed limits.



- 5.3.2 An examination of the SATURN network has confirmed that each zone centroid has been loaded onto an appropriate link. Link length checks also confirmed that link lengths had been coded correctly.
- 5.3.3 The modelled routeing of traffic throughout the network has been checked. **Appendix B** shows P1X plots of the routing calibration checks for all three modelled time periods.
- 5.3.4 The routings have been checked using SATURN's P1X module. Routes between a wide range of Origin and Destination pairs across the whole network were checked to verify that route choice in the model was reasonable. This included checks for north to south and south to north key movements; checks for east to west and west to east movements.
- 5.3.5 Major urban areas covered by the network were identified, and routes between them checked against local knowledge, common sense, and also routes suggested by Google Maps. The urban areas identified are listed below:
 - Chichester;
 - Havant;
 - Cosham;
 - Purbrook;
 - Selsey;
 - West Wittering;
 - Bognor Regis;
 - Littlehampton;
 - Emsworth;
 - Petworth;
 - Arundel; and
 - Worthing.
- 5.3.6 In accordance to TAG M3.1 guidance, the number of routes that should be checked is defined by:

Number of OD Pairs = ((Number of Zones) ^ 0.25) * (Number of User Classes)

- 5.3.7 With 268 zones and 5 user classes, a minimum of 21 OD pairs should be checked. Using combinations of the above-mentioned locations, 22 OD combinations were identified, and checked directional, a total of 44 routes ensuring a robust network. The routes selected meet advised criteria as they:
 - Relate to significant number of trips;
 - Are of significant length;
 - Pass through areas of interest;
 - Include both directions of travel;



- Link different compass areas; and
- Coincide with journey time routes as appropriate.
- 5.3.8 The routes checked for AM, IP and PM Peak are the following:
 - 1. Chichester to Arundel (Zones 31 to 210)
 - 2. Arundel to Chichester (Zones 210 to 31)
 - 3. Chichester to Bognor Regis (Zones 31 to 133)
 - 4. Bognor Regis to Chichester (Zones 133 to 31)
 - 5. Chichester to Southbourne/Emsworth (Zones 31 to 77)
 - 6. Southbourne/Emsworth to Chichester (Zones 77 to 31)
 - 7. Chichester to Littlehampton (Zones 31 to 198)
 - 8. Littlehampton to Chichester (Zones 198 to 31)
 - 9. Chichester to Petworth (Zones 31 to 227)
 - 10. Petworth to Chichester (Zones 227 to 31)
 - 11. Chichester to Worthing (Zones 31 to 244)
 - 12. Worthing to Chichester (Zones 244 to 31)
 - 13. Southbourne/Emsworth to Arundel (Zones 77 to 210)
 - 14. Arundel to Southbourne/Emsworth (Zones 210 to 77)
 - 15. Southbourne/Emsworth to Bognor Regis (Zones 77 to 133)
 - 16. Bognor Regis to Southbourne/Emsworth (Zones 133 to 77)
 - 17. Southbourne/Emsworth to Littlehampton (Zones 77 to 198)
 - 18. Littlehampton to Southbourne/Emsworth (Zones 198 to 77)
 - 19. Southbourne/Emsworth to Petworth (Zones 77 to 227)
 - 20. Petworth to Southbourne/Emsworth (Zones 227 to 77)
 - 21. Southbourne/Emsworth to Worthing (Zones 77 to 244)
 - 22. Worthing to Southbourne/Emsworth (Zones 244 to 77)
 - 23. Purbrook to Chichester (Zones 221 to 31)
 - 24. Chichester to Purbrook (Zones 31 to 221)
 - 25. Cosham to Chichester (Zones 215 to 31)
 - 26. Chichester to Cosham (Zones 31 to 215)
 - 27. Purbrook to Selsey (Zones 221 to 67)
 - 28. Selsey to Purbrook (Zones 67 to 221)



- 29. Cosham to Selsey (Zones 215 to 67)
- 30. Selsey to Cosham (Zones 67 to 215)
- 31. Purbrook to West Wittering (Zones 221 to 66)
- 32. West Wittering to Purbrook (Zones 66 to 221)
- 33. Cosham to West Wittering (Zones 215 to 66)
- 34. West Wittering to Cosham (Zones 66 to 215)
- 35. Bognor Regis to Littlehampton (Zones 133 to 198)
- 36. Littlehampton to Bognor Regis (Zones 198 to 133)
- 37. Bognor Regis to Petworth (Zones 133 to 227)
- 38. Petworth to Bognor Regis (Zones 227 to 133)
- 39. Havant to Chichester (Zones 258 to 31)
- 40. Chichester to Havant (Zones 31 to 258)
- 41. Havant to Purbrook (Zones 258 to 221)
- 42. Purbrook to Havant (Zones 221 to 258)
- 43. Havant to Cosham (Zones 258 to 215)
- 44. Cosham to Havant (Zones 215 to 258)
- 5.3.9 The ability of the model to robustly represent route choice within the network depends on:
 - Correct zone sizing and definition, network structure and the realism of the zone centroid connectors to the modelled network;
 - Accuracy of the network coding;
 - Accuracy with which delays at junctions and cruise speeds on links are modelled; and
 - Accuracy of the trip matrices.

5.4 Matrix Calibration

- 5.4.1 The matrix calibration involved assigning the prior matrices onto the network and checking that observed flows were reasonably replicated. The prior matrix was developed as described in **Section 4**.
- 5.4.2 Where necessary, selective factoring of matrices was also undertaken so that modelled flows were more consistent with observed flows. These matrix processes were only undertaken after the network checks had been made and applied prior to carrying out the matrix estimation process.

The results of the flow calibration following the matrix estimation process are reported in **Section 7**.



6 Flow and Journey Time Validation and Calibration Criteria and Acceptability Guidelines

6.1 Introduction

6.1.1 The criteria and guidelines apply to models created both for general purposes and those created to address specific interventions. In respect of the latter, it is expected that greater attention should be paid to validation quality in the vicinity of the interventions.

6.2 Trip Matrix Validation

6.2.1 For trip matrix validation, the measure is the percentage differences between modelled flows and counts. Comparisons at screenline level provide information of the quality of the matrices. The validation criterion and acceptability guideline for screenline flows are defined in Table
6.1.

Table 6.1 – Trip Matrix Screenline Validation

Screenline Flow Validation Criterion and Acceptability Guideline				
Criteria	Acceptability Guideline			
Differences between modelled flows and counts should be less than 5% of the counts	All or nearly all screenlines			

* TAG Unit M3.1, Section 3.2.5, Table 1

6.3 Link Flow Validation and Calibration

- 6.3.1 For link flow validation/calibration, the measures which should be used are:
 - The absolute and percentage differences between modelled flows and counts; and
 - The GEH statistic, which is a form of the Chi-squared statistic that incorporates both relative and absolute errors, and is defined as follows:

$$GEH = \sqrt{\frac{(M-C)^2}{\frac{(M+C)}{2}}}$$

* TAG Unit M3.1, Section 3.2.7

Where: GEH is the GEH Statistic

M is the modelled flow; and

C is the observed flow

6.3.2 The validation criteria and acceptability guidelines for link flows are defined in **Table 6.2**.



Table 6.2 – Link Flow Validation/Calibration

Link Flow and Turning Movement Validation/Calibration Criteria and Acceptability Guidelines						
	Criteria	Acceptability Guideline				
1	Individual flows within 100 veh/h of counts for flows less than 700 veh/h	> 85% of cases				
	Individual flows within 15% of counts for flows from 700 to 2,700 veh/h	> 85% of cases				
	Individual flows within 400 veh/h of counts for flows more than 2,700 veh/h	> 85% of cases				
2	GEH < 5 for individual flows	> 85% of cases				

* TAG Unit M3.1, Section 3.2.8, Table 2

6.4 Journey Time Validation

6.4.1 For the journey time validation, the measure that is used is the percentage difference between modelled and observed journey times, subject to an absolute maximum difference. The validation criterion and acceptability guideline for journey times are defined in **Table 6.3**.

Table 6.3 – Journey Time Validation

Journey Time Validation Criterion and Acceptability Guideline					
Criteria	Acceptability Guideline				
Modelled times along routes would be within 15% of surveyed times (or 1 minute, if higher than 15%)	> 85% of routes				

* TAG Unit M3.1, Section 3.2.10, Table 3



7 Model Calibration Results

7.1 Introduction

- 7.1.1 This section reports on the flow calibration. The calibration of the network and matrices were undertaken to seek to achieve an accurate representation of observed traffic flows and behaviours in the updated model. This section reports on the results of the flow calibration in the CATM for all three-time period undertaken for key locations.
- 7.1.2 **Figure 7.1** shows us the location of the calibration counts.



Figure 7.1 – Calibration Counts Location



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7.1.3 The CATM flow calibration consists of up to 93 records in each time period. This underlines the extensive coverage of the calibration with a view to developing a model that is reasonably robust across the network.

7.2 Flow Calibration Results

7.2.1 The summary of the calibration results is shown in **Table 7.1** with the full analysis attached in **Appendix C**. Out of the total of 93 survey locations, 87 of them are classified counts.

Criteria	All Vehicles						
	AM Peak		Inter Peak		PM Peak		
No of links meeting Acceptability criteria (hourly flow)	83	89%	90	97%	80	86%	
No of links meeting Acceptability criteria (GEH)	84	90%	89	96%	77	83%	
No of links meeting Acceptability criteria (hourly flow or GEH)	84	90%	90	97%	80	86%	
Total Number of links	93		93		93		
Critoria	Cars						
Cintena	AM Peak		Inter Peak		PM Peak		
No of links meeting Acceptability criteria (hourly flow)	79	91%	84	97%	79	91%	
No of links meeting Acceptability criteria (GEH)	77	89%	84	97%	76	87%	
No of links meeting Acceptability criteria (hourly flow or GEH)	79	91%	84	97%	79	91%	
Total Number of links	87		87		87		
Critoria	LGVs						
Onteria	AM Peak		Inter Peak		PM Peak		
No of links meeting Acceptability criteria (hourly flow)	84	97%	87	100%	85	98%	
No of links meeting Acceptability criteria (GEH)	82	94%	86	99%	84	97%	
No of links meeting Acceptability criteria (hourly flow or GEH)	84	97%	87	100%	85	98%	
Total Number of links	87		87		87		
Criteria	Lights (Cars + LGV)						
Onteria	AM Peak		Inter Peak		PM Peak		
No of links meeting Acceptability criteria (hourly flow)	77	89%	84	97%	77	89%	
No of links meeting Acceptability criteria (GEH)	78	90%	84	97%	74	85%	
No of links meeting Acceptability criteria (hourly flow or GEH)	78	90%	84	97%	77	89%	
Total Number of links	87		87		87		
Criteria	HGVs						
	AM Peak		Inter Peak		PM Peak		
No of links meeting Acceptability criteria (hourly flow)	85	98%	87	100%	87	100%	
No of links meeting Acceptability criteria (GEH)	85	98%	86	99%	86	99%	
No of links meeting Acceptability criteria (hourly flow or GEH)	85	98%	87	100%	87	100%	
Total Number of links	87		87		87		

Table 7.1 - Calibration Counts Summary


- 7.2.2 Overall the Link Calibration of the network is shown to be good, achieving higher percentages than the 85% of the guideline.
- 7.2.3 The calibration analysis was based on the GEH statistic and the Link Flow Criteria. The GEH statistic is a formula used in traffic modelling to compare two sets of traffic volumes and assess the fit between the observed and modelled flows. It takes account of the fact that when traffic flows are low, the percentage difference between observed and modelled flows may be high but the significance of this difference is small.
- 7.2.4 A GEH of less than 5.0 is considered to represent a good match between the modelled and observed hourly flows. A GEH value greater than 10 indicates that the match between observed and modelled flows is poor and closer attention is required. The guideline is to aim for 85% of counts with a GEH below 5.

7.3 Trip Length Distribution Calibration Results

- 7.3.1 Trip length distribution pre and post matrix estimation has been checked. This is to check that the trip matrix estimation process does not materially alter the trip making patterns in the prior matrices. Matrix estimation can have the tendency to increase short distance trips at the expense of long trips, which needs to be kept to a minimum.
- 7.3.2 The results of the trip length distribution checks are shown in **Figures 7.2** to **7.4** for each of the AM, Inter Peak and PM peaks respectively. The results show that the trip length distribution does not change too greatly pre and post matrix estimation and this demonstrates that the matrix estimation has not overly altered trip length distribution within the model.



Figure 7.2 – AM Peak TLD Comparison













8 Model Validation Results

8.1 Introduction

- 8.1.1 This section reports on the flow and journey time validation achieved by CATM. The results have been considered with respect to validation criteria and acceptability guidelines contained in Section 3 of TAG Unit M3.1 (Highway Assignment Modelling). The guidance notes that any adjustments to the model intended to reduce the differences between the modelled and observed data should be regarded as calibration. Validation simply involves comparing modelled and observed data that is independent from that used in the calibration.
- 8.1.2 The main comparisons required for the validation of a highway assignment model as noted in the guidance are listed below:
 - A check on the quality of the trip matrices this requires a comparison of assigned flows and count totalled for each screenline or cordon;
 - A check on the quality of the assignment this is demonstrated by comparing flows and counts on individual links and turning movements at junctions; and
 - A check on the quality of the network and assignment this is demonstrated by comparing modelled and observed journey times along routes.

8.2 Screenline Validation Results

8.2.1 Flow validation has been undertaken on seven screenlines within the model. The screenlines are shown in **Figure 8.1**. The results of the flow validation are presented by time period below.



Figure 8.1 - Screenlines



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Table 8.1 – AM Peak Flow Validation (PCU/hr)

		AM					
Screenline Name	No. of Links	Observed	Modelled	% Diff.	Pass?	% of Links Compliant	
Chichester Inner Cordon - Inbound	12	6,139	6,131	0%	Pass	100%	
Chichester Inner Cordon - Outbound	12	3,900	3,965	2%	Pass	100%	
Chichester Outer Cordon - Inbound	13	9,334	9,327	0%	Pass	85%	
Chichester Outer Cordon - Outbound	13	6,841	6,900	1%	Pass	92%	
Northern Screenline -SB	5	2,799	2,841	1%	Pass	100%	
Northern Screenline - NB	5	2,344	2,306	-2%	Pass	100%	
Bognor Regis Screenline - SB	5	2,172	2,230	3%	Pass	100%	
Bognor Regis Screenline - NB	5	3,624	3,630	0%	Pass	100%	
River Arun Screenline - EB	2	2,322	2,294	-1%	Pass	100%	
River Arun Screenline - WB	2	2,444	2,343	-4%	Pass	100%	
Chichester Transport Study Screenline 1 - NB	2	1,270	1,168	-8%	Fail	100%	
Chichester Transport Study Screenline 1 - SB	2	980	1,008	3%	Pass	100%	
Chichester Transport Study Screenline 2 - EB	3	2,298	2,180	-5%	Fail	67%	
Chichester Transport Study Screenline 2 - WB	3	2,266	2,561	13%	Fail	67%	



Table 8.2 – IP Peak Flow Validation (PCU/hr)

		IP					
Screenline Name	No. of Links	Observed	Modelled	% Diff.	Pass?	% of Links Compliant	
Chichester Inner Cordon - Inbound	12	4,455	4,445	0%	Pass	100%	
Chichester Inner Cordon - Outbound	12	4,556	4,577	0%	Pass	100%	
Chichester Outer Cordon - Inbound	13	7,314	7,246	-1%	Pass	100%	
Chichester Outer Cordon - Outbound	13	7,286	7,302	0%	Pass	100%	
Northern Screenline -SB	5	2,126	2,099	-1%	Pass	100%	
Northern Screenline - NB	5	1,964	1,886	-4%	Pass	100%	
Bognor Regis Screenline - SB	5	2,532	2,532	0%	Pass	100%	
Bognor Regis Screenline - NB	5	2,409	2,406	0%	Pass	100%	
River Arun Screenline - EB	2	2,150	2,047	-5%	Pass	100%	
River Arun Screenline - WB	2	2,161	2,065	-4%	Pass	100%	
Chichester Transport Study Screenline 1 - NB	2	1,118	1,124	1%	Pass	100%	
Chichester Transport Study Screenline 1 - SB	2	1,253	1,311	5%	Pass	100%	
Chichester Transport Study Screenline 2 - EB	3	1,951	1,840	-6%	Fail	100%	
Chichester Transport Study Screenline 2 - WB	3	1,840	1,839	0%	Pass	100%	



Table 8.3 – PM Peak Flow Validation (PCU/hr)

		PM					
Screenline Name	No. of Links	Observed	Modelled	% Diff.	Pass?	% of Links Compliant	
Chichester Inner Cordon - Inbound	12	4,448	4,329	-3%	Pass	100%	
Chichester Inner Cordon - Outbound	12	5,949	6,042	2%	Pass	92%	
Chichester Outer Cordon - Inbound	13	7,999	8,228	3%	Pass	92%	
Chichester Outer Cordon - Outbound	13	10,000	9,706	-3%	Pass	69%	
Northern Screenline -SB	5	2,618	2,549	-3%	Pass	100%	
Northern Screenline - NB	5	2,750	2,625	-5%	Pass	80%	
Bognor Regis Screenline - SB	5	4,172	4,162	0%	Pass	100%	
Bognor Regis Screenline - NB	5	2,478	2,530	2%	Pass	100%	
River Arun Screenline - EB	2	2,761	2,663	-4%	Pass	100%	
River Arun Screenline - WB	2	2,453	2,430	-1%	Pass	100%	
Chichester Transport Study Screenline 1 - NB	2	1,335	1,431	7%	Fail	50%	
Chichester Transport Study Screenline 1 - SB	2	1,457	1,369	-6%	Fail	100%	
Chichester Transport Study Screenline 2 - EB	3	2,544	2,622	3%	Pass	100%	
Chichester Transport Study Screenline 2 - WB	3	2,466	2,630	7%	Fail	100%	



- 8.2.2 Overall the Screenline Validation on the network is shown to be good. In the AM 11 out of 14 screenlines (78.6%) fulfil the criteria of 5% difference between observed and modelled flows, the IP, 13 out of 14 (92.9%) and in the PM, 11 out of 14 (78.6%).
- 8.2.3 It is important to note that the screenlines that fail the 5% criterion, are still close to this percentage without generally exceeding an 8% difference. It is also noted that individual link flows for the screenlines (column % of Links Compliant), largely achieve WebTAG validation criteria.
- 8.2.4 As noted, where the screenlines flows are lower than observed, none exceed an absolute difference of 8% which could be considered to be within day to day variations. The IP model shows the best fit to the observed screenline flows with 13 screenline flows out of 14 achieving WebTAG criteria. The AM and PM models also achieve good screenline validation. The IP is the least congested, and for the purposes of testing the Local Plan, focus will be on the more congested AM and PM peak periods.
- 8.2.5 The modelling assumes fixed trip assignment whereby route choice is the only traveller response, with variable demand not being accounted for. This means that future forecasts are likely to overestimate future demands on the highway network and hence the modelling represents a robust view of future network performance. The issues discussed above, will be borne in mind when undertaking model tests and in interpreting and understanding the impacts of proposed Local Plan development.

8.3 Link Flow Validation

- 8.3.1 **Table 8.4** and **Table 8.5** show the summary of the Link and Turn Flow Validation checks respectively. The analytical presentation of the results is in **Appendix D** for the Link Flow Validation and **Appendix E** for the Turn Flow Validation.
- 8.3.2 **Figure 8.2** shows the location of the validation counts.



Figure 8.2 – Validation Link Flow Counts Location



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Table 8.4 – Link Flow Validation Summary

Criteria		All Vehicles							
	AM	Peak	Inter	Peak	PM F	PM Peak			
No of links meeting Acceptability criteria (hourly flow)	36	88%	36	88%	31	76%			
No of links meeting Acceptability criteria (GEH)	36	88%	38	93%	35	85%			
No of links meeting Acceptability criteria (hourly flow or GEH)	37	90%	38	93%	37	90%			
Total Number of links	2	11	4	1	4	1			
Critoria		Cars							
Citteria	AM	Peak	Inter	Peak	PM F	Peak			
No of links meeting Acceptability criteria (hourly flow)	33	89%	36	97%	31	84%			
No of links meeting Acceptability criteria (GEH)	33	89%	34	92%	30	81%			
No of links meeting Acceptability criteria (hourly flow or GEH)	34	92%	36	97%	31	84%			
Total Number of links	3	37	3	7	3	7			
Critoria	LGVs								
Citteria	AM Peak		Inter Peak		PM Peak				
No of links meeting Acceptability criteria (hourly flow)	35	95%	36	97%	35	95%			
No of links meeting Acceptability criteria (GEH)	31	84%	33	89%	30	81%			
No of links meeting Acceptability criteria (hourly flow or GEH)	35	95%	36	97%	35	95%			
Total Number of links	3	37	3	7	3	7			
Critoria	Lights (Cars + LGV)								
	AM	Peak	Inter	Peak	PM F	Peak			
No of links meeting Acceptability criteria (hourly flow)	33	89%	37	100%	28	76%			
No of links meeting Acceptability criteria (GEH)	34	92%	36	97%	31	84%			
No of links meeting Acceptability criteria (hourly flow or GEH)	35	95%	37	100%	34	92%			
Total Number of links	3	37	3	7	3	7			
Critoria			HG	8Vs					
Griteria		Peak	Inter	Peak	PM F	Peak			
No of links meeting Acceptability criteria (hourly flow)	37	100%	37	100%	37	100%			
No of links meeting Acceptability criteria (GEH)	36	97%	35	95%	37	100%			
No of links meeting Acceptability criteria (hourly flow or GEH)	37	100%	37	100%	37	100%			
Total Number of links	3	37	3	7	37				

8.3.3 Overall the Link Flow Validation on the network is shown to be good, with only the cars in the PM Peak at 84% failing but still be close to the 85% guideline. Out of the total of 41 survey locations, 37 of them are classified counts.

8.4 Turn Flow Validation

8.4.1 Turn counts for key junction on A27 Chichester Bypass for all modelled periods were checked against observed flows. The data has been retained from the original HE CATM LMVR. **Figure 8.3** shows the location of the turn flow counts.



Figure 8.3 – Validation Turn Flow Counts Location



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		All Vehicles								
Criteria	AM	Peak	Inter	Peak	PM F	Peak				
No of turns meeting Acceptability criteria (hourly flow)	122	88%	125	91%	116	84%				
No of turns meeting Acceptability criteria (GEH)	85	62%	96	70%	73	53%				
No of turns meeting Acceptability criteria (hourly flow or GEH)	122	88%	125	91%	118	86%				
Total Number of turns	1	38	13	38	13	8				
Critoria			Ca	ars						
Criteria	AM	Peak	Inter	Peak	PM F	Peak				
No of turns meeting Acceptability criteria (hourly flow)	121	88%	125	91%	117	85%				
No of turns meeting Acceptability criteria (GEH)	90	65%	93	67%	81	59%				
No of turns meeting Acceptability criteria (hourly flow or GEH)	124	90%	126	91%	117	85%				
Total Number of turns	1:	38	13	38	138					
Criteria	LGVs									
Ginena	AM Peak		Inter Peak		PM Peak					
No of turns meeting Acceptability criteria (hourly flow)	132	96%	135	98%	130	94%				
No of turns meeting Acceptability criteria (GEH)	96	70%	110	80%	96	70%				
No of turns meeting Acceptability criteria (hourly flow or GEH)	132	96%	135	98%	130	94%				
Total Number of turns	1:	138 138 13								
Criteria	Lights (Cars + LGV)									
	AM	Peak	Inter	Peak	PM F	Peak				
No of turns meeting Acceptability criteria (hourly flow)	123	89%	122	88%	112	81%				
No of turns meeting Acceptability criteria (GEH)	86	62%	97	70%	73	53%				
No of turns meeting Acceptability criteria (hourly flow or GEH)	123	89%	125	91%	114	83%				
Total Number of turns	138 138 138									
Critoria			HG	€Vs						
Cinteria	AM	Peak	Inter	Peak	PM F	Peak				
No of turns meeting Acceptability criteria (hourly flow)	138	100%	138	100%	138	100%				
No of turns meeting Acceptability criteria (GEH)	116	84%	123	89%	118	86%				
No of turns meeting Acceptability criteria (hourly flow or GEH)	138	100%	138	100%	138	100%				
Total Number of turns	1:	38	13	38	138					

8.4.2 Overall the Turn Flow Validation on the network is shown to be good, with only the Cars and Lights in the PM Peak marginally failing at 85% and 83% respectively compared to the greater than 85% guideline threshold.



8.5 Model Convergence

- 8.5.1 WebTAG guidance notes that before the results of any traffic assignment are used to influence decisions, the stability or degree of convergence of the assignment must be confirmed at the appropriate level (TAG M3.1, paragraph 3.3).
- 8.5.2 The importance of achieving convergence at an appropriate level is related to the need to provide stable, consistent and robust model results. This is especially so when model outputs are used to compare 'with' and 'without' scheme scenarios in cost benefit analysis. It is important to be able to distinguish differences due to the scheme from those associated with different degrees of convergence.
- 8.5.3 The convergence checks have followed WebTAG guidance on the anticipated degree of model convergence and are the following:
 - The main measure of the convergence is the Delta statistic or % gap which is the difference between the costs along the chosen routes and those along the minimum cost routes expressed as a percentage of the minimum costs. WebTAG recommends a guidance target for the % gap of 0.1% or less;
 - The proportion of links for which changes in traffic volumes is less than 1% is at least 98% for four consecutive iterations; and
 - The proportion of links for which changes in link delays is less than 1% is at least 98& for four consecutive iterations.

8.5.4 **Table 8.6** summarises the above-mentioned guidance.

Measure of Convergence	Base Model Acceptable Values
Delta and % Gap	Less than 0.1% or at least stable with convergence fully documented and all other criteria met
Percentage of links with flow change (P) < 1%	Four consecutive iterations greater than 98%
Percentage of links with cost change (P2) < 1%	Four consecutive iterations greater than 98%
Percentage change in total user costs (V)	Four consecutive iterations less than 0.1% (SUE only)
* TAC Unit MO 1 Continue 2 2 17 Table 4	

Table 8.6 – Summary of Convergence Measures and Base Model Acceptable Values

* TAG Unit M3.1, Section 3.3.17, Table 4

8.5.5 The results of convergence statistics achieved for all three periods of the CATM are shown in **Table 8.7**. This shows that all three time period models exceed the convergence criteria required and there demonstrate that the models are stable and robust.



Table 8.7 – Convergence Statistics

	AM		
Itoration	% Gap/	% Elow	%Cost
neration	Delta	70 FIOW	Delays
33	0.011	99.2	99.5
34	0.0074	99.2	99.6
35	0.01	99.1	99.4
36	0.0059	99.5	99.7
	IP		
Iteration	% Gap/	0/ =	%Cost
Iteration	Delta	% FIOW	Delays
12	0.0038	99.1	99.9
13	0.0028	99.1	100
14	0.0025	99.5	99.9
15	0.0021	99.3	100.0
	PM		
Itoration	% Gap/	% Elow	% Cost
iteration	Delta	70 FIOW	Delay
47	0.022	99.2	99.6
48	0.019	99.8	99.5
49	0.017	99.6	99.9
50	0.0088	99.5	99.7

8.6 Journey Time Validation

- 8.6.1 Journey time routes on key routes have been checked for validation. Each route has been checked for validation in both directions. The validation routes were previously shown in **Figure 3.2**.
- 8.6.2 Teletrac Navman journey time data (TrafficMaster) has been provided to PBA for journey time validation purposes along the A27 and A259 specifically.
- 8.6.3 **Table 8.9** gives a summary of the AM Peak, Inter Peak and PM Peak journey time validation. **Appendix E** gives graphical representation of the journey time validation.
- 8.6.4 The results show that in the AM Peak 16 out of the 18 routes (89%) fall within the 15% of the observed journey time.
- 8.6.5 Specifically, it was identified that the A27 Eastbound journey time route during the AM peak fails against the observed journey time data. Analysis was undertaken to review the output from Highways England WebTris data which identified that there was significant variation in travel time along this link and as such it is deemed that the modelled time, although doesn't validate against the data used, is a good replication to a general journey time across the link.



8.6.6 **Table 8.8** summarises the AM journey time data for Tuesdays, Wednesdays and Thursdays during March and June for the A27 Eastbound journey time route to provide an example of the variation between these days.

Date	Total Traffic Flow	AM Travel Time (sec)
04/03/2014	1,780	556
05/03/2014	2,023	899
06/03/2014	1,868	622
11/03/2014	2,028	742
12/03/2014	1,854	538
13/03/2014	1,964	898
18/03/2014	2,001	1,112
19/03/2014	1,970	758
20/03/2014	1,967	1,003
25/03/2014	1,980	1,021
26/03/2014	2,027	598
27/03/2014	1,857	753
03/06/2014	1,858	1,159
04/06/2014	1,922	824
05/06/2014	1,883	648
10/06/2014	1,982	866
11/06/2014	1,821	693
12/06/2014	1,819	864
17/06/2014	1,763	1,126
18/06/2014	1,958	847
19/06/2014	1,899	733
24/06/2014	1,966	719
25/06/2014	1,984	769
26/06/2014	2,045	1,312
Average March	1,943	792
Average June	1,908	880
Overall Average	1,926	836

Table 8.8 – HE WebTris AM Journey Time Data for A27 Eastbound route

- 8.6.7 In the Inter Peak 17 out of the 18 routes (94%) fall within the 15% of the observed journey time. In the PM Peak 16 out of the 18 routes (89%) fall within the 15% of the observed journey time. In the main, while generally lower than observed journey times, the modelled journey times are consistent with observed data across the three model time periods and adequately meet WebTAG journey time criteria.
- 8.6.8 The validation routes were previously shown in **Figure 3.2**, are shown again in **Figure 8.4**.



Figure 8.4 – Journey time routes for the CATM update



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Table 8.9 – Journey Time Validation

Route	Direction	Peak	Av. Observed JT (secs)	Modelled JT (secs)	Diff (secs)	%Diff	Modelled JT within Confidence Interval?	Difference within 1 min?	Pass?
		AM	466	380	-86	-19%	No	No	Fail
	NB	IP	361	342	-19	-5%	Yes	Yes	Pass
1		PM	425	420	-5	-1%	Yes	Yes	Pass
L		AM	439	490	51	12%	Yes	Yes	Pass
	SB	IP	498	350	-148	-30%	No	No	Fail
		PM	708	553	-155	-22%	No	No	Fail
		AM	593	666	73	12%	Yes	No	Pass
	EB	IP	712	645	-67	-9%	Yes	No	Pass
2 WB	PM	817	803	-14	-2%	Yes	Yes	Pass	
	AM	670	721	51	8%	Yes	Yes	Pass	
	IP	604	643	39	6%	Yes	Yes	Pass	
	PM	735	743	8	1%	Yes	Yes	Pass	
		AM	559	516	-43	-8%	Yes	Yes	Pass
	NB	IP	549	483	-66	-12%	Yes	No	Pass
2		PM	575	480	-95	-17%	No	No	Fail
5		AM	533	520	-13	-2%	Yes	Yes	Pass
	SB	IP	472	477	5	1%	Yes	Yes	Pass
		PM	501	522	21	4%	Yes	Yes	Pass
		AM	254	257	3	1%	Yes	Yes	Pass
	EB	IP	264	270	6	2%	Yes	Yes	Pass
4		PM	347	365	18	5%	Yes	Yes	Pass
4		AM	409	435	26	6%	Yes	Yes	Pass
	WB	IP	289	276	-13	-4%	Yes	Yes	Pass
		PM	271	230	-41	-15%	No	Yes	Pass
		AM	591	580	-11	-2%	Yes	Yes	Pass
	EB	IP	601	542	-59	-10%	Yes	Yes	Pass
_		PM	635	573	-62	-10%	Yes	No	Pass
5		AM	602	606	4	1%	Yes	Yes	Pass
	WB	IP	620	573	-47	-8%	Yes	Yes	Pass
		PM	641	626	-15	-2%	Yes	Yes	Pass
		AM	583	617	34	6%	Yes	Yes	Pass
	EB	IP	562	576	14	3%	Yes	Yes	Pass
6		PM	606	653	47	8%	Yes	Yes	Pass
6		AM	614	622	8	1%	Yes	Yes	Pass
	WB	IP	599	591	-8	-1%	Yes	Yes	Pass
		PM	624	635	11	2%	Yes	Yes	Pass
		AM	559	590	31	6%	Yes	Yes	Pass
	NB	IP	507	433	-74	-15%	Yes	No	Pass
_		PM	452	446	-6	-1%	Yes	Yes	Pass
/		AM	465	518	53	11%	Yes	Yes	Pass
	SB	IP	498	470	-28	-6%	Yes	Yes	Pass
		PM	634	569	-65	-10%	Yes	No	Pass
		AM	974	851	-123	-13%	Yes	No	Pass
	WB	IP	923	835	-88	-10%	Yes	No	Pass
1250		PM	950	838	-112	-12%	Yes	No	Pass
A259		AM	1174	1078	-96	-8%	Yes	No	Pass
	EB	IP	949	871	-78	-8%	Yes	No	Pass
		PM	1021	931	-90	-9%	Yes	No	Pass
		AM	607	688	81	13%	Yes	No	Pass
	WB	IP	641	626	-15	-2%	Yes	Yes	Pass
A 3 7		PM	648	737	89	14%	Yes	No	Pass
AZ/		AM	1112	659	-453	-41%	No	No	Fail
	EB	IP	648	643	-5	-1%	Yes	Yes	Pass
		PM	774	793	19	2%	Yes	Yes	Pass

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8.7 Summary

8.7.1 This chapter has presented and discussed the flow validation and Journey Time validation of the CATM model. It has also presented convergence statistics achieved by the model. It has been concluded that the model achieves adequate validation to be considered a robust tool that can be relied upon for the purposes for which the model was commissioned. Considerable effort has been made to improve validation on key links likely to be critical to assessing schemes and development in the vicinity of the links.



9 Summary

9.1 Overview

9.1.1 PBA has been commissioned to undertake transport assessment to inform the preparation of the Chichester Local Plan Review: 2016-2035. The Local Plan Review will review the policies and strategy of the adopted Chichester Local Plan: Key Policies 2014-2029 whilst also seeking to meet the latest identified needs of the Plan Area through to 2035. Although the Council adopted the Chichester Local Plan 2014-2029, the examination concluded that the Plan fell short of meeting the full housing needs of the District outside of the South Downs National Park (the 'Plan Area') The Inspector required that the Council commit to a review the Local Plan within 5 years with the objective to ensure that housing needs are fully met. This work informs this review, to test the impact of the additional development needs (including housing) of the Plan Area. In order to provide a robust evidence base for this work, the simulation extent of the existing HE CATM base model has been extended to the west and south so that it is suitable for informing the impacts of additional proposed Local Plan development to be located in these areas. The updated CATM model has been calibrated and validated to a base year of 2014 similar to the existing HE CATM model. This has enabled the original extensive data used in the model development to be retained with complementary or additional count and journey time data also used to calibrate and validate the updated model in the extended areas.

9.2 Conclusions

- 9.2.1 The revalidated CATM to 2014 base year, has been calibrated and validated using 2014 count and journey time data. The calibration and validation results in the three modelled peak hours have shown a good and acceptable fit between observed and modelled flows and journey times. The model has been validated against independent counts and shows an acceptable fit when measured against the Acceptability Guidelines in WebTAG Unit M3.1 (Highway Assignment Modelling).
- 9.2.2 Of the calibration counts, the AM peak achieved 90%, IP 97% and the PM peak achieved 86% respectively. These calibration results demonstrate that the model is well calibrated in respect of link flows and matches observed data very well. For all peak periods the Trip Length Distribution showed little change between the prior and post matrix estimation matrices indicating that the matrix estimation process had not fundamentally altered the trip making patterns from the prior matrices.
- 9.2.3 The link flow validation during the AM, IP and PM peaks were 93%, 85% and 90% respectively. With respect to turn flow validation for key A27 junctions, the model achieved 88% in the AM peak, 91% in the IP and 86% in the PM peak periods.
- 9.2.4 In terms of the screenlines validation, 11 out of 14 (78.6%) achieved compliance in the AM peak, 13 out of 14 (92.9%) in the IP and 11 out of 14 (78.6%) in the PM peak. It is noted that in most cases, the individual links forming the screenlines themselves achieve WebTAG flow validation. Furthermore, none but one of the modelled screenline flows exceed 8% of the observed flows underlying that the screenline flows reasonably match the observed.
- 9.2.5 Journey time routes have also been validated against which resulted in a total of 89%, 94% and 89% of routes falling within the journey time validation criteria.
- 9.2.6 From the analysis presented within this report it is concluded that this model is fit for the purposes of informing the traffic impacts of the additional local plan strategic sites for this study.



Appendix A Trip Routing Checks

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^{15.} Southbourne/Emsworth to Bognor Regis Zones 77 to 133









Zones 77 to 227 19. Southbourne/Emsworth to Petworth



































































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CATM 2014 BASE - IP PEAK - **ASSIGNED IN SATURN VER 16- 8

 $\mathbf{\nabla}$



^{15.} Southbourne/Emsworth to Bognor Regis Zones 77 to 133







17. Southbourne/Emsworth to Littlehampton Zones 77 to 198


























31. Purbrook to West Wittering







CATM 2014 BASE - IP PEAK - **ASSIGNED IN SATURN VER 16- 8-1









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15. Southbourne/Emsworth to Bognor Regis Zones 77 to 133









17. Southbourne/Emsworth to Littlehampton Zones 77 to 198











CATM 2014 BASE - PM PEAK - **ASSIGNED IN SATURN





CATM 2014 BASE - PM PEAK - **ASSIGNED IN SATURN VER 16-

















































Appendix B Calibration Counts

				-				AN	/I CALIB	RATION	l														-		
Screenline / Dir	Site Ref	Road	SATURN Link	Observ Car LGV Lights	ed HGV Tota	I Car	Mo LGV Li	delled ights HGV	Total	Car	LGV	Diff Lights	HGV T	otal	Car L	GV I	% Diff .ights H	IGV T	otal	Car LGV	GEH Lights H	HGV 1	Total Car	LGV	Flows Lights	HGV To	otal Car
	30	Broyle Road	6158_6157	427 34 461	. 15 47	6 466	37	503 15	518	39	3	42	0	42	9%	9%	9%	-1%	9%	1.9 0.5	1.9	0.0	1.9 Pass	Pass	Pass	Pass P	ass Pass
	32	St Paul's Road	5854_5953 5448_5648	617 52 668	12 68	0 681	60 8	740 12	753	64 -48	8	-18	0	73	10%	15%	11%	2%	11%	2.5 1.0	2.7	0.1	2.7 Pass	Pass	Pass	Pass P	ass Pass
	33	Via Ravenna	5344_5544	700 66 766	21 78	7 628	33	661 27	688	-72	-33	-105	6	-99 -	10% -	50%	-14%	27% -	13%	2.8 4.7	3.9	1.1	3.7 Pass	Pass	Fail	Pass P	ass Pass
	35	Terminus Road	5043_50250	349 41 390	13 40	3 342	40	382 13	396	-7	-1	-8	0	-7	-2%	-2%	-2%	4%	-2%	0.4 0.1	0.4	0.1	0.4 Pass	Pass	Pass	Pass P	ass Pass
Inner SL_IN	25	Whyke Road	6936_7040	495 49 544	22 56	6 456	40	499 14	595	-35	-4	-38	-8	-56	-8% -	-7%	-15%	-38%	-9%	1.8 1.0	2.9	2.0	2.8 Pass 2.3 Pass	Pass	Pass	Pass P	ass Pass
	40	Bognor Road	7742_7444	579 75 653	16 66	9 575	80	654 17	671	-4	5	1	1	2	-1%	6%	0%	5%	0%	0.2 0.5	0.0	0.2	0.1 Pass	Pass	Pass	Pass P	ass Pass
	42	Oving Road St Pancras	7952_7750	281 13 294	6 30	0 315 2 905	15	330 6 973 23	336	34	2	36	0	36	12%	16% 85%	12%	-1%	12%	2.0 0.5	2.0	0.0	2.0 Pass	Pass	Pass	Pass P	ass Pass
	105	Barnfield Drive	7658_7061	374 30 404	4 40	8 349	26	375 3	378	-25	-4	-29	-1	-30	-7% -	14%	-7%	-20%	-7%	1.3 0.8	1.5	0.4	1.5 Pass	Pass	Pass	Pass P	ass Pass
	28	College Lane	6358_6453	160 18 178	8 10 18	8 182	17	199 10	209	22	-1	21	0	21	14%	-5%	12%	2%	11%	1.7 0.2	1.5	0.1	1.5 Pass	Pass	Pass	Pass P	ass Pass
	29 31	St Paul's Road	6157_6158 5953 5854	332 39 371	17 30	7 264 6 323	33	296 17 359 15	313	-9	-3	-12	0	-12	-3%	18% -8%	-3%	0% 1%	-3%	0.1 0.9	0.4	0.0	0.4 Pass 0.6 Pass	Pass	Pass Pass	Pass P Pass P	ass Pass
	44	Westgate	5648_5448	170 10 180	4 18	4 162	19	181 4	185	-8	9	1	0	1	-5%	93%	1%	-2%	1%	0.6 2.4	0.1	0.0	0.1 Pass	Pass	Pass	Pass P	ass Pass
	34	Via Ravenna Torminus Road	5544_5344	373 38 410	15 42	5 410	50	460 15	475	37	12	50	0	50	10%	32%	12%	1%	12%	1.9 1.8	2.4	0.0	2.4 Pass	Pass	Pass	Pass P	ass Pass
	38	Stockbridge Road	5740_5839	269 46 314	19 33	3 232	43	275 22	297	-37	-3	-39	-5	-36	14%	-7%	-12%	-55% 18% -	4%	2.3 0.5	2.3	0.8	2.0 Pass	Pass	Pass	Pass P	ass Pass
Inner SL_001	26	Whyke Road	7040_6936	214 45 259	16 27	5 267	48	315 15	330	53	3	56	-1	55	25%	6%	22%	-7%	20%	3.4 0.4	3.3	0.3	3.1 Pass	Pass	Pass	Pass P	ass Pass
	39 41	Bognor Road Oving Road	7444_7742	208 20 228	19 58	7 547 0 167	73 18	620 20 186 4	639 190	-41	-2	-42	2	-40	9% 20%	12% -8%	-19%	3% 124% -	9% 17%	1.9 0.9	2.1	0.1	2.1 Pass 2.7 Pass	Pass	Pass Pass	Pass P Pass P	ass Pass
	45	St Pancras	7253_7555	584 52 636	19 65	5 581	32	613 19	632	-3	-20	-23	0	-23	-1% -	39%	-4%	-1%	-4%	0.1 3.1	0.9	0.1	0.9 Pass	Pass	Pass	Pass P	ass Pass
	106	Barnfield Drive	7061_7658	129 16 145	4 14	9 131	16	148 4	152	2	0	3	0	3	2%	3%	2%	3%	2%	0.2 0.1	0.2	0.1	0.2 Pass	Pass	Pass	Pass P	ass Pass
	24	Lavant Road	4264_4262	470 62 532	20 55	2 542	65	607 20	627	72	3	75	0	75	15%	5%	14%	0%	14%	3.2 0.4	3.2	0.0	3.1 Pass	Pass	Pass	Pass P	ass Pass
	95	B2178	40138_50255		66	4 655	91	746 23	769					105					16%				3.9				ail
	11	A27 EB	40124_1760	1,512 146 1,658	190 1,84	8 1,450	189 1	L,639 189	1,828	-62	43	-19	-1	-20	-4%	29%	-1%	-1%	-1%	1.6 3.3	0.5	0.1	0.5 Pass	Pass	Pass	Pass P	ass Pass
	51	A286	4327_50263	291 33 325	17 34	2 245	26	271 16	287	-110	-7	-112	-1	-55	16% -	20%	-17%	-8% -	16%	2.8 1.2	3.1	0.3	3.1 Pass	Pass	Pass	Pass P	ass Pass
	49	B2201 - Selsey Road	11013_50261	225 28 253	9 26	2 221	27	248 9	257	-4	-1	-5	0	-5	-2%	-2%	-2%	0%	-2%	0.3 0.1	0.3	0.0	0.3 Pass	Pass	Pass	Pass P	ass Pass
Outer SL_IN	61 152	B2145 Vinnetrow Road	6925_50264 50266 10002	818 66 883 170 27 197	6 20	0 870 3 200	94 28	964 27 228 6	991 234	52 30	28	81 31	0	81 31	6% 18%	42% 3%	9% 16%	1% -3%	9% 15%	1.8 3.1	2.7	0.0	2.6 Pass 2.1 Pass	Pass	Pass Pass	Pass P Pass P	ass Pass
	48	Bognor Road	9236_9135	760 95 854	52 90	6 715	78	793 54	846	-45	-17	-61	2	-60	-6% -	18%	-7%	3%	-7%	1.7 1.8	2.1	0.2	2.0 Pass	Pass	Pass	Pass P	ass Pass
	110	Shopwhyke Road	8752_8652	369 44 414	13 42	7 379	55	434 13	447	10	11	20	0	20	3%	25%	5%	-2%	5%	0.5 1.6	1.0	0.1	0.9 Pass	Pass	Pass	Pass P	ass Pass
	60	Stane Street	8257_30021 8261 10004	243 22 265	115 2,08	3 219	136 2	2,029 123	2,152	-24	-4	-28	-2	-29 -	10% -	41% 18%	-10%	-9% -	3% 10%	1.6 0.9	1.3	0.7	1.4 Pass 1.8 Pass	Pass	Pass	Pass P Pass P	ass Pass
	108	Madgwick Lane	8166_7863	261 22 283	15 29	8 157	22	179 15	194	-104	0	-104	0	-104 ·	40%	0%	-37%	3% -	35%	7.2 0.0	6.9	0.1	6.6 Fail	Pass	Fail	Pass	ail Fail
	23	Lavant Road	4262_4264	398 53 450	17 46	7 409	57	465 17	482	11	4	15	0	15	3%	7%	3%	-1%	3%	0.5 0.5	0.7	0.0	0.7 Pass	Pass	Pass	Pass P	ass Pass
	12	A27 WB	1760_40134	1,542 87 1,629	121 1,75	0 1,549	187 1	L,736 154	1,890	7	100	107	33	140	0% 1	15%	7%	27%	8%	0.2 8.5	2.6	2.8	3.3 Pass	Pass	Pass	Pass P	ass Pass
	118	Fishbourne Road (West)	9001_4741	303 87 390	14 40	4 358	111	469 16	485	55	24	79	2	81	18%	27%	20%	14%	20%	3.0 2.4	3.8	0.5	3.8 Pass	Pass	Pass	Pass P	ass Pass
	52	A286 B2201 - Selsev Road	50263_4327	343 37 380 130 22 153	21 40 9 16	1 256 2 127	35	290 21 149 9	311 158	-87	-2	-90 -4	0	-90 -	-2%	-7%	-24%	-1% -	-2%	0.2 0.0	4.9	0.0	4.8 Pass 0.3 Pass	Pass	Pass Pass	Pass P Pass P	ass Pass
Outer SL_OUT	62	B2145	50264_6925	350 59 409	26 43	5 369	34	404 25	428	19	-25	-5	-1	-7	6% -	42%	-1%	-5%	-2%	1.0 3.6	0.3	0.3	0.3 Pass	Pass	Pass	Pass P	ass Pass
	151	Vinnetrow Road	10002_50266 9137_9236	84 14 98	9 10 53 70	7 166	37	203 10	213	82	23	105	1	106	98% 1	66% 1%	107%	9% -1%	99% 1%	7.3 4.6	8.6	0.3	8.4 Pass	Pass	Fail	Pass F	ail Pass
	109	Shopwhyke Road	8652_8752	230 21 251	6 25	7 222	21	243 6	248	-8	0	-8	0	-9	-4%	-1%	-3%	-5%	-3%	0.6 0.0	0.5	0.1	0.6 Pass	Pass	Pass	Pass P	ass Pass
	13	Arundel Road	10003_8258	1,060 113 1,173	123 1,29	7 1,056	117 1	L,173 124	1,296	-4	4	0	1	-1	0%	3%	0%	0%	0%	0.1 0.3	0.0	0.1	0.0 Pass	Pass	Pass	Pass P	ass Pass
	107	Madgwick Lane	7863 8166	277 59 336	i 21 35	7 212	48	260 8	268	-65	-11	-89	-13	-89	- 23%	19%	-41%	-61% -	42 <i>%</i> 25%	4.2 1.5	4.4	3.3	5.0 Pass	Pass	Pass	Pass P	ass Pass
	90	B2141	1106_4068		19	1 156	32	189 18	207					16					8%				1.1			Р	ass
North SL_SB	98 76	A286 A285	1077_4880	266 48 314	8 32	2 283 1 152	50 18	333 10 171 4	342	-22	-4	-25	-1	-26	6% 12% -	4% 17%	-13%	19% -20% -	6% 13%	1.0 0.3	1.0	0.5	1.1 Pass	Pass	Pass	Pass P Pass P	ass Pass
	190	A29	50136_50029	458 79 537	17 55	4 487	83	570 19	588	29	4	33	2	34	6%	5%	6%	9%	6%	1.3 0.4	1.4	0.4	1.4 Pass	Pass	Pass	Pass P	ass Pass
	18	Arundel Road	50018_50063	1,351 71 1,422	109 1,53	1 1,349	71 1	L,421 108	1,529	-2	0	-1	-1	-2	0%	0%	0%	-1%	0%	0.0 0.0	0.0	0.1	0.1 Pass	Pass	Pass	Pass P	ass Pass
	97	A286	4880_1077	241 44 285	7 29	2 269	53	322 7	329	28	9	37	0	37	12%	21%	13%	2%	13%	1.8 1.3	2.1	0.0	2.1 Pass	Pass	Pass	Pass P	ass Pass
North SL_NB	75	A285	6973_1656	172 33 206	9 21	5 158	32	190 9	200	-14	-1	-16	0	-15	-8%	-3%	-8%	1%	-7%	1.1 0.2	1.1	0.0	1.1 Pass	Pass	Pass	Pass P	ass Pass
	189	AZ9 Arundel Road	50029_50136	895 70 966	123 1,08	9 860	70	930 120	1,051	-35	2	-36	-3	-38	-4%	2%	-4%	-1%	-4%	1.5 0.2	1.4	0.1	1.4 Pass 1.2 Pass	Pass	Pass	Pass P Pass P	ass Pass
	93	Pagham Road	50139_50173	329 54 383	21 40	4 327	53	380 21	401	-2	-1	-3	0	-3	-1%	-1%	-1%	0%	-1%	0.1 0.1	0.1	0.0	0.1 Pass	Pass	Pass	Pass P	ass Pass
Bognor Regis SL SB	64 92	A259 Lidsey Road	50149_50143	525 85 610	44 65	4 524	86	610 44	654	-1	-5	-18	0	-17	0%	1%	0%	0%	0%	0.0 0.1	0.0	0.0	0.0 Pass	Pass	Pass	Pass P	ass Pass
202101 10210 01_00	80	Church Lane	50164_50021	131 15 146	7 15	3 145	21	166 7	174	14	6	20	0	21	11%	42%	14%	3%	13%	1.2 1.5	1.6	0.1	1.6 Pass	Pass	Pass	Pass P	ass Pass
	82	Grevatt's Lane	50110_50021	429 64 493	24 51	7 488	63	551 24	575	59	-1	58	0	58	14%	-1%	12%	0%	11%	2.7 0.1	2.5	0.0	2.5 Pass	Pass	Pass	Pass P	ass Pass
	63	A259	50173_50139	885 120 1,004	43 1,04	9 842 7 861	114	918 18	1,025	-24	-6	-28	-1	-22	-3%	-5%	-3%	-0%	-2%	0.8 0.5	0.9	0.5	0.7 Pass	Pass	Pass	Pass P	ass Pass
Bognor Regis SL_NB	91	Lidsey Road	50272_50274	394 82 477	16 49	3 393	79	472 16	487	-1	-3	-5	0	-6	0%	-4%	-1%	-2%	-1%	0.1 0.4	0.2	0.1	0.3 Pass	Pass	Pass	Pass P	ass Pass
	79 81	Church Lane Grevatt's Lane	50021_50164 50021_50110	346 28 374 712 73 785	6 38 20 80	0 339 5 715	28	367 6 788 20	374	-7	0	-7	0	-6 3	-2%	0% 1%	-2%	5% 1%	-2% 0%	0.4 0.0	0.3	0.1	0.3 Pass 0.1 Pass	Pass	Pass	Pass P Pass P	ass Pass
Arun SL FB	99	Bridge Road	50109_50204		1,13	3 989	122 1	L,111 46	1,157	-		-		24					2%				0.7			Р	ass
/////////	22	Arundel Relief Road	50192_50193	968 91 1,059	130 1,18	9 918	91 1	L,009 128	1,137	-50	0	-50	-2	-52	-5%	0%	-5%	-1%	-4%	1.6 0.0	1.6	0.2	1.5 Pass	Pass	Pass	Pass P	ass Pass
Arun SL_WB	21	Arundel Relief Road	50193_50192	1,135 77 1,212	108 1,32	0 1,144	78 1	923 87 L,222 109	1,331	9	1	10	1	112	1%	2%	1%	1%	10%	0.3 0.2	0.3	0.1	0.3 Pass	Pass	Pass	Pass P	ass Pass
SB	507	on link A3(M) southbound between J3 and J4	40049_40111	2567 457 3,023	257 3,28	0 1,784	341 2	2,125 196	2,321	-783	-116	-899	-60	-959 -	31% -	25%	-30%	-23% -	29%	16.8 5.8	17.7	4.0	18.1 Fail	Fail	Fail	Pass F	ail Fail
SB WB	508 504	A27 WB East of A3(M)	40050_40111 40023 40004	2,833 504 3,338	283 3.62	8 740 1 2.399	132 229 2	8/2 /4	946 2.774	-2 -435	-276	-2 -710	-136	-2 -847 ·	15% -	0% 55%	-21%	-48% -	0% 23%	8.5 14.4	13.0	9.3	15.0 Fail	Fail	Fail	Fail F	ass Pass
EB	500	on link A27 eastbound exit for A3(M)	40012_40014	2,141 381 2,522	214 2,73	7 1,655	379 2	2,034 173	2,207	-486	-2	-488	-41	-529	23%	0%	-19%	-19% -	19%	11.2 0.1	10.2	3.0	10.6 Fail	Pass	Fail	Pass	Fail Fail
EB	501	on link A27 eastbound within the A3(M) junction	40012_40032	2,067 368 2,435	207 2,64	2 2,058	372 2	2,430 207	2,637	-9	4	-5	0	-5	0%	1%	0%	0%	0%	0.2 0.2	0.1	0.0	0.1 Pass	Pass	Pass	Pass P	ass Pass
NB	510	on link A3(M) northbound within J5	40014_40116	1,709 304 2,014	171 2,18	4 1,504 5 469	9	478 1	479	-1,240	-295	-1,536	-170 -1	L,705 ·	73% -	97%	-76%	-99% -	04 <i>%</i> 78%	37.6 23.6	43.5	18.3	46.7 Fail	Fail	Fail	Fail F	Fail Fail
EB	503	A27 EB East of A3(M)	40032_40036	2,749 489 3,238	275 3,51	3 2,712	411 3	3,123 209	3,332	-37	-78	-115	-66	-181	-1% -	16%	-4%	-24%	-5%	0.7 3.7	2.0	4.3	3.1 Pass	Pass	Pass	Pass P	ass Pass
EB EB	502 522	A27 WB West of A3(M) Chichester By-Pass	40003_1598 9001 11001	2,596 462 3,058	259 3,31 116 1.43	2,377	417 Z	2,794 252 L.317 132	3,046	-218 -19	-45 20	-264	-7	-2/1	-8% -	10%	-9% 0%	-3% 14%	-8% 1%	4.4 2.2 0.6 1.4	4.9	1.4	4.8 Pass 0.5 Pass	Pass	Pass Pass	Pass P Pass P	ass Pass
WB	523	Chichester By-Pass	11001_9001	1,613 284 1,897	168 2,06	5 1,641	245 1	L,886 171	2,057	28	-40	-11	4	-8	2% -	14%	-1%	2%	0%	0.7 2.4	0.3	0.3	0.2 Pass	Pass	Pass	Pass P	ass Pass
EB	524	Chichester By-Pass	11002_11003	1,117 197 1,314	116 1,43	1 1,048	211 1	L,259 127	1,386	-69	14	-55	11	-44	-6%	7% 1.2%	-4%	10%	-3%	2.1 1.0	1.5	1.0	1.2 Pass	Pass	Pass	Pass P	ass Pass
EB	530	Fisbourne Road (West)	30001_4741	422 84 507	25 53	2 490	81	571 25	596	-55	-33	-00	-2	64	16%	-4%	13%	0%	12%	3.1 0.4	2.1	0.0	2.7 Pass	Pass	Pass	Pass P	ass Pass
WB	531	Fisbourne Road (West)	4741_30001	426 85 511	25 53	6 443	106	550 25	575	18	21	39	0	39	4%	25%	8%	0%	7%	0.9 2.2	1.7	0.0	1.6 Pass	Pass	Pass	Pass P	ass Pass
NB SB	534 535	Stockbridge Road Stockbridge Road	5740_5840 5840 5740	486 97 584 304 61 364	29 61	3 346 3 234	49 43	395 14 277 22	410 299	-140 -70	-48 -17	-188 -87	-15 4	-203 -	29% -	50% 29%	-32% -24%	-50% - 24% -	33% 22%	6.9 5.6 4.3 2.4	8.5 4.9	3.1	9.0 Fail 4.5 Pass	Pass	Fail Pass	Pass P	ali Fail Pass Pass
EB	546	Quarry Lane	7041_7640	233 47 280	14 29	4 189	40	228 14	243	-44	-7	-51	1	-51	19% -	15%	-18%	4% -	17%	3.1 1.1	3.2	0.2	3.1 Pass	Pass	Pass	Pass P	ass Pass
WB	547	Quarry Lane	7640_7041	194 39 232	12 24	4 193	38	231 12	243	-1	0	-1	0	-1	0%	-1%	0%	3%	0%	0.1 0.0	0.1	0.1	0.1 Pass	Pass	Pass	Pass P	ass Pass
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																										Fa	<mark>il 8</mark>
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		TOTAL		
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														IP CA	LIBRATION												-			
Screenline / Dir	Site Ref	Road	SATURN Link	Car	LGV	bserved Lights	HGV	Total	Car	N LGV	lodelled Lights HGV	Total	Car	LGV	Diff Lights HGV	Total	Car		6 Diff ights HGV	Total	Car	LGV	GEH ights HGV	Total	Car	LGV	Flows	HGV Total	We Car	LGV
	30	Broyle Road	6158_6157	411	38	449	18	467	414	39	453 17	470	3	1	4 -	L 3	1%	2%	1% -59	% 1%	0.2	0.2	0.2 0.2	0.2	Pass	Pass	Pass	Pass Pass	Pass	Pass
	32	St Paul's Road	5854_5953	372	34	406	14	420	355	34	389 14	403	-17	0	-17	-17	-4%	0%	-4% -39	% -4%	0.9	0.0	0.8 0.1	0.8	Pass	Pass	Pass	Pass Pass	Pass	Pass
	43	Westgate Via Pavonna	5448_5648	157	29	163	10	167	178	25	186 4	511	21	2	23	24	14%	31%	14% 99	% 14%	1.6	0.7	1.8 0.2	1.8	Pass	Pass	Pass	Pass Pass	Pass	Pass
	35	Terminus Road	5043_50250	181	25	206	16	222	182	30	212 16	228	1	5	6	0 6	0%	21%	3% 05	% 3%	0.1	1.0	0.4 0.0	0.4	Pass	Pass	Pass	Pass Pass	Pass	Pass
Inner SL IN	37	Stockbridge Road	5739_5839	278	37	314	13	327	268	53	320 21	341	-10	16	6	3 14	-4%	42%	2% 62	% 4%	0.6	2.3	0.3 2.0	0.8	Pass	Pass	Pass	Pass Pass	Pass	Pass
	25	Whyke Road	6936_7040	306	38	344	20	364	322	39	361 20	381	16	1	17	17	5%	2%	5% 09	% 5%	0.9	0.1	0.9 0.0	0.9	Pass	Pass	Pass	Pass Pass	Pass	Pass
	40	Oving Road	7952 7750	433	47	480 207	17	211	143	17	497 17	165	-46	-1	-47	-46	-24%	-4%	-23% 16	% 4% % -22%	3.6	0.8	3.4 0.3	3.4	Pass	Pass	Pass	Pass Pass	Pass Pass	Pass
	46	St Pancras	7555_7253	771	39	810	21	831	789	37	826 21	847	18	-2	16	0 16	2%	-4%	2% 09	% 2%	0.6	0.3	0.6 0.0	0.6	Pass	Pass	Pass	Pass Pass	Pass	Pass
	105	Barnfield Drive	7658_7061	227	18	245	6	251	226	17	243 6	249	-1	-1	-2) -2	-1%	-4%	-1% 19	% -1%	0.1	0.2	0.1 0.0	0.1	Pass	Pass	Pass	Pass Pass	Pass	Pass
	28	College Lane	6358_6453	122	14	137	8	145	122	14	136 8	144	0	0	-1) -1	0%	0%	-1% -29	% -1%	0.0	0.0	0.1 0.1	0.1	Pass	Pass	Pass	Pass Pass	Pass	Pass
	31	St Paul's Road	5953 5854	354	23	413	10	424	384	30	414 11	425	0	1	1) 1	0%	4%	0% -1	% 0%	0.0	0.0	0.0 0.0	0.0	Pass	Pass	Pass	Pass Pass	Pass	Pass
	44	Westgate	5648_5448	146	13	158	4	162	151	14	165 4	169	5	1	7) 7	3%	7%	4% -29	6 4%	0.4	0.2	0.5 0.0	0.5	Pass	Pass	Pass	Pass Pass	Pass	Pass
	34	Via Ravenna	5544_5344	508	35	543	25	568	527	33	560 25	585	19	-2	17	17	4%	-4%	3% 19	% 3%	0.8	0.3	0.7 0.0	0.7	Pass	Pass	Pass	Pass Pass	Pass	Pass
	36	Terminus Road	50250_5043	153	35	188	13	201	154	37	191 13	204	1	19	3	3	1%	5%	2% 0	% 2%	0.1	0.3	0.2 0.0	0.2	Pass	Pass	Pass	Pass Pass	Pass	Pass
Inner SL_OUT	26	Whyke Road	7040 6936	264	31	295	18	313	305	32	337 18	355	-22	10	42	2 42	-6%	4%	14% -19	% 13%	2.4	0.2	2.4 0.1	2.3	Pass	Pass	Pass	Pass Pass	Pass	Pass
	39	Bognor Road	7444_7742	525	63	588	18	606	458	56	514 15	529	-67	-7	-74 -	3 -77	-13%	-11%	-13% -159	-13%	3.0	0.9	3.2 0.7	3.2	Pass	Pass	Pass	Pass Pass	Pass	Pass
	41	Oving Road	7750_7952	222	15	237	5	242	257	18	275 7	282	35	3	38	2 40	16%	20%	16% 359	% 16%	2.3	0.7	2.4 0.7	2.5	Pass	Pass	Pass	Pass Pass	Pass	Pass
	45	St Pancras Barafield Drive	7253_7555	739	48	788	23	811	720	50	770 23	793	-19	2	-18	-18	-3%	4%	-2% 19	% -2%	0.7	0.2	0.6 0.1	0.6	Pass	Pass	Pass	Pass Pass	Pass	Pass
	27	College Lane	6453 6358	155	18	173	10	183	155	18	173 10	183	0	0	0	0 0	0%	0%	0% 09	% <u>1</u> %	0.0	0.0	0.0 0.0	0.0	Pass	Pass	Pass	Pass Pass	Pass	Pass
	24	Lavant Road	4264_4262	359	47	406	15	421	323	49	372 15	387	-36	2	-34	-34	-10%	4%	-8% 19	~ -8%	2.0	0.3	1.7 0.0	1.7	Pass	Pass	Pass	Pass Pass	Pass	Pass
	95	B2178	40138_50255					297	249	33	282 13	294				-3				-1%				0.1				Pass		
	11	A27 EB Fishbourne Road (West)	40124_1760	1,289	115	1,405	187	1,592	1,256	155	527 19	1,564	-33	40	63 -34	1 -28	-3%	35%	0% -18	% -2% % 13%	0.9	3.4	2.8 0.1	2.8	Pass	Pass	Pass	Pass Pass	Pass	Pass
	51	A286	4327 50263	432	53	404	23	508	387	53	440 23	463	-45	0	-45	-45	-10%	-1%	-9% -29	% <u>-</u> 9%	2.2	0.1	2.1 0.1	2.0	Pass	Pass	Pass	Pass Pass	Pass	Pass
	49	B2201 - Selsey Road	11013_50261	160	24	184	10	194	157	26	183 10	193	-3	2	-1) -1	-2%	9%	-1% 09	-1%	0.3	0.4	0.1 0.0	0.1	Pass	Pass	Pass	Pass Pass	Pass	Pass
Outer SL_IN	61	B2145	6925_50264	454	51	505	28	533	411	47	458 27	485	-43	-4	-47 -	L -48	-9%	-8%	-9% -49	% -9%	2.1	0.6	2.1 0.2	2.1	Pass	Pass	Pass	Pass Pass	Pass	Pass
	152	Vinnetrow Road	50266_10002 0226_0125	153	30	183	10	193	169	31	200 10	210	16	1	17	17	11%	3%	9% -19	% 9% % 13%	1.3	0.1	3.7 0.0	1.2	Pass	Pass	Pass	Pass Pass	Pass	Pass
	110	Shopwhyke Road	8752 8652	192	23	215	6	221	143	22	164 5	170	-49	-2	-51 -	L -51	-26%	-7%	-24% -109	% -23%	3.8	0.3	3.7 0.3	3.7	Pass	Pass	Pass	Pass Pass	Pass	Pass
	14	Arundel Road		1,258	102	1,360	150	1,510	1,253	99	1,353 150	1,503	-5	-3	-7) -7	0%	-2%	-1% 05	% 0%	0.1	0.3	0.2 0.0	0.2	Pass	Pass	Pass	Pass Pass	Pass	Pass
	60	Stane Street	8261_10004	253	23	276	18	294	261	24	284 18	302	8	1	8	8	3%	3%	3% -19	% 3%	0.5	0.1	0.5 0.0	0.5	Pass	Pass	Pass	Pass Pass	Pass	Pass
	108	Madgwick Lane	8166_7863	231	37	268	17	285	357	38	229 18	247	-39	1	-39	L -38	-17%	-1%	-14% 35	% -13% % 3%	2.7	0.1	2.5 0.1	2.3	Pass	Pass	Pass	Pass Pass	Pass	Pass
	96	B2178	50255 40138	340	40	552	14	324	256	27	283 12	295	11	0	10	-29	370	-176	376 0.	-9%	0.0	0.1	0.5 0.0	1.6	rass	rass	rass	Pass	rass	F 055
	12	A27 WB	1760_40134	1,186	117	1,303	179	1,481	1,254	164	1,418 152	1,570	68	47	115 -2	7 89	6%	40%	9% -15	6%	1.9	4.0	3.1 2.1	2.3	Pass	Pass	Pass	Pass Pass	Pass	Pass
	118	Fishbourne Road (West)	9001_4741	423	72	495	20	515	433	75	508 20	528	10	3	13	13	2%	4%	3% 05	% 2%	0.5	0.3	0.6 0.0	0.6	Pass	Pass	Pass	Pass Pass	Pass	Pass
	52	A286 B2201 - Selsev Road	50263_4327	160	39	548	29	188	170	21	548 27 191 7	5/5	-b 10	5	10 -	2 -2	-1%	-1%	0% -81 5% 69	% 0% % 5%	0.3	0.8	0.0 0.4	0.1	Pass	Pass	Pass	Pass Pass	Pass	Pass
Outer SL_OUT	62	B2145	50264_6925	471	53	524	30	554	473	51	523 32	555	2	-2	-1	2 1	0%	-4%	0% 69	% 0%	0.1	0.3	0.0 0.3	0.0	Pass	Pass	Pass	Pass Pass	Pass	Pass
_	151	Vinnetrow Road	10002_50266	227	38	265	11	276	213	36	249 9	258	-14	-2	-16 -	-18	-6%	-6%	-6% -199	% -7%	0.9	0.4	1.0 0.7	1.1	Pass	Pass	Pass	Pass Pass	Pass	Pass
	47	Bognor Road	9137_9236	634	91	725	59	784	633	91	724 67	791	-1	0	-1	3 7	0%	0%	0% 139	6 1%	0.0	0.0	0.0 1.0	0.2	Pass	Pass	Pass	Pass Pass	Pass	Pass
	109	Arundel Road	8652_8752	1.133	25 96	246	133	1.362	1.139	25 96	256 9	1.356	11	0	10 .	2 -6	5%	1%	4% 43	% 5% % 0%	0.7	0.1	0.6 1.0	0.8	Pass	Pass	Pass	Pass Pass	Pass Pass	Pass Pass
	59	Stane Street	10004_8261	247	25	272	23	295	253	26	279 20	299	6	1	7 -	3 4	2%	6%	3% -129	% 1%	0.4	0.3	0.4 0.6	6 0.2	Pass	Pass	Pass	Pass Pass	Pass	Pass
	107	Madgwick Lane	7863_8166	224	33	257	15	272	154	31	185 11	196	-70	-2	-72 -	-76	-31%	-6%	-28% -299	~28%	5.1	0.3	4.8 1.2	5.0	Pass	Pass	Pass	Pass Pass	Pass	Pass
	90	B2141	1106_4068	240	44	204	7	131	59	13	72 14	86	11	2	12	-45	49/	69/	E9/ 100	-34%	0.7	0.4	08 22	4.3	Dass	Dass	Dage	Pass Pass	Doce	Dace
North SL_SB	98 76	A285	1656 6973	240	28	284	9	291	198	28	297 15	236	11	3	13	18	4%	6% 0%	5% 109 8% 69	% 7% % 8%	1.3	0.4	1.2 0.2	1.2	Pass	Pass	Pass	Pass Pass	Pass Pass	Pass
	190	A29	50136_50029	304	78	382	19	401	317	77	394 19	413	13	-1	12	12	4%	-1%	3% 19	% 3%	0.7	0.1	0.6 0.0	0.6	Pass	Pass	Pass	Pass Pass	Pass	Pass
	18	Arundel Road	50018_50063	881	77	958	127	1,085	849	76	926 126	1,052	-32	-1	-32 -	-33	-4%	-1%	-3% -1	-3%	1.1	0.1	1.1 0.1	1.0	Pass	Pass	Pass	Pass Pass	Pass	Pass
	89	B2141	4068_1106	106	25	221	6	113	206	9	53 9 220 0	62	10	- 2	0	-51	E 9/	7%	2% 54	-45%	0.7	0.4	05 13	5.4	Pace	Pace	Pace	Pass Pass	Pace	Dace
North SL NB	75	A285	6973 1656	190	21	171	6	177	141	22	163 6	169	-8	-2	-8) -8	-5%	3%	-5% 19	% -5%	0.7	0.4	0.7 0.0	0.6	Pass	Pass	Pass	Pass Pass	Pass	Pass
-	189	A29	50029_50136	293	69	362	15	377	312	69	381 15	397	19	0	19	20	7%	0%	5% 19	% 5%	1.1	0.0	1.0 0.0	1.0	Pass	Pass	Pass	Pass Pass	Pass	Pass
	17	Arundel Road	50063_50018	868	73	941	119	1,060	820	72	892 118	1,010	-48	-1	-49 -	L -50	-6%	-1%	-5% -19	% -5%	1.7	0.1	1.6 0.1	1.5	Pass	Pass	Pass	Pass Pass	Pass	Pass
	93	Pagham Road	50139_50173	461	55 80	517	17	534	439	55 81	494 18	512 816	-22	0	-23	-22	-5%	0%	-4% 55	% -4% % 3%	1.0	0.0	1.0 0.2	0.9	Pass	Pass	Pass	Pass Pass	Pass	Pass
Bognor Regis SL_SB	92	Lidsey Road	50274_50272	332	69	401	14	415	321	66	387 14	401	-11	-3	-14) -14	-3%	-4%	-3% -2	% -3%	0.6	0.4	0.7 0.1	0.7	Pass	Pass	Pass	Pass Pass	Pass	Pass
	80	Church Lane	50164_50021	144	19	163	7	170	149	21	170 7	177	5	2	7) 7	4%	9%	4% 39	% 4%	0.5	0.4	0.6 0.1	0.6	Pass	Pass	Pass	Pass Pass	Pass	Pass
	82	Grevatt's Lane	50110_50021	536	67	602	19	621	538	68	606 19	625	2	1	4) 4	0%	1%	1% 29	% 1%	0.1	0.1	0.1 0.1	0.2	Pass	Pass	Pass	Pass Pass	Pass	Pass
	54 63	A259	50173_50139	638	82	720	50	770	676	48 86	763 51	813	-31	-5	43	L -50	-7%	-7%	-7% -5 6% 19	~ -7% % 6%	1.5	0.5	1.6 0.1	1.5	Pass	Pass	Pass	Pass Pass	Pass	Pass
Bognor Regis SL_NB	91	Lidsey Road	50272_50274	335	48	383	13	396	320	47	367 13	380	-15	-1	-16) -16	-5%	-2%	-4% -19	% -4%	0.9	0.1	0.8 0.0	0.8	Pass	Pass	Pass	Pass Pass	Pass	Pass
	79	Church Lane	50021_50164	147	20	168	7	175	142	20	162 7	169	-5	0	-6) -6	-3%	-2%	-4% -2	-4%	0.4	0.1	0.5 0.1	0.5	Pass	Pass	Pass	Pass Pass	Pass	Pass
	81	Grevatt's Lane	50021_50110	484	65	549	21	570	495	66 119	560 22 885 61	582	11	1	11	12	2%	1%	2% 39	% 2%	0.5	0.1	0.5 0.1	0.5	Pass	Pass	Pass	Pass Pass	Pass	Pass
Arun SL_EB	22	Arundel Relief Road	50192 50193	950	87	1,037	124	1,161	891	110	978 122	1.100	-59	-1	-59 -	-43	-6%	-1%	-6% -19	-4%	1.9	0.1	1.9 0.1	1.4	Pass	Pass	Pass	Pass Pass	Pass	Pass
Arun SL W/R	100	Bridge Road	50204_50109					1,022	797	90	887 72	959				-63				-6%	-			2.0				Pass		
	21	Arundel Relief Road	50193_50192	930	83	1,014	125	1,139	899	82	981 124	1,106	-31	-1	-33 -	L -33	-3%	-1%	-3% 09	% -3%	1.0	0.1	1.0 0.1	1.0	Pass	Pass	Pass	Pass Pass	Pass	Pass
SB	507	3(M) southbound between	40049_40111	1,546	254	1,800	138	1,938	1,528	253	1,782 138	1,920	-17	-1	-18 -	L -19	-1%	0%	-1% 09	% -1%	0.4	0.1	0.4 0.1	0.4	Pass	Pass	Pass	Pass Pass	Pass	Pass
WB	508	A27 WB East of A3(M)	40030_40111	2,063	340	2,403	185	2,587	2,021	295	2,315 186	2,501	-42	-45	-87	L -86	-2%	-13%	-4% 19	~ -1% % -3%	0.0	2.5	1.8 0.1	1.7	Pass	Pass	Pass	Pass Pass	Pass	Pass
EB	500	nk A27 eastbound exit for A	40012_40014	1,663	274	1,937	149	2,086	1,538	274	1,812 128	1,940	-125	0	-125 -2	l -146	-8%	0%	-6% -14	% -7%	3.1	0.0	2.9 1.8	3 3.2	Pass	Pass	Pass	Pass Pass	Pass	Pass
EB	501	7 eastbound within the A3(N	40012_40032	1,536	253	1,789	137	1,926	1,505	252	1,757 136	1,893	-31	-1	-32 -	-34	-2%	0%	-2% -19	% -2%	0.8	0.1	0.8 0.1	0.8	Pass	Pass	Pass	Pass Pass	Pass	Pass
NB	509	Ink A3(M) J5 northbound ac	40014_40116	663	221	772	125	832	1,424	117	1,541 90	1,631	761	8	768 3	799	115%	-36%	99% 519	% 96%	23.5	0.7	22.6 3.5	22.8	Fail	Pass	Fail	Pass Fail	Fail	Pass
EB	503	A27 EB East of A3(M)	40032 40036	2,112	348	2,460	189	2,649	2,238	348	2,585 189	2.774	-690	-84	126	, -1,059) 125	-03%	-30%	5% 0	~ -00% % 5%	20.8	0.0	2.5 0.0	2.4	Pass	Pass	Pass	Pass Pass	Pass	Pass
WB	502	A27 WB West of A3(M)	40003_1598	1,656	273	1,929	148	2,077	2,142	282	2,424 177	2,601	486	10	495 2	524	29%	4%	26% 19	% 25%	11.1	0.6	10.6 2.3	10.8	Fail	Pass	Fail	Pass Fail	Fail	Pass
EB	522	Chichester By-Pass	9001_11001	1,211	206	1,417	115	1,532	1,231	208	1,439 115	1,553	20	2	22	21	2%	1%	2% 05	% 1%	0.6	0.1	0.6 0.0	0.5	Pass	Pass	Pass	Pass Pass	Pass	Pass
WB FR	523 524	Chichester By-Pass	11001_9001	1,269	216	1,485	120	1,605	1,229	227	1,456 120	1,576	-39	11	-29	-29	-3%	5% 0%	-2% 0	% -2%	1.1	0.7	0.7 0.0	0.7	Pass	Pass	Pass	Pass Pass	Pass	Pass
WB	525	Chichester By-Pass	6936 11003	1,202	205	1,407	120	1,521	1,227	222	1,449 120	1,505	-17	7	-10	, -16 L -27	-1%	3%	-1/0	~ -1% % -2%	1.0	0.1	0.7 0.1	0.4	Pass	Pass	Pass	Pass Pass	Pass	Pass
EB	530	Fisbourne Road (West)	30001_4741	375	75	450	25	474	396	75	471 26	497	21	1	22	1 23	6%	1%	5% 49	% 5%	1.1	0.1	1.0 0.2	1.0	Pass	Pass	Pass	Pass Pass	Pass	Pass
WB	531	Fisbourne Road (West)	4741_30001	380	76	456	25	481	425	77	502 25	527	44	1	46	46	12%	1%	10% 19	% 9%	2.2	0.1	2.1 0.0	2.0	Pass	Pass	Pass	Pass Pass	Pass	Pass
NB SP	534	Stockbridge Road	5740_5840	317	63	379	21	400	267	53	320 21	341	-49	-10	-59	J -59	-16%	-15%	-16% 19	% -15%	2.9	1.3	3.2 0.1	3.1	Pass	Pass	Pass	Pass Pass	Pass	Pass
EB	535	Quarry Lane	7041 7640	150	30	180	10	410	127	28	155 10	415	-23	-12	-26	-26	-15%	-19%	-14% -39	~ 0% ~ 14%	2.0	0.4	2.0 0.1	1.9	Pass	Pass	Pass	Pass Pass	Pass	Pass
WB	547	Quarry Lane	7640_7041	152	30	182	10	192	117	29	146 10	156	-35	-1	-36	-36	-23%	-3%	-20% 35	6 -19%	3.0	0.1	2.8 0.1	2.7	Pass	Pass	Pass	Pass Pass	Pass	Pass



i	terion Gl	EH or FLC	w
	Lights	HGV	Total
	Pass	Pass	Pass
	Pass	Pass	Pass
_	Pass	Pass	Pass
	Pass	Pass	Pass
_	Pass	Pass	Pass
	Pass	Pass	Pass
			Pass
	Pass	Pass	Pass
2	Pass	Pass	Pass
	Pass	Pass	Pass
2	Pass	Pass	Pass
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2	Pass	Pass	Pass
	1 433	1 435	Pass
	Pass	Pass	Pass
	Dage	Dage	Pass
	Pass	Pass	Pass
j	Pass	Pass	Pass
	Pass	Pass	Pass
	Pass	Pass	Pass
	Pass	Pass	Pass
1	r'd\$5	r'd55	Pass
	Pass	Pass	Pass
			Pass
	Pass	Pass	Pass
	Pass	Pass	Pass
2	Pass	Pass	Pass
	Pass	Pass	Pass
	Pass	Pass	Pass
	Fail	Pass	Fail
	Fail	Pass	Fail
1	Pass	Pass	Pass
1	Pass	Pass	Pass
2	Pass	Pass	Pass
j	Pass	Pass	Pass
	Pass	Pass	Pass
	Pass	Pass	Pass
2	Pass	Pass	Pass
2	Pass	Pass	Pass
2	Pass	Pass	Pass
	Pass	Pass	Pass
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	TOTAL		
D	R Hourly	flows	
	Lights	HGV	Total
	84	87	90
	3	0	3
	97%	100%	97%

											PM CA	LIBRA	TION																	
Screenline / Dir	Site Ref	Road	SATURN Link	Car IG	Observ Ulights	ed HGV	Total	Car		delled	GV Tot	al I	Car L	D GV Lie	Diff abts HC	SV T	otal (Car I	SV Lia	oiff hts HGV	Total	Car IG	GE V Light	H HG	V Tota	l Car	IGV	Flows		Watal Car
	30	Broyle Road	6158 6157	434 1	8 452		459	450	20	470	7 4	.ai 76	16	2 Lig	18	0	17	4%	10%	4% -39	6 4%	0.8 0	4 0	.8 0.	1 0.	8 Pass	Pass	Pass	Pass P	ass Pass
	32	St Paul's Road	5854 5953	378 2	0 398	3 6	404	369	20	389	6 3	95	-9	0	-9	0	-9	-3%	1%	-2% 19	6 -2%	0.5 0	.0 0	.5 0.	.0 0.	5 Pass	Pass	Pass	Pass P	ass Pass
	43	Westgate		184	3 188	3 1	189	88	4	93	1	94	-96	1	-95	0	-95 -	52%	44% -5	1% -13%	6 -51%	8.2 0	.7 8	.0 0.	.1 8.	0 Pass	Pass	Pass	Pass P	ass Pass
	33	Via Ravenna	5344_5544	551 2	5 576	5 8	584	521	30	551	7 5	58	-30	5	-25	-1	-26	-5%	19%	-4% -11%	-4%	1.3 0	.9 1	.1 0.	.3 1.	1 Pass	Pass	Pass	Pass P	ass Pass
	35	Terminus Road	5043_50250	162 1	.1 173	3 7	180	174	12	187	7 1	94	12	1	14	0	14	8%	11%	8% 39	6 8%	1.0 0	.4 1	.0 0.	.1 1.	0 Pass	Pass	Pass	Pass P	ass Pass
Inner SL_IN	37	Stockbridge Road	5739_5839	299	5 334	1 10	344	297	34	330	10 3	40	-2	-1	-4	0	-4	-1%	-4%	-1% -2%	6 -1%	0.1 0	.2 0	.2 0.	1 0.	2 Pass	Pass	Pass	Pass P	ass Pass
	25	Bogpor Road	7742 7444	401 3	9 248	2 12	259	521	18	200	12 5	72	-41	-1	-42	0	-42 -	6%	-3% -1	6% 29	6 -15%	1.2 0	.1 2	.8 0.	1 Z.	7 Pass	Pass	Pass	Pass P Pass P	ass Pass
	40	Oving Road	7952 7750	227 1	7 244	1 3	247	220	16	236	4 2	40	-7	-1	-8	1	-7	-3%	-6%	3% 379	6 -3%	0.5 0	.2 0	.5 0.	.6 0.	4 Pass	Pass	Pass	Pass P	ass Pass
	46	St Pancras	7555 7253	764 2	8 792	2 15	807	779	40	819	14 8	33	15	12	27	-1	26	2%	43%	3% -9%	6 3%	0.6 2	.0 1	.0 0.	.4 0.	9 Pass	Pass	Pass	Pass P	ass Pass
	105	Barnfield Drive	7658_7061	257 2	3 280) 4	284	230	23	253	4 2	57	-27	0	-27	0	-27 -	11%	2%	-9% -6%	6 -9%	1.7 0	.1 1	.6 0.	1 1.	6 Pass	Pass	Pass	Pass P	ass Pass
	28	College Lane	6358_6453	133 1	.0 142	2 8	150	134	10	144	8 1	52	1	0	2	0	2	1%	3%	1% 49	6 2%	0.1 0	.1 0	.2 0.	.1 0.	2 Pass	Pass	Pass	Pass P	ass Pass
	29	Broyle Road	6157_6158	477 1	.2 489	7	496	476	15	491	7 4	98	-1	3	2	0	2	0%	25%	0% -2%	6 0%	0.0 0	.8 0	.1 0.	.1 0.	1 Pass	Pass	Pass	Pass P	ass Pass
	31	St Paul's Road	5953_5854	637 2	1 657	6	663	619	18	637	6 6	43	-18	-3	-20	0	-20	-3%	-15%	-3% 19	6 -3%	0.7 0	.7 0	.8 0.	.0 0.	8 Pass	Pass	Pass	Pass P	ass Pass
	44	Westgate Via Povonno	5648_5448	334	8 341	1 3	344	424	27	451	3 4	54	90	19	110	0	110	27%	232% 3	2% -2%	6 32%	4.6 4	.5 5	.5 0.	.0 5.	5 Pass	Pass	Fail	Pass P	all Pass
	34	Via Ravenna Torminus Road	5544_5344	262	2 54		202	220	19	249	15 5	56	-29	-3	-32	-2	-34	-0% 1.2%	-14%	2% 20	6 -0%	2.0 1	./ 1	.4 0.	.5 I. 1 2	2 Pass	Pass	Pass	Pass P Pass P	ass Pass
	38	Stockbridge Road	5740 5839	448 1	4 462	2 11	473	398	36	434	11 4	45	-52	22	-28	0	-28 -	12/0	155%	-6% -29	6 -1370	2.0 1	4 1	3 0	1 1	2 Pass	Pass	Pass	Pass P	ass Pass
Inner SL_OUT	26	Whyke Road	7040 6936	404	4 419	9 12	431	423	24	446	12 4	58	19	10	27	0	27	5%	69%	7% 09	6 6%	0.9 2	.2 1	.3 0.	.0 1.	3 Pass	Pass	Pass	Pass P	ass Pass
	39	Bognor Road	7444_7742	619	6 654	1 12	666	537	35	573	12 5	85	-82	-1	-81	0	-81 -	13%	-2% -1	.2% -1%	6 -12%	3.4 0	.1 3	.3 0.	.0 3.	3 Pass	Pass	Pass	Pass P	ass Pass
	41	Oving Road	7750_7952	395 1	.6 411	L 2	413	458	19	478	2 4	80	63	3	67	0	67	16%	22% 1	.6% -7%	6 16%	3.1 0	.8 3	.2 0.	.1 3.	2 Pass	Pass	Pass	Pass P	ass Pass
	45	St Pancras	7253_7555	895 2	9 924	10	934	988	45 1	,032	10 1,0	43	93	16	108	0	109	10%	54% 1	.2% 49	6 12%	3.0 2	.6 3	.5 0.	.1 3.	5 Pass	Pass	Pass	Pass P	ass Pass
	106	Barnfield Drive	7061_7658	388 2	8 416	5 2	418	372	19	391	2 3	93	-16	-9	-25	0	-25	-4%	-33%	-6% 7%	6%	0.8 1	.9 1	.3 0.	.1 1.	2 Pass	Pass	Pass	Pass P	ass Pass
	27	College Lane	6453_6358	230 1	.5 245	5 9	254	237	12	250	9 2	59	7	-3	5	0	5	3%	-18%	2% 39	6 2%	0.5 0	.7 0	.3 0.	.1 0.	3 Pass	Pass	Pass	Pass P	ass Pass
	24	Lavant Road	4264_4262	464 6	526	5 19	545	386	47	433	18 4	51	-78	-14	-93	-1	-94 -	17%	-23% -1	.8% -5%	6 -17%	3.8 1	.9 4	.2 0.	.2 4.	2 Pass	Pass	Pass	Pass P	ass Pass
	95	B2178	40138_50255	1.020	2 1 0 1 4	75	301	341	28	370	10 3	80	20	07	67	1	79	20/	12.40/	40/ 10	26%	070	0 1	- 0	4.	3	Dese	Dese	P	ass
	117	AZ7 ED Eisbhourne Road (West)	40124_1780	369 /	2 1,91	1 6	1,980	1,609	109 1	,976	11 /	54 77	-50	97	51	5	57	-2%	154% 8% 1	4% 17 2% 889	° 570	24 0	5 2	5 1	8 2	7 Pass	Pass	Pass	Pass P	acc Pacc
	51	A286	4327 50263	516	0 566	5 10	576	456	49	505	10 5	14	-60	-1	-61	0	-62 -	12%	-2% -1	.1% -39	6 -11%	2.7 0	.1 2	.7 0	1 2	6 Pass	Pass	Pass	Pass P	ass Pass
	49	B2201 - Selsey Road	11013 50261	200 2	1 221	1 5	226	198	20	218	5 2	23	-2	-1	-3	0	-3	-1%	-3%	1% 59	6 -1%	0.2 0	.2 0	.2 0.	.1 0.	2 Pass	Pass	Pass	Pass P	ass Pass
Outer SL_IN	61	B2145	6925_50264	463 4	8 511	16	527	493	47	540	16 5	55	30	-1	29	0	28	6%	-2%	6% -3%	6 5%	1.4 0	.1 1	.3 0.	.1 1.	2 Pass	Pass	Pass	Pass P	ass Pass
-	152	Vinnetrow Road	50266_10002	156 2	4 180) 9	189	150	24	174	8 1	82	-6	0	-6	-1	-7	-4%	0%	-3% -7%	6 -4%	0.5 0	.0 0	.4 0.	.2 0.	5 Pass	Pass	Pass	Pass P	ass Pass
	48	Bognor Road	9236_9135	758	3 831	L 25	856	939	83 1	,022	34 1,0	56	181	10	191	9	200	24%	14% 2	3% 36%	6 23%	6.2 1	.2 6	.3 1.	.7 6.	5 Fail	Pass	Fail	Pass	ail Fail
	110	Shopwhyke Road	8752_8652	232 1	.8 250) 1	251	284	21	305	3 3	08	52	3	55	2	57	22%	19% 2	2% 1729	6 23%	3.2 0	.8 3	.3 1.	.3 3.	4 Pass	Pass	Pass	Pass P	ass Pass
	14	Arundel Road	8257_30021	1,337 8	2 1,419	70	1,489	1,270	92 1	,361	61 1,4	23	-67	10	-58	-9	-66	-5%	12%	-4% -12%	6 -4%	1.9 1	.1 1	.5 1.	.1 1.	7 Pass	Pass	Pass	Pass P	ass Pass
	60	Stane Street	8261_10004	195 1	7 212	2 8	220	207	21	227	9 2	36	12	4	15	1	16	6%	22%	7% 79	6 7%	0.8 0	.8 1	.0 0.	.2 1.	1 Pass	Pass	Pass	Pass P	ass Pass
	108	Madgwick Lane	8166_7863	359 5	0 410	3	413	511	62	365	3 3	68	-48	4	-46	2	-45 -	13%	/% -1	.1% /%	6 -11%	2.6 0	.5 2	.3 0.	.1 2.	3 Pass	Pass	Pass	Pass P	ass Pass
	96	B2178	4202_4204 50255_40138	521 0	19 390) 22	752	407	26	733	20 0	42	0	-/	-2	-2	-4	170	-11%	0% -97	-170	0.2 0	.9 0	.1 0.	12	7	PdSS	PdSS	rdss r	ail
	12	A27 WB	1760 40134	1.832 10	3 1.935	5 92	2.027	1.888	128 2	.016	85 2.1	01	56	25	81	-7	74	3%	24%	4% -8%	6 4%	1.3 2	.3 1	.8 0.	.8 1.	6 Pass	Pass	Pass	Pass P	ass Pass
	118	Fishbourne Road (West)	9001_4741	405 4	3 448	3 12	460	459	83	541	13 5	54	54	40	93	1	94	13%	92% 2	1% 59	6 20%	2.6 5	.0 4	.2 0.	.2 4.	2 Pass	Pass	Pass	Pass P	ass Pass
	52	A286	50263_4327	490 2	3 513	3 10	523	363	11	374	10 3	84	-127	-12 -	139	0	-139 -	26%	-51% -2	7% 0%	6 -27%	6.2 2	.8 6	.6 0.	.0 6.	5 Fail	Pass	Fail	Pass F	ail Fail
	50	B2201 - Selsey Road	50261_11013	239 2	0 259	3	262	236	21	257	3 2	60	-3	1	-2	0	-2	-1%	6%	1% 0%	6 -1%	0.2 0	.3 0	.1 0.	.0 0.	1 Pass	Pass	Pass	Pass P	ass Pass
Outer SL_OUT	62	B2145	50264_6925	888 5	6 944	18	962	911	70	981	18 9	99	23	14	37	0	37	3%	25%	4% 0%	6 4%	0.8 1	.8 1	.2 0.	.0 1.	2 Pass	Pass	Pass	Pass P	ass Pass
	151	Vinnetrow Road	10002_50266	321 5	7 378	3 12	390	329	57	386	13 3	99	8	0	8	1	9	2%	1%	2% 69	6 2%	0.4 0	.1 0	.4 0.	.2 0.	5 Pass	Pass	Pass	Pass P	ass Pass
	47	Bognor Road	9137_9236	833 8	1 914	1 24	938	995	85 1	,081	25 1,1	05	162	4	167	1	167	19%	6% 1	.8% 49	6 18%	5.4 0	.5 5	.3 0.	.2 5.	2 Fail	Pass	Fail	Pass F	ail Fail
	109	Shopwhyke Koad	8652_8/52	479 t	1 1 0 20	5 51	1 000	354	50 60 1	411	4 4	14	-125	-4 -	70	1 .	-128	26%	-b% -2	4% 26%	6 -24%	b.1 0	.5 5 6 1	9 0.	.4 5. 2 1	8 Fail	Pass	Pail	Pass P	
	59	Stane Street	10003_8258	262 1	0 272	9 9	281	298	17	315	9 3	24	36	7	43	0	43	14%	72% 1	6% 19	6 15%	2.0 0	0 2	5 0	0 2	5 Pass	Pass	Pass	Pass P	ass Pass
	107	Madgwick Lane	7863 8166	240 1	8 258	3 3	261	186	18	205	3 2	08	-54	0	-53	0	-53 -	22%	1% -2	1% 09	6 -20%	3.7 0	.0 2	.5 0.	.0 3.	5 Pass	Pass	Pass	Pass P	ass Pass
	90	B2141	1106_4068				200	84	12	96	10 1	07					-93				-47%		-	-	7.	6			P	ass
	98	A286	1077_4880	269 4	9 318	8 8	326	282	49	331	8 3	39	13	0	13	0	13	5%	0%	4% 4%	6 4%	0.8 0	.0 0	.7 0.	.1 0.	7 Pass	Pass	Pass	Pass P	ass Pass
North SL_SB	76	A285	1656_6973	238	7 275	5 3	278	226	30	256	4 2	60	-12	-7	-19	1	-18	-5%	-19%	7% 48%	6%	0.8 1	.2 1	.2 0.	.7 1.	1 Pass	Pass	Pass	Pass P	ass Pass
	190	A29	50136_50029	530 15	681	L 6	687	555	160	715	12 7	26	25	10	34	6	39	5%	7%	5% 95%	6%	1.1 0	.8 1	.3 1.	.9 1.	5 Pass	Pass	Pass	Pass P	ass Pass
	18	Arundel Road	50018_50063	1,013 5	7 1,070) 57	1,127	1,004	57 1	,061	56 1,1	16	-9	0	-9	-1	-11	-1%	0%	-1% -2%	6 -1%	0.3 0	.0 0	.3 0.	.2 0.	3 Pass	Pass	Pass	Pass P	ass Pass
	89	B2141	4068_1106	246 0	2 400	10	206	68	12	80	6	86	0	2	c	0	-120	20/	E 9/	19/ 00	-58%	0.5 0	4 0	2 0	9.	9 2 Doce	Dass	Dass	Dace D	
North SL NB	75	A280	400_1077	269 2	0 289	2 2	291	263	25	288	3 2	90	-6	5	-1	1	-1	-2%	23%	1% 259	6 0%	0.3 0	0 0	1 0	3 0	1 Pass	Pass	Pass	Pass P	ass Pass
	189	A29	50029 50136	512 4	7 560) 8	568	505	47	552	8 5	60	-7	0	-8	0	-8	-1%	-1%	1% 09	6 -1%	0.3 0	.0 0	.4 0.	.0 0.	3 Pass	Pass	Pass	Pass P	ass Pass
	17	Arundel Road	50063_50018	1,170 4	1 1,211	L 54	1,266	1,164	47 1	,211	54 1,2	65	-6	6	0	0	-1	0%	13%	0% 09	6 0%	0.2 0	.8 0	.0 0.	.0 0.	0 Pass	Pass	Pass	Pass P	ass Pass
	93	Pagham Road	50139_50173	1,069 8	1,154	1 13	1,167	1,046	82 1	,128	13 1,1	41	-23	-3	-26	0	-26	-2%	-3%	-2% 1%	6 -2%	0.7 0	.3 0	.8 0.	.0 0.	8 Pass	Pass	Pass	Pass P	ass Pass
	64	A259	50149_50143	1,032 4	5 1,078	3 18	1,096	1,057	58 1	,115	19 1,1	34	25	13	37	1	38	2%	29%	3% 3%	6 3%	0.8 1	.8 1	.1 0.	.1 1.	1 Pass	Pass	Pass	Pass P	ass Pass
Bognor Regis SL_SB	92	Lidsey Road	50274_50272	504 10	609	21	630	490	98	588	21 6	09	-14	-7	-21	0	-21	-3%	-6%	-3% -1%	6 -3%	0.6 0	.6 0	.9 0.	.1 0.	8 Pass	Pass	Pass	Pass P	ass Pass
	80	Church Lane	50164_50021	206 2	2 228	3 3	231	204	25	229	3 2	32	-2	3	1	0	1	-1%	12%	0% 89	6 0%	0.1 0	.5 0	.1 0.	.1 0.	1 Pass	Pass	Pass	Pass P	ass Pass
	82 94	Pagham Road	50173 50120	408	+ 1,044 .8 л⊑	+ 4 7 0	1,048 466	366	43	,039 410	/ 1,0	40 18	-4 -42	-1	-5 -47	-1	-48	0% 10%	-10% .1	0% -120	• U%	21 0	.1 0 .7 2	.2 1.	.+ U. .4 ?	1 PdSS 3 Pace	Pass	Pass	Pass P	ass Pass
	63	A259	50143 50149	684	1 73	5 21	756	732	58	789	23 8	12	48	7	54	2	56	7%	13%	7% 109	6 7%	1.8 0	.9 2	.0 0.	4 2	0 Pass	Pass	Pass	Pass P	ass Pass
Bognor Regis SL NB	91	Lidsey Road	50272 50274	372	8 450	15	465	364	75	439	15 4	54	-8	-3	-11	0	-11	-2%	-4%	-3% 19	6 -2%	0.4 0	.4 0	.5 0.	.1 0.	5 Pass	Pass	Pass	Pass P	ass Pass
	79	Church Lane	50021_50164	166 2	0 186	5 5	191	160	21	182	5 1	87	-6	1	-4	0	-4	-4%	7%	2% 0%	6 -2%	0.5 0	.3 0	.3 0.	.0 0.	3 Pass	Pass	Pass	Pass P	ass Pass
	81	Grevatt's Lane	50021_50110	542 5	2 594	16	600	601	52	653	76	60	59	0	59	1	60	11%	0% 1	.0% 16%	6 10%	2.5 0	.0 2	.3 0.	.4 2.	4 Pass	Pass	Pass	Pass P	ass Pass
Arun SL EB	99	Bridge Road	50109_50204				1,407	1,099	156 1	,255	30 1,2	85				-	-122				-9%				3.	3			Р	ass
	22	Arundel Relief Road	50192_50193	1,246 5	3 1,299	55	1,354	1,264	60 1	,323	54 1,3	78	18	7	24	-1	24	1%	13%	2% -1%	6 2%	0.5 0	.9 0	.7 0.	.1 0.	6 Pass	Pass	Pass	Pass P	ass Pass
Arun SL_WB	100	Bridge Road	50204_50109	1.072	C 1 1 2	51	1,274	1,147	72 1	,219	33 1,2	53	4	-	-	1	-21	00/	00/	00/ 20	-2%		0 0	0 0	0.	6	Dese	Dese	P	ass
CD	21	Arundel Kellet Koad	20193_50192	2 412 2	1,128	51	1,1/9	1,0/1	277 1	635	5U 1,1	// 31 -1	-1	0 1	-1	-10-1	-2	U% 44%	0%	0% -29	~ 0%	24 2 0	.u 0	7 1	0.10.	1 Pass	Pass	Fail	Pass P	ass Pass
SR	508	on link A3(M) J4 southbound access	40050 40111	569 6	5 634	1 25	660	569	65	633	16 6	50	-1	0 -1,	-1	-9	-10	0%	0%	0% -369	6 -2%	0,0 0	.0 0	.0 2	.0 0	4 Pass	Pass	Pass	Pass P	ass Pass
WB	504	A27 WB East of A3(M)	40023 40004	2,829 32	4 3,15	3 125	3,279	2,738	254 2	,992	108 3.1	00	-91	-70 -	-161 -	-17	-178	-3%	-22%	-5% -149	6 -5%	1.7 4	.1 2	.9 1.	.6 3	2 Pass	Pass	Pass	Pass P	ass Pass
EB	500	on link A27 eastbound exit for A3(M)	40012_40014	3,005 34	4 3,349	133	3,483	2,260	317 2	,577 :	168 2,7	45	-745	-27 -	772	35	-738 -	25%	-8% -2	3% 269	6 -21%	14.5 1	.5 14	.2 2.	.8 13.	2 Fail	Pass	Fail	Pass F	ail Fail
EB	501	on link A27 eastbound within the A3(M) junction	40012_40032	2,442 28	0 2,721	108	2,830	2,535	305 2	,839	72 2,9	12	93	25	118 -	-36	82	4%	9%	4% -33%	6 3%	1.9 1	.5 2	.2 3.	.8 1.	5 Pass	Pass	Pass	Pass P	ass Pass
NB	509	on link A3(M) J5 northbound access	40014_40116	1,077 12	3 1,201	L 48	1,249	1,926	120 2	,047	47 2,0	93	849	-3	846	-1	845	79%	-3% 7	0% -2%	68%	21.9 0	.3 21	.0 0.	.1 20.	7 Fail	Pass	Fail	Pass	ail Fail
NB	510	on link A3(M) northbound within J5	40015_40116	2,568 29	4 2,862	2 114	2,976	323	144	467	31 4	98 -2	2,245 -1	150 -2,	395 -	-83 -2	2,477 -	87%	-51% -8	4% -73%	6 -83%	59.0 10	.1 58	.7 9.	.7 59.	4 Fail	Fail	Fail	Pass	ail Fail
EB	503	A27 EB East of A3(M)	40032_40036	3,321 38	3,701	L 147	3,849	3,434	404 3	,837	99 3,9	36	113	23	136 -	48	88	3%	6%	4% -33%	6 2%	1.9 1	.2 2	.2 4.	.3 1.	4 Pass	Pass	Pass	Pass P	ass Pass
WB	502	AZ/ WB West of A3(M)	40003_1598	2,225 25	2,480	99	2,579	2,521	3/8 2	,899 3 760	150 3,0	49 26	296 1	123	419	51	470	13%	48% 1	./% 52%	18%	6.1 6	8 E.	.1 4.	.0 0.	Pass 2 Pass	Pace	Pass	Pass P	all Pass
EB W/P	522	Chichester Ry-Pass	11001 9001	1 419 14	1,/84	50	1,048	1 524	176 1	700	64 1 7	50 64	105	4	114	6	120	7%	6%	7% 109	-1% 6 7%	27 0		.J U. 8 0	7 2	9 Pace	Pass	Pass	Pass P	ass Pace
EB	524	Chichester By-Pass	11002 11003	1,690 10	8 1.889	3 70	1,958	1,538	186 1	,724	69 1.7	93	-152	-12 -	164	0	-165	-9%	-6%	-9% -19	6 -8%	3.8 0	.9 3	.9 0	.1 3	8 Pass	Pass	Pass	Pass P	ass Pass
WB	525	Chichester By-Pass	6936_11004	1,350 1	8 1,509	56	1,565	1,365	156 1	,520	61 1,5	82	15	-3	12	6	17	1%	-2%	1% 109	6 1%	0.4 0	.2 0	.3 0.	.7 0.	4 Pass	Pass	Pass	Pass P	ass Pass
EB	530	Fisbourne Road (West)	30001_4741	425 5	2 478	3 14	492	435	52	487	14 5	01	10	0	10	-1	9	2%	0%	2% -49	6 2%	0.5 0	.0 0	.4 0.	.1 0.	4 Pass	Pass	Pass	Pass P	ass Pass
WB	531	Fisbourne Road (West)	4741_30001	411 5	1 461	14	475	492	89	581	14 5	95	82	38	120	0	120	20%	76% 2	6% 2%	6 25%	3.8 4	.6 5	.3 0.	.1 5.	2 Pass	Pass	Fail	Pass	ail Pass
NB	534	Stockbridge Road	5740_5840	285	5 320	0 10	330	276	33	309	10 3	19	-9	-2	-11	0	-11	-3%	-6%	3% 19	6 -3%	0.5 0	.4 0	.6 0.	.0 0.	6 Pass	Pass	Pass	Pass P	ass Pass
SB	535	Stockbridge Road	5840_5740	396 4	9 445	5 13	459	403	39	443	12 4	54	7	-10	-3	-2	-4	2%	-20%	1% -13%	6 -1%	0.4 1	.5 0	.1 0.	.5 0.	2 Pass	Pass	Pass	Pass P	ass Pass
EB	546	Quarry Lane	7640 7640	214	.u 90	J 3	93	78	10	88	3	91 60	-3	U	-2	0	-2	-3%	5%	2% 129	% -2%	0.3 0	.2 0	.2 0.	.∠ U.	2 Pass	Pass	Pass	Pass P	ass Pass
WB	54/	Quarry Lane	/040_/041	Z14 Z	.0 240	/ /	248	13/	20	102	/ 1	ບປ	-//	-2	-/8	U	-/ŏ -	%0د	-0% -3	J70 1%	₀ -32%	J.8 ()	.s 5	.J U.	.0 5.	H Pass	PdSS	rd55	rass P	ass Pass



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	LGV	Lights	HGV	Total
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	Pass	Pass	Pass	Pass
	Pass	Fail	Pass	Fail
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ļ	Pass	Pass	Pass	Pass

	TOTAL		
GEH O	R Hourl	y flow	S
LGV	Lights	HGV	Total
85	77	87	80
2	10	0	13
98%	89%	####	86%



Appendix C Flow Validation

\\pba.int\cbh\Projects\43682 Chichester Local Plan - Transport Study\Transport\Working Documents\Technical Notes\TN002 - 2014 CATM Base Model LMVR -Final_v2.1.docx

		AM FLOW VALIDATION																																	
Link	Details		SATURNLink		Obs	served			Moo	delled					Diff					% Diff				GEH				Flow	s		We	bTAG c	riterion	GEH o	br
Ref Direction	Source	Road	SATORN LINK	Car	LGV Li	ghts HG	iV Tota	l Car	LGV Lig	ghts H	GV T	Total	Car	LGV L	ights	HGV	Total	Car	LGV	Lights	HGV [.]	Total	Car LG\	/ Lights	HGV	Total C	ar LG	/ Lights	HGV	Total	Car	LGV L	ights H	GV T	otal
1 EB	TRADS	Arundel Road	50030_50029	1,238	120 1	,358 1	51 1,509	9 1,233	182 1,	,415	144 1	1,559	-5	62	57	-7	50	0%	52%	4%	-5%	3%	0.1 5.	0 1.5	0.6	1.3 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
2 WB	TRADS	Arundel Road	50029_50030	1,739	95 1	,834 1	24 1,95	8 1,778	150 1,	,929	115 2	2,044	39	55	95	-9	86	2%	58%	5%	-7%	4%	0.9 5.	0 2.2	0.8	1.9 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
3 EB	TRADS	Arundel Road	10006_50152	1,143	134 1	,276 1	35 1,41	1 1,153	145 1,	,299	135 1	1,434	10	11	23	0	23	1%	8%	2%	0%	2%	0.3 1.	0.6	0.0	0.6 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
4 WB	TRADS	Arundel Road	50160_50150	1,644	87 1	,731 1	21 1,85	2 1,690	128 1,	,819	113 1	1,932	46	41	88	-8	80	3%	47%	5%	-7%	4%	1.1 4.	0 2.1	0.7	1.8 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
5 EB	TRADS	Chichester By-Pass	11070_11007	920	106 1	,025 1	28 1,15	3 791	121	912	112 1	1,024	-129	15	-113	-16	-129	-14%	14%	-11%	-12%	-11%	4.4 1.4	4 3.6	1.5	3.9 F	ail Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
6 WB	TRADS	Chichester By-Pass	11007_11070	1,137	97 1	,234 1	25 1,359	9 1,101	109 1,	,210	135 1	1,346	-36	12	-24	10	-13	-3%	12%	-2%	8%	-1%	1.1 1.	2 0.7	0.9	0.4 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
7 EB	TRADS	Chichester By-Pass	11002_11003	1,163	137 1	,300 1	60 1,46	0 1,048	211 1,	,259	127 1	1,386	-115	74	-41	-33	-74	-10%	54%	-3%	-20%	-5%	3.5 5.	6 1.1	2.7	1.9 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
8 WB	TRADS	Chichester By-Pass	6936_11004	1,667	137 1	,804 1	64 1,96	8 1,560	249 1,	,809	166 1	1,975	-107	112	5	2	7	-6%	82%	0%	1%	0%	2.7 8.	1 0.1	0.1	0.2 P	ass <mark>Fa</mark> i	Pass	Pass	Pass	Pass	Fail Pa	ass Pa	ass Pr	ass
9 EB	TRADS	Chichester By-Pass	9001_11001	1,101	154 1	,256 1	85 1,440	0 1,099	218 1,	,317	132 1	1,449	-2	64	61	-53	9	0%	41%	5%	-28%	1%	0.0 4.	7 1.7	4.2	0.2 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
10 WB	TRADS	Chichester By-Pass	11001_9001	1,726	134 1	,860 1	60 2,020	0 1,641	245 1,	,886	171 2	2,057	-85	111	26	11	37	-5%	83%	1%	7%	2%	2.1 8.	0.6	0.9	0.8 P	ass <mark>Fa</mark> i	Pass	Pass	Pass	Pass	Fail Pa	ass Pa	ass Pr	ass
15 EB	TRADS	Chichester Road	50230_50278	939	70 1	,009 1	09 1,11	8 790	67	857	116	973	-149	-3	-152	7	-145	-16%	-4%	-15%	7%	-13%	5.1 0.4	4 5.0	0.7	4.5 F	ail Pas	s Fail	Pass	Pass	Fail I	Pass Pa	ass Pa	ass Pr	ass
16 WB	TRADS	Chichester Road	50278_50230	1,164	55 1	,219	97 1,31	6 1,260	73 1,	,333 🖸	107 1	1,439	96	18	114	10	123	8%	32%	9%	10%	9%	2.8 2.	2 3.2	1.0	3.3 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
53 NB	WSCC	St Pancras	6546_6547	826	80	905	20 92	5 844	86	929	18	948	18	6	24	-2	23	2%	7%	3%	-8%	2%	0.6 0.	7 0.8	0.4	0.7 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
55 NB	WSCC	Stockbridge Road	5447_5750	486	37	523	22 54	5 449	24	473	25	498	-37	-13	-50	3	-47	-8%	-36%	-10%	15%	-9%	1.7 2.4	4 2.2	0.7	2.1 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
56 SB	WSCC	Orchard Street	5750_5447	582	27	609	22 63	1 630	38	667	9	676	48	11	58	-13	45	8%	39%	10%	-61%	7%	1.9 1.	9 2.3	3.4	1.8 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
57 NB	WSCC	St Paul's Road	5558_5459	277	27	304	6 31	0 204	25	230	13	243	-73	-2	-74	7	-67	-26%	-6%	-24%	120%	-22%	4.7 0.	3 4.5	2.3	4.0 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
58 SB	WSCC	St Pauls's Road	5459_5558	639	40	679	9 68	8 671	94	766	19	784	32	54	87	10	96	5%	136%	13%	109%	14%	1.3 6.	6 3.2	2.6	3.6 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
65 NB	WSCC	Selsey Road	4226_4132	560	64	624	27 65	1 544	57	602	23	624	-16	-7	-22	-4	-27	-3%	-10%	-4%	-16%	-4%	0.7 0.	8 0.9	0.9	1.1 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
66 SB	WSCC	Selsey Road	4132_4226	372	61	432	23 45	5 327	40	368	19	387	-45	-21	-64	-4	-68	-12%	-34%	-15%	-17%	-15%	2.4 2.	9 3.2	0.9	3.3 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
67 NB	WSCC	Main Road	30003_11012	550	50	600	19 619	9 470	47	517	27	544	-80	-3	-83	8	-75	-15%	-6%	-14%	42%	-12%	3.6 0.4	4 3.5	1.7	3.1 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
68 SB	WSCC	Main Road	11012_30003	424	84	508	17 52	5 501	87	588	33	622	77	3	80	16	97	18%	4%	16%	94%	18%	3.6 0.4	4 3.4	3.2	4.0 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
69 EB	WSCC	Fisbourne Road (West)	30001_4741	439	55	494	13 50	7 490	81	571	25	596	51	26	77	12	89	12%	48%	16%	93%	18%	2.3 3.	2 3.3	2.8	3.8 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
70 WB	WSCC	Fisbourne Road (West)	4741_30001	374	80	454	20 474	4 443	106	550	25	575	69	26	96	5	101	19%	33%	21%	27%	21%	3.4 2.	7 4.3	1.1	4.4 P	ass Pas	s Pass	Pass	Fail	Pass	Pass Pa	ass Pa	ass Pr	ass
71 EB	WSCC	A286	4068_4880	154	26	179	6 18	5 178	36	213	5	219	24	10	34	-1	34	15%	37%	19%	-9%	18%	1.8 1.	7 2.5	0.2	2.4 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
72 WB	WSCC	A286	4880_4068	204	16	220	8 22	8 181	32	213	3	216	-23	16	-7	-5	-12	-11%	98%	-3%	-57%	-5%	1.6 3.	2 0.5	1.9	0.8 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
83 NB	WSCC	A29	1038_1199	436	63	499	21 52	0 321	76	397	24	421	-115	13	-102	3	-99	-26%	20%	-20%	14%	-19%	5.9 1.	5 4.8	0.6	4.6	ail Pas	s Fail	Pass	Pass	Fail	Pass Pa	ass Pa	ass Pr	ass
84 SB	WSCC	A29	1199_1038	306	39	345	24 36	9 344	56	400	16	416	38	17	55	-8	47	12%	44%	16%	-33%	13%	2.1 2.	5 2.8	1.7	2.4 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
101 EB	WSCC	A259	50204_50202	í Í			69	8 576	68	644	23	667					-31					-4%				1.2				Pass				Pr	ass
102 WB	WSCC	A259	50202_50204	í Í			840	0 429	46	475	35	510					-330					-39%				12.7				Fail				F	ail
103 NB	WSCC	A284 - Lyminster Road	50201_50200	í l			464	4 428	24	451	19	470					6					1%				0.3				Pass				P	ass
104 SB	WSCC	A284 - Lyminster Road	50200_50201	í l			47	7 281	45	326	22	348					-129					-27%				6.3				Fail				F	ail
534 NB		Main Road	30003_11012	550	50	600	19 619	9 470	47	517	27	544	-80	-3	-83	8	-75	-15%	-6%	-14%	42%	-12%	3.6 0.4	4 3.5	1.7	3.1 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
540 NB	CIS_SL_I_NB	Selsey Road	4226_4132	560	64	624	27 65	1 544	57	602	23	624	-16	-7	-22	-4	-27	-3%	-10%	-4%	-16%	-4%	0.7 0.	8 0.9	0.9	1.1 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
535 SB	CTC CL 1 CD	Main Road	11012_30003	424	84	508	17 52	5 501	87	588	33	622	77	3	80	16	97	18%	4%	16%	94%	18%	3.6 0.4	4 3.4	3.2	4.0 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
541 SB	CIS_SL_1_SB	Selsey Road	4132_4226	372	61	432	23 45	5 327	40	368	19	387	-45	-21	-64	-4	-68	-12%	-34%	-15%	-17%	-15%	2.4 2.	9 3.2	0.9	3.3 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
521 EB		A27 EB	40124_1760	1,512	146 1	,658 1	90 1,84	8 1,450	189 1,	,639	189 1	1,828	-62	43	-19	-1	-20	-4%	29%	-1%	-1%	-1%	1.6 3.	3 0.5	0.1	0.5 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass Pr	ass
552 EB	CTS_SL_2_EB	Main Road	1001 1255	259	52	311	15 32	7 160	37	198	14	212	-99	-14	-113	-2	-115	-38%	-28%	-36%	-10%	-35%	6.8 2.	1 7.1	0.4	7.0 P	ass Pas	s Fail	Pass	Fail	Pass	Pass Fa	ail Pa	ass F	ail
600 EB		New Brighton Road	40045 40136	108	10	118	5 12	3 95	33	127	14	141	-14	23	9	8	18	-13%	240%	8% :	164%	14%	1.4 5.	0.0	2.8	1.5 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass P	ass
12 WB		A27 WB	1760 40134	1,542	87 1	,629 1	21 1,750	0 1,549	187 1,	,736	154 1	1,890	7	100	107	33	140	0%	115%	7%	27%	8%	0.2 8.	5 2.6	2.8	3.3 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass P	ass
553 WB	CTS_SL_2_WB	Main Road	1255 1001	271	54	325	16 342	2 374	135	508	55	563	103	81	183	38	221	38%	149%	56%	238%	65%	5.7 8.	3 9.0	6.5	10.4	ail Pas	s Fail	Pass	Fail	Fail	Pass Fa	ail Pa	ass F	ail
601 WB		New Brighton Road	40136 40045	148	20	168	6 174	4 78	21	99	9	108	-70	1	-69	3	-66	-47%	3%	-41%	53%	-38%	6.6 0.	1 6.0	1.2	5.5 P	ass Pas	s Pass	Pass	Pass	Pass	Pass Pa	ass Pa	ass P	ass
L	1	~	. – .																																

			TOTAL											
		GEH O	R Hourl	y flow	S									
	Car LGV Lights HGV Tot													
Pass	34	35	35	37	37									
Fail	в	2	2	0	4									
%Pass	92%	95%	95%	####	90%									

															ALIDATIO	ON																			
	Link D	etails		SATURNLink		Obser	ved		Mo	odelled				Diff				9	% Diff				G	EH				Flows			We	bTAG crit	terion G	EH or FL	bw
Ref	Direction	Source	Road	SATONN LINK	Car	LGV Light	s HGV T	otal Car	LGV Li	ights H	IGV Tota	l Car	LGV	Lights	HGV 1	Total	Car	LGV I	Lights	HGV	Total	Car L	GV Lig	hts HG	iV Tota	l Car	LGV	Lights	HGV 1	Гotal	Car	LGV	Lights	HGV	Total
1	EB	TRADS	Arundel Road	50030_50029	1,149	97 1,24	7 148 1	,395 1,090	131 1	1,221	128 1,34	8 -59	34	-26	-20	-47	-5%	35%	-2%	-14%	-3%	1.8	3.2	0.7	L.7 1.	3 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
2	WB	TRADS	Arundel Road	50029_50030	1,234	110 1,34	4 161 1	,505 1,134	148 1	1,282	131 1,41	3 -100	38	-62	-30	-92	-8%	34%	-5%	-19%	-6%	2.9	3.3	1.7	2.5 2.4	4 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
3	EB	TRADS	Arundel Road	10006_50152	1,231	114 1,34	15 141 1	486 1,268	127 1	1,395	130 1,52	4 37	13	50	-11	38	3%	11%	4%	-8%	3%	1.0	1.2	1.3	L.O 1.0	0 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
4	WB	TRADS	Arundel Road	50160_50150	1,111	106 1,21	148 1	,365 982	103 1	1,085	127 1,21	3 -129	-3	-132	-21	-152	-12%	-2%	-11%	-14%	-11%	4.0	0.2	3.9	L.8 4.1	2 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
5	EB	TRADS	Chichester By-Pass	11070_11007	1,077	84 1,16	51 126 1	,287 913	114 1	1,027	120 1,14	7 -164	30	-134	-6	-140	-15%	36%	-12%	-5%	-11%	5.2	3.0	4.0 0).6 4.0	0 Fail	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass
6	WB	TRADS	Chichester By-Pass	11007_11070	1,019	105 1,12	4 152 1	,276 979	128 1	1,107	150 1,25	8 -40	23	-17	-2	-18	-4%	22%	-1%	-1%	-1%	1.2	2.1	0.5 0	0.1 0.	5 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
7	EB	TRADS	Chichester By-Pass	11002_11003	1,289	114 1,40	04 166 1	,570 1,185	206 1	1,391	114 1,50	5 -104	92	-13	-52	-65	-8%	81%	-1%	-31%	-4%	3.0	7.3	0.4	1.4 1.	7 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
8	WB	TRADS	Chichester By-Pass	6936_11004	1,200	117 1,31	8 190 1	,507 1,227	222 1	1,449	120 1,56	9 27	105	131	-70	62	2%	90%	10%	-37%	4%	0.8	8.1	3.5	5.6 1.	6 Pass	Fail	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass
9	EB	TRADS	Chichester By-Pass	9001_11001	1,341	133 1,47	4 166 1	,640 1,231	208 1	1,439	115 1,55	3 -110) 75	-35	-51	-87	-8%	56%	-2%	-31%	-5%	3.1	5.7	0.9	1.3 2.1	2 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
10	WB	TRADS	Chichester By-Pass	11001_9001	1,296	131 1,42	26 189 1	,615 1,229	227 1	1,456	120 1,57	6 -67	96	30	-69	-39	-5%	73%	2%	-36%	-2%	1.9	7.2	0.8	5.5 1.0	0 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
15	EB	TRADS	Chichester Road	50230_50278	836	62 89	9 108 1	,007 811	73	884	115 99	9 -26	5 11	-15	7	-8	-3%	18%	-2%	7%	-1%	0.9	1.4	0.5 0).7 0.1	2 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
16	WB	TRADS	Chichester Road	50278_50230	881	65 94	6 119 1	,065 855	78	932	123 1,05	5 -26	i 13	-14	4	-10	-3%	19%	-1%	3%	-1%	0.9	1.5	0.5 0	0.3 0.3	3 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
53	NB	WSCC	St Pancras	6546_6547	928	79 1,00	07 24 1	,031 971	94 1	1,065	32 1,09	7 43	15	58	8	66	5%	19%	6%	34%	6%	1.4	1.6	1.8	L.5 2.0	0 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
55	NB	WSCC	Stockbridge Road	5447_5750	447	32 47	/9 19	498 372	30	402	23 42	5 -75	-2	-77	4	-73	-17%	-7%	-16%	22%	-15%	3.7	0.4	3.7 ().9 3.4	4 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
56	SB	WSCC	Orchard Street	5750_5447	519	35 55	54 22	576 466	24	490	13 50	3 -53	-11	-64	-9	-73	-10%	-31%	-12%	-42%	-13%	2.4	2.0	2.8	2.2 3.1	2 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
57	NB	WSCC	St Paul's Road	5558_5459	323	24 34	7 7	354 243	23	266	8 27	4 -80) -1	-81	1	-80	-25%	-3%	-23%	16%	-23%	4.8	0.1	4.6 0).4 4.	5 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
58	SB	WSCC	St Pauls's Road	5459 5558	294	26 32	20 10	330 239	29	268	10 27	8 -55	3	-52	0	-52	-19%	12%	-16%	0%	-16%	3.4	0.6	3.0 ().0 3.0	0 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
65	NB	WSCC	Selsey Road	4226 4132	410	59 46	59 22	491 332	39	371	25 39	7 -78	-20	-98	3	-94	-19%	-33%	-21%	15%	-19%	4.1	2.8	4.8 ().7 4.	5 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
66	SB	WSCC	Selsey Road	4132 4226	430	60 48	39 22	511 465	40	505	32 53	7 35	-20	16	10	26	8%	-33%	3%	43%	5%	1.6	2.8	0.7	l.8 1.	1 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
67	NB	WSCC	Main Road	30003 11012	532	70 60)2 25	627 598	83	681	46 72	8 66	i 13	79	21	101	12%	19%	13%	85%	16%	2.8	1.5	3.1	3.6 3.9	9 Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	Pass
68	SB	WSCC	Main Road	11012 30003	632	84 71	6 26	742 653	74	727	47 77	4 21	-10	11	21	32	3%	-12%	2%	82%	4%	0.8	1.1	0.4	3.5 1.3	2 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
69	EB	WSCC	Fisbourne Road (West)	30001_4741	426	63 48	39 24	513 396	75	471	26 49	7 -30) 12	-18	2	-16	-7%	20%	-4%	7%	-3%	1.5	1.5	0.8 (0.3 0.1	7 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
70	WB	WSCC	Fisbourne Road (West)	4741_30001	416	60 47	6 23	499 425	77	502	25 52	7 9	17	26	2	28	2%	28%	5%	10%	6%	0.4	2.0	1.2 ().5 1.1	2 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
71	EB	WSCC	A286	4068_4880	158	19 17	7 9	186 140	17	157	6 16	3 -18	-2	-20	-3	-23	-11%	-11%	-11%	-39%	-13%	1.5	0.5	1.5	L.3 1.3	8 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
72	WB	WSCC	A286	4880_4068	174	20 19	94 9	203 149	23	172	6 17	9 -25	3	-22	-3	-24	-14%	17%	-11%	-31%	-12%	2.0	0.7	1.6	L.O 1.	8 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
83	NB	WSCC	A29	1038_1199	262	41 30	03 24	327 193	40	233	16 24	9 -69	-1	-70	-8	-78	-26%	-3%	-23%	-35%	-24%	4.6	0.2	4.3	L.9 4.	6 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
84	SB	WSCC	A29	1199_1038	331	56 38	37 28	415 244	45	289	15 30	4 -87	-11	-98	-13	-111	-26%	-20%	-25%	-45%	-27%	5.1	1.6	5.3	2.7 5.8	8 Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	Fail
101	EB	WSCC	A259	50204_50202				674 400	63	463	32 49	5				-179					-27%				7.4	4				Fail					Fail
102	WB	WSCC	A259	50202_50204				716 434	50	484	31 51	.5				-201					-28%				8.	1				Fail					Fail
103	NB	WSCC	A284 - Lyminster Road	50201_50200				402 385	36	421	37 45	8				56					14%				2.	7				Pass					Pass
104	SB	WSCC	A284 - Lyminster Road	50200_50201				465 311	32	343	29 37	3				-92					-20%				4.	5				Pass					Pass
534	NB		Main Road	30003_11012	532	70 60)2 25	627 598	83	681	46 72	8 66	5 13	79	21	101	12%	19%	13%	85%	16%	2.8	1.5	3.1	3.6 3.9	9 Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	Pass
540	NB	CIS_SL_I_ND	Selsey Road	4226_4132	410	59 46	69 22	491 332	39	371	25 39	7 -78	-20	-98	3	-94	-19%	-33%	-21%	15%	-19%	4.1	2.8	4.8 ().7 4.	5 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
535	SB	CTC CL 4 CD	Main Road	11012_30003	632	84 71	6 26	742 653	74	727	47 77	4 21	-10	11	21	32	3%	-12%	2%	82%	4%	0.8	1.1	0.4	3.5 1.3	2 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
541	SB	CIS_SL_1_SB	Selsey Road	4132_4226	430	60 48	39 22	511 465	40	505	32 53	7 35	-20	16	10	26	8%	-33%	3%	43%	5%	1.6	2.8	0.7	l.8 1.	1 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
521	EB		A27 EB	40124_1760	1,289	115 1,40	05 187 1	592 1,256	155 1	1,411	153 1,56	4 -33	40	6	-34	-28	-3%	35%	0%	-18%	-2%	0.9	3.4	0.2	2.6 0.1	7 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
552	EB	CTS_SL_2_EB	Main Road	1001_1255	194	39 23	32 13	245 145	44	189	18 20	7 -49	6	-43	6	-38	-25%	15%	-19%	43%	-15%	3.8	0.9	3.0	L.4 2.	5 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
600	EB	F	New Brighton Road	40045_40136	93	15 10)7 7	114 46	15	61	8 6	9 -47	0	-46	1	-45	-4%	1%	-43%	19%	-40%	5.6	0.0	5.1 ().5 4.	7 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
12	WB		A27 WB	1760_40134	1,186	117 1,30	3 179 1	481 1,254	164 1	1,418	152 1,57	0 68	47	115	-27	89		40%	9%	-15%	6%	1.9	4.0	3.1	2.1 2.1	3 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
553	WB	CTS_SL_2_WB	Main Road	1255_1001	196	39 23	35 13	247 155	33	189	14 20	3 -40) -5	-46	1	-45	-21%	-14%	-19%	5%	-18%	3.0	0.9	3.1 ().2 3.0	0 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
601	WB		New Brighton Road	40136 40045	87	17 10)4 8	112 53	9	62	6 6	7 -34	-8	-42	-2	-44	-39%	-48%	-41%	-25%	-40%	4.1	2.3	4.7 ().7 4.	7 Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
			•					I.	· · · · · ·			-		i																					

			TOTAL		
		GEH OF	R Hourly	flows	
	Car	LGV	Lights	HGV	Total
Pass	36	36	37	37	38
Fail	1	1	0	0	3
%Pass	97%	97%	100%	100%	93%

											PI	vi flov	V VALID	ATION																			
Link	Details		SATURNLink		Observed			Ν	٨odelled				Diff					% Diff				GEH				Flows			W	ebTAG c	riterion (GEH or FL	ow
Ref Direction	Source	Road	SATONNELIIK	Car LG\	/ Lights HO	iV Total	Car	LGV	Lights HGV	Total	Car	LGV	Lights	HGV .	Total	Car	LGV	Lights	HGV	Total Ca	LGV	Lights	HGV To	tal Car	LGV	Lights	HGV	Total	Car	LGV	Lights	HGV	Total
1 EB	TRADS	Arundel Road	50030_50029	1,822 5	8 1,880	65 1,94	5 1,627	7 90	1,717 60	1,777	-195	32	-163	-5	-168	-11%	54%	-9%	-7%	-9% 4.	7 3.7	3.9	0.6	3.9 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
2 WB	TRADS	Arundel Road	50029_50030	1,538 9	0 1,627	67 1,69	5 1,521	214	1,735 58	1,792	-17	124	108	-9	97	-1%	138%	7%	-14%	6% 0.	4 10.1	2.6	1.2	2.3 Pas	s Fail	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass
3 EB	TRADS	Arundel Road	10006_50152	2,163 9	0 2,253	71 2,324	4 1,937	7 96	2,033 61	2,094	-226	6	-220	-10	-230	-10%	7%	-10%	-14%	-10% 5.	0.6	4.7	1.3	4.9 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
4 WB	TRADS	Arundel Road	50160_50150	1,303 8	8 1,391	64 1,45	5 1,189	9 120	1,309 54	1,363	-114	32	-82	-10	-92	-9%	36%	-6%	-15%	-6% 3.	2 3.1	2.2	1.3	2.4 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
5 EB	TRADS	Chichester By-Pass	11070_11007	1,227 4	7 1,274	55 1,329	9 1,004	4 83	1,087 53	1,140	-223	36	-187	-2	-189	-18%	76%	-15%	-3%	-14% 6.	7 4.4	5.5	0.2	5.4 <mark>Fai</mark>	Pass	Fail	Pass	Fail	Fail	Pass	Pass	Pass	Pass
6 WB	TRADS	Chichester By-Pass	11007_11070	1,016 5	4 1,070	56 1,12	5 1,144	102	1,246 52	1,298	128	48	176	-4	172	13%	89%	16%	-8%	15% 3.	9 5.4	5.2	0.6	4.9 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
7 EB	TRADS	Chichester By-Pass	11002_11003	1,783 7	4 1,858	80 1,93	8 1,538	3 186	1,724 69	1,793	-245	112	-134	-11	-145	-14%	151%	-7%	-13%	-7% 6.	9.8	3.2	1.2	3.4 Fai	l Fail	Pass	Pass	Pass	Fail	Fail	Pass	Pass	Pass
8 WB	TRADS	Chichester By-Pass	6936_11004	1,420 10	2 1,522 1	04 1,62	5 1,365	5 156	1,520 61	1,582	-55	54	-2	-43	-44	-4%	52%	0%	-41%	-3% 1.	5 4.7	0.0	4.7	1.1 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
9 EB	TRADS	Chichester By-Pass	9001_11001	1,774 8	8 1,862	73 1,93	5 1,594	176	1,769 66	1,836	-180	88	-93	-7	-99	-10%	100%	-5%	-9%	-5% 4.	4 7.6	2.2	0.8	2.3 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
10 WB	TRADS	Chichester By-Pass	11001_9001	1,552 9	8 1,649	91 1,740	0 1,524	176	1,700 64	1,764	-28	78	51	-27	24	-2%	79%	3%	-29%	1% 0.	7 6.6	1.2	3.0	0.6 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
15 EB	TRADS	Chichester Road	50230_50278	1,192 4	6 1,238	48 1,28	5 1,100) 45	1,145 51	. 1,196	-92	-1	-93	3	-90	-8%	-3%	-8%	7%	-7% 2.	7 0.2	2.7	0.5	2.6 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
16 WB	TRADS	Chichester Road	50278_50230	966 4	6 1,012	52 1,064	4 1,044	4 62	1,106 54	1,160	78	16	94	2	96	8%	35%	9%	4%	9% 2.	5 2.2	2.9	0.3	2.9 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
53 NB	WSCC	St Pancras	6546_6547	1,274 7	6 1,350	30 1,38	1,478	8 86	1,564 22	1,586	204	10	214	-8	206	16%	14%	16%	-26%	15% <mark>5</mark> .	5 1.2	5.6	1.6	5.4 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
55 NB	WSCC	Stockbridge Road	5447_5750	583 1	6 599	11 610	509	9 13	522 8	531	74	-3	-77	-3	-79	-13%	-17%	-13%	-24%	-13% 3.	2 0.7	3.2	0.8	3.3 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
56 SB	WSCC	Orchard Street	5750_5447	598 2	3 621	13 634	4 607	7 36	643 7	650	9	13	22	-6	16	2%	55%	4%	-43%	3% 0.	4 2.3	0.9	1.8	0.6 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
57 NB	WSCC	St Paul's Road	5558_5459	733 3	0 763	4 76	7 359	9 18	377 5	382	-374	-12	-386	1	-385	-51%	-40%	-51%	30%	-50% 16.	0 2.5	16.2	0.6 1	6.1 Fai	Pass	Fail	Pass	Fail	Fail	Pass	Fail	Pass	Fail
58 SB	WSCC	St Pauls's Road	5459_5558	322 2	2 345	2 34	7 326	5 26	352 6	358	4	4	7	4	11	1%	17%	2%	224%	3% 0.	2 0.8	0.4	2.2	0.6 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
65 NB	WSCC	Selsey Road	4226_4132	517 4	9 567	12 579	9 435	5 30	465 13	478	-82	-19	-102	1	-101	-16%	-39%	-18%	11%	-17% 3.	8 3.0	4.5	0.4	4.4 Pas	s Pass	Fail	Pass	Fail	Pass	Pass	Pass	Pass	Pass
66 SB	WSCC	Selsey Road	4132_4226	631 6	4 696	11 70	7 536	6 41	578 15	593	-95	-23	-118	4	-114	-15%	-35%	-17%	36%	-16% 3.	9 3.1	4.7	1.1	4.5 Pas	s Pass	Fail	Pass	Fail	Pass	Pass	Pass	Pass	Pass
67 NB	WSCC	Main Road	30003_11012	664 7	9 744	12 75	6 851	L 78	930 24	953	187	-1	186	12	197	28%	-1%	25%	99%	26% <mark>6</mark> .	8 0.1	6.4	2.8	6.8 Fai	Pass	Fail	Pass	Fail	Fail	Pass	Fail	Pass	Fail
68 SB	WSCC	Main Road	11012_30003	683 5	8 741	9 75	706	6 47	753 23	776	23	-11	12	14	26	3%	-19%	2%	153%	3% 0.	9 1.5	0.4	3.5	0.9 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
69 EB	WSCC	Fisbourne Road (West)	30001_4741	447 4	7 494	14 508	8 435	5 52	487 14	501	-12	5	-7	0	-7	-3%	11%	-1%	-2%	-1% 0.	6 0.8	0.3	0.1	0.3 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
70 WB	WSCC	Fisbourne Road (West)	4741_30001	469 4	6 515	11 52	6 492	2 89	581 14	595	23	43	66	3	69	5%	93%	13%	28%	13% 1.	1 5.2	2.8	0.9	2.9 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
71 EB	WSCC	A286	4068_4880	244 1	7 261	3 264	4 232	2 38	270 8	3 277	-12	21	9	5	13	-5%	123%	3%	166%	5% 0.	8 4.0	0.5	2.1	0.8 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
72 WB	WSCC	A286	4880_4068	218 2	3 241	7 24	8 173	3 24	196 7	203	-45	1	-45	0	-45	-21%	3%	-19%	-3%	-18% 3.	2 0.1	3.0	0.1	3.0 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
83 NB	WSCC	A29	1038_1199	428 2	9 457	13 470	338	3 40	378 8	387	-90	11	-79	-5	-83	-21%	38%	-17%	-36%	-18% 4.	6 1.9	3.9	1.4	4.0 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
84 SB	WSCC	A29	1199_1038	594 7	3 667	14 68:	1 449	98	547 11	. 559	-145	25	-120	-3	-122	-24%	34%	-18%	-20%	-18% <mark>6</mark> .	3 2.7	4.9	0.8 4	.91 Fai	Pass	Fail	Pass	Fail	Fail	Pass	Pass	Pass	Pass
101 EB	WSCC	A259	50204_50202			81	6 636	5 93	728 17	745					-71					-9%				2.5				Pass					Pass
102 WB	WSCC	A259	50202_50204			80	1 674	45	719 13	731					-70					-9%				2.5				Pass					Pass
103 NB	WSCC	A284 - Lyminster Road	50201_50200			47	7 357	7 18	375 8	384					-93					-20%				4.5				Pass					Pass
104 SB	WSCC	A284 - Lyminster Road	50200_50201			61	7 380) 29	409 8	417	'				-200					-32%				8.8				Fail					Fail
534 NB	CTS SI 1 NB	Main Road	30003_11012	664 7	9 744	12 75	6 851	l 78	930 24	953	187	-1	186	12	197	28%	-1%	25%	99%	26% <mark>6</mark> .	8 0.1	6.4	2.8	6.8 Fai	Pass	Fail	Pass	Fail	Fail	Pass	Fail	Pass	Fail
540 NB	010_01_1_10	Selsey Road	4226_4132	517 4	9 567	12 579	9 435	5 30	465 13	478	-82	-19	-102	1	-101	-16%	-39%	-18%	11%	-17% 3.	8 3.0	4.5	0.4	4.4 Pas	s Pass	Fail	Pass	Fail	Pass	Pass	Pass	Pass	Pass
535 SB	CTS SI 1 SB	Main Road	11012_30003	683 5	8 741	9 75	706	5 47	753 23	776	23	-11	12	14	26	3%	-19%	2%	153%	3% 0.	9 1.5	0.4	3.5	0.9 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
541 SB	0.0_01_1_00	Selsey Road	4132_4226	631 6	4 696	11 70	7 536	5 41	578 15	593	-95	-23	-118	4	-114	-15%	-35%	-17%	36%	-16% 3.	9 3.1	4.7	1.1	4.5 Pas	s Pass	Fail	Pass	Fail	Pass	Pass	Pass	Pass	Pass
521 EB		A27 EB	40124_1760	1,839 7	2 1,911	75 1,98	5 1,809	9 169	1,978 76	2,054	-30	97	67	1	68	-2%	134%	4%	1%	3% 0.	7 8.8	1.5	0.1	1.5 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
552 EB	CTS_SL_2_EB	Main Road	1001_1255	291 3	6 327	10 33	7 288	3 57	345 26	371	3	21	18	16	34	-1%	58%	5%	165%	10% 0.	2 3.1	1.0	3.8	1.8 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
600 EB		New Brighton Road	40045_40136	184 3	0 214	7 22	1 151	32	183 14	197	-33	2	-31	7	-24	-2%	6%	-14%	95%	-11% 2.	5 0.3	2.2	2.1	1.7 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
12 WB		A27 WB	1760_40134	1,832 10	3 1,935	92 2,02	7 1,888	3 128	2,016 85	2,101	. 56	25	81	-7	74		24%	4%	-8%	4% 1.	3 2.3	1.8	0.8	1.6 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
553 WB	CTS_SL_2_WB	Main Road	1255_1001	258 3	2 290	9 29	9 261	l 67	328 10	338	3	35	38	2	39	1%	111%	13%	19%	13% 0.	2 5.0	2.1	0.5	2.2 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
601 WB		New Brighton Road	40136_40045	113 2	4 136	4 14	166	5 20	186 5	191	. 53	-4	50	1	51	47%	-15%	36%	33%	36% 4.	5 0.8	3.9	0.6	4.0 Pas	s Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

			TOTAL												
		GEH C	DR Hourl	y flows											
	Car LGV Lights HGV Total														
Pass	31	35	34	37	37										
Fail	6	2	3	0	4										
%Pass	<mark>84%</mark>	95%	92%	100%	90%										



Appendix D Turn Flow Validation

Road	Movement	SATURN Link			Observe	d			Mode	lled				Diff			URN FLOW	VALIDAT	% Diff					GEH			We	TAG flo	w criterie	on	w	/ebTAG cr	iterion GI	H or FLOW
	E TO A	4645_9001_4945	Car 520	LGV 52	Lights 572	HGV 14	Total 586	Car L 568	GV Light 36 603	ts HG 3 51	/ Total 654	Car 48	-16	Lights 31	HGV 37	Total 68	Car 9.2%	LGV -31.5%	Lights 5.5%	HGV 262.8%	Total 11.6%	Car 2.0	LGV 2.5	Lights 1.3	HGV 6.5	Total 2.7	Car LG	/ Light 1	s HG	V Tota 1	Car Pass	LGV Pass	Lights Pass	HGV Tota Pass Pas
	E TO B	4645_9001_5043 4645_9001_11001	114 691	34 303	148 994	4	152	87 742 1	9 97 37 879	8	105	-27	-25 -166	-51 -115	4	-47 -117	-23.3% 7.4%	-72.9%	-34.7%	110.9%	-30.8%	2.6	5.3 11.2	4.6	1.8	4.1	1 1 1 0	1	1	1	Pass	Pass	Pass	Pass Pas Pass Pas
	E TO D	4645_9001_4741	16	3	19	1	20	53	7 61	3	64	37	4	42	2	44	231.8%	148.3%	218.6%	202.6%	217.8%	6.3	1.9	6.6	1.4	6.7	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	A TO B	4645_9001_4644 4945_9001_5043	8	6 12	14 137	0	16	0 144 :	0 0 24 169	9 2	170	-8 19	-6 12	-14 32	-2 2	-16 33	-100.0% 15.5%	-100.0% 103.9%	-100.0% 23.2%	-100.0%	-100.0%	4.0	3.5	2.6	2.0	2.7	1 1 1 1	1	1	1	Pass Pass	Pass	Pass Pass	Pass Pas Pass Pas
	A TO C A TO D	4945_9001_11001 4945 9001 4741	161	14 10	175 97	2	177 99	182 ·	49 231 27 153	1 2 3 2	233 154	21 39	35 17	56 56	0	56 55	12.8% 44.4%	253.1% 171.2%	32.0% 57.5%	-12.4%	31.5% 56.1%	1.6 3.7	6.3 4.0	3.9 5.0	0.2	3.9 4.9	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	A TO E	4945_9001_4644	247	18	265	9	274	245	41 286	6 6	292	-2	23	21	-3	18	-0.9%	125.7%	7.7%	-31.3%	6.5%	0.1	4.2	1.2	1.0	1.1	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	B TO C	5043_9001_11001	6	4	10	2	12	19	9 29	1	30	13	5	19	-1	18	220.0%	136.8%	186.7%	-52.6%	146.8%	3.7	2.1	4.2	0.9	3.9	1 1	1	1	1	Pass	Pass	Pass	Pass Pas Pass Pas
Fisbourne	B TO D B TO E	5043_9001_4741 5043 9001 4644	21 43	15	36 56	1 6	37 62	31	15 47 12 49	2	48	-6	0	-7	-3	-10	49.6%	2.1%	29.8%	57.8% -57.0%	30.5%	2.0	0.1	1.7	0.5	1.7	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	B TO A	5043_9001_4945	20	10	30	0	30	11	3 14	1	15	-9	-7	-16	1	-15	-43.4%	-69.5%	-52.1%		-49.6%	2.2	2.7	3.3	1.2	3.1	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	C TO D	11001_9001_4741	185	60	245	10	255	150	61 212	2 10	221	-35	1	-33	0	-34	-18.7%	2.2%	-13.6%	-4.5%	-13.3%	2.7	0.2	2.2	0.1	2.2	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	C TO E C TO A	11001_9001_4644 11001_9001_4945	1,183	3 251 21	1,434 391	102 3	1,536 1 394	.,281 1 209 ·	.37 1,41 47 256	.8 146 5 15	271	98 -161	-114 26	-16 -135	44 12	28 -123	8.3% -43.4%	-45.5% 122.3%	-1.1% -34.5%	43.3% 404.5%	1.8% -31.1%	2.8 9.4	8.2 4.4	0.4	4.0	0.7 6.7	1 0 0 1	1	1	0	Pass Fail	Fail Pass	Pass Fail	Pass Pas Pass Fa
	C TO B	11001_9001_5043	12	7	19	2	21	0	0 0	1	1	-12	-7	-19	-1	-20	-99.8%	-100.0%	-99.8%	-74.8%	-97.5%	4.9	3.7	6.1	1.3	6.2	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	D TO E	4741_9001_4644	61	2	63	5	68	0	0 0	0	0	-61	-2	-63	-5	-68	-99.6%	-98.5%	-99.6%	-99.4%	-99.6%	11.0	2.0	11.2	3.1	11.6	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	D TO A D TO B	4741_9001_4945 4741_9001_5043	275	16	291 65	2	293 65	100 119	8 108 8 127	36 73	114	-175	-8 1	-183 62	4	-179 65	-63.6% 104.9%	-51.4% 9.6%	-63.0% 94.7%	191.3%	-61.2% 99.4%	12.8 6.5	2.4	13.0 6.3	1.9 2.5	12.6 6.6	0 1 1	0	1	0	Pass	Pass Pass	Pass Pass	Pass Fai Pass Pas
	D TO C	4741_9001_11001 4741_9001_4741	104	18	122	6	128	169	25 193	3 4	197	65 0	7	71 0	-2 0	69 0	62.2%	36.5%	58.4%	-35.1%	54.0%	5.5 0.2	1.4	5.7 0.2	0.9	5.4 0.2	1 1	1	1	1	Pass	Pass	Pass	Pass Pas Pass Pas
	D TO A	11001_5739_5839	48	10	58	5	63	68	10 79	2	81	20	0	21	-3	18	42.3%	4.7%	35.8%	-56.2%	28.5%	2.7	0.1	2.5	1.5	2.1	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	D TO B	11001_5739_11002 11001_5739_50257	179	73	991 252	114	269	909 1 123 :	.78 1,08 29 151	1 12: 1 8	1,210	-56	-81 -44	-101	-10	-110	-31.5%	-31.2%	9.7%	-55.9%	9.5%	4.6	5.5 6.2	3.0	0.8 2.7	3.1 7.5	0 1 1 1	1	1	0	Pass	Pass	Pass Fail	Pass Pas Pass Fai
	D TO D A TO B	11001_5739_11001 5839 5739 11002	0	2	2 136	0	2 142	0 44	0 0	0	0	-60	-2 -19	-2 -78	0 -4	-2 -82	-57.4%	-100.0%	-100.0%	-60.8%	-100.0%	6.9	2.0 3.9	2.0	1.8	2.0	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	A TO C	5839_5739_50257	98	28	126	8	134	205	34 239	9 17	256	107	6	113	9	122	109.7%	20.0%	89.7%	116.1%	91.3%	8.7	1.0	8.4	2.6	8.8	0 1	0	1	0	Fail	Pass	Fail	Pass Fai
Stockbridge	A TO A	5839_5739_11001 5839_5739_5839	0	0	0	0	0	0	0 0	4	0	-08	0	-85	-5	-00	-90.7%	-93.1%	-95.9%	-44.3%	-92.2%	11.5	5.5	12.5	1.5	12.5	1 1	1	1	1	Pass	Pass	Pass	Pass Pas Pass Pas
	B TO C B TO D	11002_5739_50257 11002_5739_11001	152	33 7 234	185 1,491	6 100	191 1,591 1	174 · .,274 1	44 218 .92 1,46	3 13 6 151	231	22	11 -42	33 -25	7 51	40 26	14.4% 1.4%	34.0% -17.9%	17.9% -1.7%	109.3% 50.7%	20.8%	1.7 0.5	1.8 2.9	2.3 0.6	2.2 4.5	2.7 0.7	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	B TO A	11002_5739_5839	217	30	247	6	253	112	13 125	5 3	128	-105	-17	-122	-3	-125	-48.3%	-57.3%	-49.4%	-56.7%	-49.6%	8.2	3.7	9.0	1.6	9.1	0 1	0	1	0	Fail	Pass	Fail	Pass Fai
	C TO D	50257_5739_11001	334	40	374	13	387	386	54 440) 18	458	52	14	66	5	71	15.5%	35.6%	17.7%	40.3%	18.4%	2.7	2.1	3.3	1.3	3.5	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	C TO A C TO B	50257_5739_5839 50257_5739_11002	181	21 41	202 182	6 12	208 194	159 97	24 182 20 117	29 72	191 119	-22	3 -21	-20 -65	3 -10	-17 -75	-12.3%	12.8% -50.7%	-9.7% -35.7%	44.6% -82.1%	-8.1%	1.7 4.1	0.6 3.8	1.4 5.3	1.0 3.7	1.2 6.0	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	C TO C	50257_5739_50257 11004_6936_7040	0	0	0	0	0	0	0 0	0	219	0	0	0	0	0	71.9%	-2.8%	53.6%	-0.3%	51.7%	63	0.2	5.6	0.0	5.5	1 1 1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	D TO B	11004_6936_11005	721	261	982	120	1,102	800 1	.62 962	2 115	5 1,077	79	-99	-20	-5	-25	10.9%	-37.8%	-2.0%	-4.3%	-2.3%	2.9	6.8	0.6	0.5	0.8	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	D TO C	11004_6936_50264	2	28	2	8	2	0	0 0	0	0	-81	-12	-94	-1	-94	-54.7%	-43.3%	-52.9%	-0.5%	-100.0%	2.0	2.6	8.2 2.0	0.2	2.0	1 1	1	1	1	Pass	Pass	Pass	Pass Pas Pass Pas
	A TO B A TO C	7040_6936_11005 7040 6936 50264	42	6 15	48 97	2	50 104	70 105	6 75 8 113	0 3 7	75 120	28 23	0 -7	27 16	-2 0	25 16	65.9% 28.1%	-7.7% -44.2%	56.7% 16.9%	-98.3% -2.3%	50.5% 15.6%	3.7 2.4	0.2	3.5 1.6	1.9 0.1	3.2 1.5	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	A TO D	7040_6936_11004	74	24	98	1	99	93	34 126	5 8	134	19	10	28	7	35	25.1%	40.3%	28.8%	700.0%	35.6%	2.0	1.8	2.7	3.3	3.3	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
Whyke	B TO C	11005_6936_50264	123	29	152	9	161	196	10 206	5 10	217	73	-19	54	1	56	59.5%	-65.0%	35.7%	15.4%	34.6%	5.8	4.3	4.1	0.4	4.1	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	B TO D B TO A	11005_6936_11004 11005_6936_7040	1,104	4 204 14	1,308 76	2	1,412 1 78	.,044 1 37	.49 1,19 0 37	03 144	1,337 37	-60	-55 -14	-115 -39	40 -2	-75 -41	-5.4% -40.9%	-27.0% -96.6%	-8.8% -51.1%	38.3% -99.1%	-5.3%	1.8 3.6	4.1 5.0	3.2 5.2	3.6 2.0	2.0 5.4	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	B TO B	11005_6936_11005 50264_6936_11004	0	2	2	0	2	0	0 0	0	0	0	-2 29	-2 60	0	-2 67	8.0%	-100.0%	-100.0%	107.4%	-100.0%	1.6	2.0	2.0	2.1	2.0	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	C TO A	50264_6936_7040	294	34	328	12	340	239	8 248	3 9	256	-55	-26	-80	-3	-84	-18.6%	-75.1%	-24.5%	-28.4%	-24.6%	3.4	5.5	4.7	1.1	4.8	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	C TO B	50264_6936_11005 50264_6936_50264	151	30	181	10	191 0	0	17 223 0 0	0	0	0	-13	42	-4 0	38 0	36.2%	-42.8%	23.1%	-38.1%	19.9%	4.1	2.6	2.9	1.3	2.6	1 1 1 1	1	1	1	Pass Pass	Pass	Pass Pass	Pass Pas Pass Pas
	D TO E D TO A	11006_10002_7742 11006_10002_11070	66 606	16 216	82 822	3 90	85 912	33 719 1	4 36 .04 822	1 2 102	37 2 924	-33 113	-12 -112	-46 0	-2 12	-48 12	-50.5% 18.6%	-77.9% -52.0%	-55.8% 0.0%	-69.0% 13.6%	-56.3% 1.4%	4.7	4.0 8.9	6.0 0.0	1.5 1.3	6.1 0.4	1 1 0 0	1	1	1	Pass Pass	Pass Fail	Pass Pass	Pass Pas Pass Pas
	D TO B	11006_10002_9137	221	73	294	44	338	249	54 303	3 18	321	28	-19	9	-26	-17 78	12.6%	-26.1%	3.0%	-58.1%	-5.0%	1.8	2.4	0.5	4.6	0.9	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	D TO D	11006_10002_11006	2	0	2	0	2	0	0 0	0	0	-2	0	-2	0	-2	-100.0%	1117.070	-100.0%	-50.570	-100.0%	2.0	0.2	2.0	5.1	2.0	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	E TO A E TO B	7742_10002_11070 7742_10002_9137	67 215	34	101 253	3	265	288	14 70 36 324	10 4 25	80 349	-12	-20 -2	-31 71	7 13	-24 84	-17.6% 33.9%	-57.4% -5.1%	-31.0% 28.0%	234.3% 107.6%	-23.3% 31.6%	1.5 4.6	4.0 0.3	3.4 4.2	2.8	2.5 4.8	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	E TO C	7742_10002_50266	68 68	10 19	78 87	1 2	79 89	72	11 83 15 92	5	88 95	4	-4	5	4	9	6.6%	5.1%	6.4% 5.3%	409.6%	11.5% 6.9%	0.5	0.2	0.6	2.3	1.0	1 1 1 1	1	1	1	Pass	Pass	Pass	Pass Pas Pass Pas
	E TO E	7742_10002_7742	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	26.0%	69.0%	42 69/	20.1%	20.2%	0.3	2.0	0.3	0.7	0.3	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	A TO C	11070_10002_50266	42	8	50	2	52	22	4 40 3 24	5	29	-21	-5	-26	3	-23	-48.0%	-67.0%	-51.0%	138.7%	-43.7%	3.6	2.3	4.0	1.5	3.6	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
Bognor Rd	A TO D A TO E	11070_10002_11006 11070_10002_7742	935 65	158 23	1,093 88	66 3	1,159 91	920 ! 92	94 1,01 5 96	4 114	1,128 99	-15 27	-64 -18	-79 8	48 0	-31 8	-1.6% 40.8%	-40.3% -79.2%	-7.2% 9.4%	72.9%	-2.7% 9.1%	0.5	5.7 4.9	2.4 0.9	5.1 0.0	0.9	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	A TO A B TO C	11070_10002_11070 9135_10002_50266	3	1	4	5	9	0	0 0	0	0	-3	-1 -3	-4 -13	-5 -1	-9 -14	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	2.4	1.4	2.8	3.2	4.2	1 1	1	1	1	Pass Pass	Pass	Pass	Pass Pas Pass Pas
	B TO D	9135_10002_11006	368	60	428	43	471	316	54 369	9 41	410	-52	-6	-59	-2	-61	-14.2%	-10.7%	-13.7%	-5.3%	-12.9%	2.8	0.8	2.9	0.4	2.9	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	B TO A	9135_10002_11070	65	18	83	9	92	0	0 0	0	0	-65	-18	-83	-9	-92	-100.0%	-99.9%	-100.0%	-100.0%	-100.0%	11.4	6.0	12.9	4.2	13.6	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	B TO B C TO D	9135_10002_9137 50266_10002_11006	0 56	0 6	0 62	0	0 63	0	0 0 2 3	0	0	-55	0 -4	0 -59	0 -1	0 -60	-98.1%	-71.0%	-95.5%	-76.1%	-95.2%	10.3	2.2	10.4	1.0	10.4	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	C TO E C TO A	50266_10002_7742 50266 10002 11070	77	12	89 45	1 2	90 47	166 3 33	21 187 5 38	7 4	191 40	89 -4	9 -3	98 -7	3	101	115.8%	72.4%	109.9%	271.3%	111.7%	8.1 0.7	2.1 1.0	8.3 1.0	1.8	8.5 1.0	1 1 1 1	1	1	0	Pass Pass	Pass Pass	Pass Pass	Pass Fai
	C TO B	50266_10002_9137	0	2	2	2	4	0	0 0	0	0	0	-2	-2	-2	-4		-98.5%	-93.5%	-98.5%	-96.0%	0.4	2.0	1.8	2.0	2.7	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	C TO D	11007_7952_7750	10	7	17	1	18	0	0 0	0	0	-10	-7	-17	-1	-18	-95.8%	-99.6%	-97.4%	-100.0%	-97.5%	4.2	3.7	5.6	1.4	5.8	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	C TO A C TO B	11007_7952_11008 11007_7952_8652	632 70	227 8	859 78	102 0	961 78	/30 1 60	8 68	+ 110	954 70	98 -10	-114 0	-15 -10	8	-7 -8	15.6% -13.7%	-50.2% -1.5%	-1.8% -12.4%	7.9%	-0.8% -9.8%	3.8 1.2	8.7 0.0	0.5 1.1	0.8 2.0	0.2 0.9	1 0 1 1	1	1	1	Pass Pass	Pass	Pass Pass	Pass Pas Pass Pas
	D TO A D TO B	7750_7952_11008 7750_7952_8652	64 78	15 11	79 89	1	80 89	38 129	7 45 11 141	4	48 142	-26 51	-8 0	-34 52	3	-32 53	-40.9% 66.0%	-52.9% 3.2%	-43.2% 58.2%	258.3%	-39.4% 59.2%	3.7 5.1	2.4 0.1	4.3 4.8	1.7 1.3	3.9 4.9	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
Oving Rd	D TO C	7750_7952_11007	6	1	7	2	9	0	0 0	0	0	-6	-1	-7	-2	-9	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	3.5	1.4	3.7	2.0	4.2	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	A TO C	11008_7952_8652	90	209	1,143	83	1,226 1	.,027	2 34 92 1,12	20 130) 1,250	93	-117	-80	47	24	-64.4%	-55.8%	-04.2%	-30.5% 56.9%	2.0%	3.0	9.5	0.7	4.6	0.7	1 0	1	1	1	Pass	Fail	Pass	Pass Pas Pass Pas
	A TO D B TO C	11008_7952_7750 8652_7952_11007	145	21	166 114	3	169 116	128 80	4 132 17 97	2 3	135	-17	-17 9	-34 -17	0 4	-34 -13	-11.4%	-83.0% 116.0%	-20.4% -15.0%	5.9% 194.3%	-20.0%	2.7	5.0 2.6	2.8	0.1 2.0	2.7	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	B TO D	8652_7952_7750 8652_7952_11008	195	15	210	1	211	186	11 198 26 140	3 3) 4	200	-9 -46	-4 14	-12	2	-11	-4.5%	-23.9%	-5.9%	175.2%	-5.0%	0.6	1.0	0.9	1.3	0.7	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	DTOA	7755_10003_10004	18	6	24	0	24	0	0 0	0	0	-18	-6	-24	0	-24	-100.0%	-100.0%	-100.0%	E 74	-100.0%	6.0	3.5	6.9		6.9	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	D TO B	7755_10003_8258	358	20	413	15 5	428 150	5	18 369 2 6	3 16	385	-/	-37	-44 -139	-2	-43 -141	-1.8% -96.2%	-67.6% -91.6%	-10.6% -95.6%	-44.9%	-10.0%	0.3	6.2 5.6	2.2	0.2	2.1	1 1 0 1	1	1	0	Pass Fail	Pass	Pass Fail	Pass Pas Pass Fal
	D TO D A TO B	7755_10003_7755 10004 10003 8258	50 31	8	58 34	1	59 39	7 47	0 7	0	7	-43 16	-8 -3	-51 13	-1 -5	-52 8	-86.5% 51.1%	-94.1%	-87.5% 37.8%	-82.6%	-87.4%	8.1 2.5	3.7 2.4	8.9 2.0	1.1 3.2	9.0 1.2	1 1 1 1	1	1	1	Pass	Pass	Pass Pass	Pass Pas Pass Pas
	A TO C	10004_10003_30022	120	24	144	11	155	112	13 125	5 24	149	-9	-11	-19	13	-6	-7.1%	-44.7%	-13.4%	118.1%	-4.0%	0.8	2.5	1.7	3.1	0.5	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
Portfield	A TO A	10004_10003_10004	2	0	2	3	5	0	0 0	0	0	-1	0	-2	-3	-2	-18.3%	-03.0%	-100.0%	-100.0%	-100.0%	2.0	1.1	2.0	2.4	3.2	1 1	1	1	1	Pass	Pass	Pass	Pass Pas Pass Pas
. o. cheru	B TO C B TO D	30021_10003_30022 30021_10003_7755	938 690	156 64	1,094 754	70 12	1,164 1 766	,071 822	83 1,15 53 875	3 107 5 16	1,261 891	133 132	-74 -11	59 121	37 4	97 125	14.2% 19.2%	-47.1% -17.1%	5.4% 16.1%	53.4% 29.5%	8.3% 16.3%	4.2 4.8	6.7 1.4	1.8 4.3	4.0 1.0	2.8 4.3	1 1 0 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	B TO A	30021_10003_10004 30021_10003_9359	83	18	101	5	106 19	0	0 0	0	0	-83	-18	-101	-5	-106	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	12.9	6.0 2 /	14.2	3.2	14.6	1 1	0	1	0	Pass	Pass	Fail	Pass Fai
	C TO D	30022_10003_7755	193	26	219	7	226	63	7 70	1	71	-130	-19	-149	-6	-155	-67.4%	-73.4%	-68.1%	-85.6%	-68.7%	11.5	4.7	12.4	3.0	12.7	0 1	0	1	0	Fail	Pass	Fail	Pass Fai
	C TO A C TO B	30022_10003_10004 30022_10003_8258	220 518	62 212	282 730	13 97	295 827	149 660	40 189 98 758	9 10 3 107	199 865	-71 142	-22 -114	-93 28	-3 10	-96 38	-32.3% 27.4%	-35.2% -53.6%	-32.9% 3.9%	-23.7% 10.3%	-32.5% 4.6%	5.2 5.8	3.0 9.1	6.1 1.0	0.9	6.1 1.3	1 1 0 0	1	1	1	Pass Fail	Pass Fail	Pass Pass	Pass Pas Pass Pas
	C TO C	30022_10003_30022 5745_5744_5844	6 165	0	6 191	7	13 197	1 65	0 1	2	3	-5	0	-5 -116	-5 -6	-10	-83.2%	-59.4%	-81.8%	-71.4%	-76.2%	2.7	0.4	2.6	2.4	3.5 10.4	1 1 0 1	1	1	1	Pass	Pass	Pass	Pass Pas
	A TO C	5745_5744_5743	59	1	60	0	60	90	5 94	2	96	31	4	34	2	36	52.1%	357.0%	57.2%	20.270	59.8%	3.6	2.1	3.9	1.8	4.1	1 1	1	1	1	Pass	Pass	Pass	Pass Pas
	A TO D A TO A	5745_5744_5544 5745_5744_5645	271	22	293 15	10 0	303 15	260 0	1 261 0 0	1 8 0	269	-11 -12	-21 -3	-32 -15	-2 0	-34 -15	-3.9% -100.0%	-96.4% -100.0%	-10.9% -100.0%	-20.0%	-11.2% -100.0%	0.7 4.9	6.3 2.4	1.9 5.5	0.7	2.0 5.5	1 1 1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	B TO C	5845_5744_5743 5845_5744_5544	56 222	0 8	56 241	0	56 246	155	10 165	5 4 7 8	169 246	99 -46	10 42	109 -4	4	113 0	177.1%	534 /%	194.9%	62 7%	202.6%	9.7 3.2	4.5	10.4	2.9	10.7	1 1	0	1	0	Pass	Pass	Fail	Pass Fai
	B TO A	5845_5744_5645	168	26	194	15	209	116	17 133	3 9	142	-52	-9	-61	-6	-67	-30.9%	-32.9%	-31.2%	-42.3%	-32.0%	4.4	1.8	4.7	1.8	5.0	1 1	1	1	1	Pass	Pass	Pass	Pass Pas

Avenue de Chartres	в то в	5845_5744_5844	9	0	9	1	10	0	0	0	0	0	-9	0	-9	-1	-10	-100.09	6	-100.0%	-100.0%	-100.0%	4.2		4.2	1.4	4.5	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
/ Via Ravenna Rdb	C TO D	5743_5744_5544	12	1	13	0	13	4	1	5	0	5	-8	0	-8	0	-8	-62.8%	-33.0%	-60.5%		-59.8%	2.6	0.4	2.6	0.4	2.6	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	C TO A	5743_5744_5645	8	0	8	0	8	3	0	3	0	3	-5	0	-5	0	-5	-65.4%		-61.3%		-59.1%	2.3	0.8	2.1	0.6	2.0	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	С ТО В	5743_5744_5844	1	0	1	0	1	2	0	2	0	2	1	0	1	0	1	71.0%		109.0%		116.0%	0.6	0.9	0.9	0.4	0.9	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	с то с	5743_5744_5743	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	D TO A	5544_5744_5645	325	23	348	13	361	167	1	168	19	187	-158	-22	-180	6	-174	-48.6%	-94.9%	-51.7%	43.3%	-48.2%	10.1	6.3	11.2	1.4	10.5	0	1	0	1	0	Fail	Pass	Fail	Pass	Fail
	D TO B	5544_5744_5844	325	19	344	5	349	342	24	366	5	371	17	5	22	0	22	5.4%	24.5%	6.4%	4.7%	6.4%	1.0	1.0	1.2	0.1	1.2	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	D TO C	5544_5744_5743	103	1	104	0	104	96	7	102	2	105	-7	6	-2	2	1	-7.3%	572.0%	-1.7%		0.5%	0.8	2.9	0.2	2.2	0.1	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	D TO D	5544_5744_5544	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	A TO B	6650_6648_6748	452	73	525	19	544	518	53	571	19	590	66	-20	46	0	46	14.7%	-27.9%	8.8%	-1.6%	8.4%	3.0	2.6	2.0	0.1	1.9	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	A TO C	6650_6648_6543	499	47	546	8	554	526	66	592	24	616	27	19	46	16	62	5.4%	40.9%	8.5%	195.6%	11.2%	1.2	2.6	1.9	3.9	2.6	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	B TO C	6748_6648_6543	689	95	784	18	802	896	102	998	33	1,031	207	7	214	15	229	30.0%	7.2%	27.3%	83.0%	28.5%	7.3	0.7	7.2	3.0	7.6	0	1	0	1	0	Fail	Pass	Fail	Pass	Fail
Gyratory at East St	G TO A	20003_6547_6650_6648	455	72	527	10	537	556	52	608	19	627	101	-20	81	9	90	22.2%	-27.8%	15.4%	91.3%	16.8%	4.5	2.5	3.4	2.4	3.7	0	1	1	1	1	Pass	Pass	Pass	Pass	Pass
/ Market Rd / St	F TO G	6546_6547_20003	444	87	531	11	542	531	61	592	9	601	87	-26	61	-2	59	19.5%	-29.4%	11.5%	-17.3%	10.9%	3.9	3.0	2.6	0.6	2.5	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
Pancras / New	F TO A	6546_6547_6650_6648	299	55	354	23	377	65	7	72	0	72	-234	-48	-282	-23	-305	-78.3%	-87.3%	-79.7%	-98.1%	-80.8%	17.3	8.6	19.3	6.6	20.3	0	1	0	1	0	Fail	Pass	Fail	Pass	Fail
Park Rd / The	D TO E	6446_6542_6448	14	6	20	1	21	0	0	0	1	1	-14	-6	-20	0	-20	-97.6%	-99.3%	-98.2%	-34.8%	-95.1%	5.1	3.4	6.2	0.4	6.0	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
Hornot	D TO F	6542_6546_6547	368	54	422	20	442	251	21	272	4	276	-117	-33	-150	-16	-166	-31.7%	-60.9%	-35.5%	-82.1%	-37.6%	6.6	5.4	8.0	4.8	8.8	0	1	0	1	0	Fail	Pass	Fail	Pass	Fail
nomet	E TO F	6448_6546_6547	44	14	58	5	63	17	2	19	1	20	-27	-12	-39	-4	-43	-60.8%	-88.1%	-67.4%	-83.8%	-68.7%	4.8	4.4	6.3	2.5	6.7	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	C TO D	6543_6446_6445	726	50	776	16	792	689	93	781	30	811	-37	43	5	14	19	-5.2%	85.5%	0.7%	84.8%	2.4%	1.4	5.1	0.2	2.8	0.7	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	C TO E	6543_6542_6448	132	19	151	2	153	159	12	171	13	184	27	-7	20	11	31	20.2%	-36.2%	13.1%	552.0%	20.1%	2.2	1.7	1.6	4.0	2.4	1	1	1	1	1	Pass	Pass	Pass	Pass	Pass
	C TO F	6543_6546_6547	329	74	403	9	412	575	63	638	14	652	246	-11	235	5	240	74.8%	-14.6%	58.3%	55.0%	58.3%	11.6	1.3	10.3	1.5	10.4	0	1	0	1	0	Fail	Pass	Fail	Pass	Fail

		GE	H Statist	tics			Flo	ow Crite	ion			GEH C	OR Hourl	y flows	
Pass	89	94	85	115	84	121	132	123	138	122	124	132	123	138	122
Fail	37	28	43	3	44	17	6	15	0	16	14	6	15	0	16
%Pass	71%	77%	66%	97%	66%	88%	96%	89%	100%	88%	90%	96%	89%	100%	88%

















Road	Movement	SATURN Link	Car I	Obs LGV Li	served ohts	HGV 1	Total	Car	Mod LGV Li	delled	GV Total	Car LG	l Diff Lights	P TURN	FLOW VALIDA		% Diff Lights	HGV	Total	Car	LGV	GEH Lights	HGV	Total Ca	WebT.	AG flow	v criterio	on / Total	We Car	ebTAG c LGV	riterion G Lights	EH or FLOW HGV Tot
	E TO A E TO B	4645_9001_4945 4645_9001_5043	235 36	32 2 16	267 52	10 5	277 57	425 22	33 4 3	458 2 25 1	8 486 0 36	190 1 -14 -13	191 -27	18 2 5 ·	209 80.9% 21 -37.7%	1.9%	71.4%	184.7% 106.3%	75.5%	10.5 2.5	0.1 4.3	10.0 4.3	4.2 1.9	10.7 0 3.1 1		0	1	0	Fail Pass	Pass Pass	Fail Pass	Pass Fai Pass Pas
	E TO C E TO D E TO E	4645_9001_11001 4645_9001_4741 4645_9001_4644	809 2 42 2	206 1, 8 0	,015 50 2	107 1 2 0	1,122 52 2	758 50 0	114 8 6 0	872 10 56 8 0 0	07 979 8 63 0 0	-51 -92 8 -2 -2 0	-143 6 -2	0 -: 6 0	143 -6.3% 11 19.3% -2 -100.0%	-44.8%	-14.1% 11.8% -100.0%	-0.3% 275.9%	-12.8% 22.0% -100.0%	1.8 1.2 2.0	7.3 0.8	4.7 0.8 2.0	0.0 2.5	4.4 1 1.5 1 2.0 1	1	0 1 1	1 1	1 1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas Pass Pas
	A TO B A TO C	4945_9001_5043 4945_9001_11001	66 271	15 18 2	81 289	2	83 291	53 204	5 24	58 1 228 1	1 59 1 229	-13 -10 -67 6	-23 -61	-1	-24 -20.0% -62 -24.5%	-64.5% 31.5%	-28.2%	-37.4% -49.8%	-28.5%	1.7 4.3	3.0 1.2	2.7	0.6	2.8 1 3.8 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	A TO D A TO E A TO A	4945_9001_4741 4945_9001_4644 4945_9001_4945	159 225 0	13 1 36 2 0	172 261 0	5 11 0	177 272 0	168 300 0	19 : 20 : 0	187 2 320 2 0 0	4 191 3 342 0 0	9 6 75 -16 0 0	15 59 0	-1 12 0	14 5.8% 70 33.2% 0	43.2%	8.6% 22.5%	-20.4% 105.8%	7.8% 25.9%	0.7 4.6	1.4 3.0	1.1 3.4	0.5 2.8	1.0 1 4.0 1	1	1 1	1 1	1 1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas Pass Pas
Fisherman	B TO C B TO D	5043_9001_11001 5043_9001_4741	20 32	6 8	26 40	2	28 40	87 24	26 : 5	113 2 29 4	2 115 4 32	67 20 -8 -3	87 -11	0 4	87 334.8% -8 -26.2%	340.5%	336.1% -28.7%	-19.8%	310.7% -19.6%	9.2 1.6	5.1 1.2	10.5 2.0	0.3	10.3 1 1.3 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
Fisbourne	B TO A B TO A B TO B	5043_9001_4544 5043_9001_4945 5043_9001_5043	34 45 0	13 8 0	47 53 0	5 1 0	52 54 0	16 28 0	3 0	18 7 31 1 0 0	7 25 1 32 0 0	-18 -11 -17 -5 0 0	-29 -22 0	0 ·	-27 -52.1% -22 -38.7% 0	-86.1%	-61.5%	-2.2%	-52.0%	2.9	4.1	3.4	0.8	4.4 1 3.4 1	1	1 1	1 1	1 1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas Pass Pas
	C TO D C TO E	11001_9001_4741 11001_9001_4644	170 876	40 2 261 1,	210	12 134 1	222 L,271	191 847	45 2 138 9	236 5 984 11	5 241 13 1,098	21 5 -29 -12	26 3 -153	-7 -21 -	19 12.3% 173 -3.4%	13.3% -47.1%	12.5% -13.4%	-59.7% -15.4%	8.6% -13.6%	1.6 1.0	0.8	1.8	2.5 1.8	1.3 1 5.0 1	. 1	1 0	1	1 0	Pass Pass	Pass Fail	Pass Pass	Pass Pas Pass Fa
	C TO B C TO C	11001_9001_5043 11001_9001_11001	10 6	3	130 13 8	1	132 14 9	77 0	17 0	93 1 0 (1 95 0 0	-20 12 67 14 -6 -2	-8 -8	0	-9 -14.8% 81 666.5% -9 -100.0%	458.7%	-100.0%	-100.0%	-100.0%	10.1 3.5	4.4 2.0	11.0 4.0	0.1 1.4	10.9 1 4.2 1	1	1 1	1 1	1 1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas
	D TO E D TO A	4741_9001_4644 4741_9001_4945 4741_9001_5043	18 178	5 16 1	23 194 43	3 6	26 200	92 152 30	4	96 9 171 2	9 104 2 173	74 -1 -26 3	-23	6 -4 ·	78 410.9% 27 -14.8%	-22.6% 18.8%	316.7%	186.8% -66.2%	301.7% -13.6%	10.0 2.0	0.5	9.4 1.7	2.3	9.7 1 2.0 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	D TO C D TO D	4741_9001_11001 4741_9001_4741	162 0	41 2 0	43 203 0	10 0	213 0	181 0	44 2 0	225 5 0 0	5 230 0 0	19 3 0 0	22	-5 0	-0 -9.9% 17 11.7% 0	7.9%	11.0%	-47.4%	8.2%	1.5	0.5	1.5	1.7	1.2 1	1	1 1	1 1	1 1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas
	D TO A D TO B	11001_5739_5839 11001_5739_11002 11001_5739_50257	43 881 2	11 207 1,	54 ,088	3 106 1	57 L,194	26 831	10 164 9	36 3 994 10	3 38 03 1,097	-17 -1 -50 -43	-18 -94	-3	-19 -40.0% -97 -5.7% 74 28.6%	-10.4%	-33.9% -8.6%	-9.4% -3.1%	-32.6% -8.1%	2.9	0.4	2.7	0.2	2.7 1 2.9 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	D TO D A TO B	11001_5739_11001 5839_5739_11002	4 123	2 30 1	6 153	0	6 159	0 97	0 9 :	0 0 106 2	0 0 2 108	-4 -2 -26 -21	-6 -47	0 -4 -	-6 -100.0% -51 -20.8%	-100.0%	-100.0% -30.7%	-73.9%	-100.0% -32.3%	2.8	2.0	3.5 4.1	2.3	3.5 1 4.5 1	1	1 1	1 1	1 1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	A TO C A TO D	5839_5739_50257 5839_5739_11001	184 60	26 2	210 75	6 4	216 79	179 68	31 2 13	210 1 82 2	.9 229 2 84	-5 5 8 -2	0 7	13 -2	13 -2.8% 5 14.2%	18.6%	-0.2% 9.0%	214.3% -52.5%	5.8% 5.9%	0.4	0.9 0.5	0.0	3.6 1.2	0.8 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
Stockbridge	B TO C B TO D	11002_5739_50257 11002_5739_11001	195 894	28 2 250 1,	223 ,144	8 131 1	231 L,275	253 944	35 2 182 1	288 1 ,126 11	0 298 10 1,236	58 7 50 -68	65	2 -21	-1 -100.0% 67 29.6% -39 5.6%	25.3% -27.0%	29.0%	27.3%	29.0%	3.9 1.6	1.3 4.6	4.1	0.7 1.9	4.1 1 1.1 1	1	1 1	1 1	1 1	Pass Pass Pass	Pass Pass	Pass Pass Pass	Pass Pas Pass Pas
	B TO A B TO B	11002_5739_5839 11002_5739_11002 50257_5739_11001	100 15	20 1 3	120 18	4	124 19 218	30 0	5 0	35 (0 (0 35 0 0	-70 -15 -15 -3	-85 -18	-4 -1 -	89 -69.8% 19 -100.0%	-76.4% -100.0%	-70.9% -100.0%	-87.7% -100.0%	-71.5% -100.0%	8.7 5.5	4.3 2.4	9.7 6.0	2.3	9.9 1 6.2 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	С ТО А С ТО В	50257_5739_5839 50257_5739_11002	170 156	29 1 30 1	199 186	7 12	206 198	217 212 257	38 2 34 2	249 1 290 1	.8 267 .0 300	42 9 101 4	50 104	11 -2 1	61 24.4% 102 64.7%	30.8% 11.9%	25.4%	155.2% -20.4%	29.8% 51.5%	3.0 7.0	1.5 0.6	3.4 6.8	3.1 0.7	4.0 1 6.5 0		1 0	1 1	1 0	Pass Fail	Pass Pass	Pass Fail	Pass Pas Pass Fa
	C TO C D TO A	50257_5739_50257 11004_6936_7040 11004_6936_11005	0 66	0 27	0 93 166	0 4 112 1	0 97	0 156 917	0 30 :	0 0	0 0 7 193	0 0 90 3	0 93	3	0 96 136.5%	10.9%	100.1%	81.2%	99.3%	8.6	0.6	7.9	1.4	8.0 1	1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	D TO C D TO D	11004_0936_11003 11004_6936_50264 11004_6936_11004	160 8	27 1 1	,100 187 9	8	195 10	112 0	32 : 0	,001 10 143 2 0 0	2 146 0 0	-48 5 -8 -1	-103 -44 -9	-6 ·	-49 -30.2% -10 -100.0%	-33.3% 17.3% -100.0%	-23.3% -100.0%	-69.1% -100.0%	-25.2% -100.0%	4.1	0.9 1.4	3.4	2.4 1.4	3.8 1 4.5 1	1	1 1	1 1	1 1	Pass Pass Pass	Pass Pass	Pass Pass Pass	Pass Pas Pass Pas
	A TO B A TO C	7040_6936_11005 7040_6936_50264 7040_6936_11004	39 116	7 18 1	46 134 92	9	47 143 95	56 166	0	56 (176 1	0 56 5 191	17 -7 50 -8	10 42	-1 6	9 43.0% 48 43.4%	-95.3% -47.1%	21.9% 31.2%	-74.8% 67.1%	19.9% 33.5%	2.4	3.5 2.3	1.4 3.4	0.9	1.3 1 3.7 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
Whyke	A TO A B TO C	7040_6936_7040 11005_6936_50264	0 126	1 25 1	1 151	0 10	1 161	0 195	0 10 2	0 (0 0 .4 219	0 -1 69 -15	-1 53	0 4	-1 58 54.4%	-100.0% -60.8%	-100.0% 35.4%	42.8%	-100.0% 35.8%	5.4	1.4 3.6	1.4	1.2	1.4 1 4.2 1	1	1	1 1	1 1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	B TO D B TO A B TO B	11005_6936_11004 11005_6936_7040 11005_6936_11005	966 2 29	243 1, 6	,209 35 1	124 1 1	1,333 36 2	985 55 0	168 1 2	,153 11 57 0	16 1,269 0 57	19 -75 26 -4	-56 22 -1	-8	64 2.0% 21 89.4%	-30.7% -60.7%	-4.6% 63.7%	-6.6% -100.0%	-4.8% 59.1%	0.6 4.0	5.2 1.8	1.6 3.3	0.7	1.8 1 3.1 1 2.0 1	1	1	1	1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas
	C TO D C TO A	50264_6936_11004 50264_6936_7040	164 123	28 1 18 1	192 141	11 10	203 151	159 111	32 : 7 :	191 2 118 1	2 193 3 131	-5 4 -12 -11	-1 -23	-9 · 3 ·	10 -2.9% 20 -9.6%	13.5% -63.3%	-0.5%	-83.8% 28.0%	-5.0%	0.4	0.7 3.2	0.1	3.6 0.8	0.7 1	1	1	1 1	1 1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	C TO B C TO C	50264_6936_11005 50264_6936_50264 11006_10002_7742	122 0 71	27 1 0	149 0	8	157 0	141 0	9 :	149 1 0 (2 162 0 0	19 -18 0 0	0	4	5 15.4% 0 -43.8%	-68.0%	0.3%	54.9%	3.1%	1.6	4.3	0.0	1.4	0.4 1	1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	D TO A D TO B	11006_10002_11070 11006_10002_9137	796 : 224	169 9 53 2	965 277	83 1 30	1,048 307	736	90 8 52 3	826 8 305 2	9 915 7 331	-60 -79 28 -1	-139 28	6 - -3	133 -7.5% 24 12.6%	-46.8%	-14.4%	7.8%	-12.7%	2.2	7.0 0.1	4.7	0.7	4.2 1 1.4 1	1	0	1 1	1 1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	D TO C D TO D	11006_10002_50266 11006_10002_11006 7742_10002_11070	20 5 78	4 2 2 1	24 7	2	26 8 112	86 0	1 0 7	87 0 0 0	0 87 0 0	66 -3 -5 -2	-7	-2	61 328.0% -8 -100.0%	-66.3% -100.0%	262.3%	-98.3% -100.0%	234.5%	9.0 3.2	1.6 2.0	8.5 3.7	1.9 1.4	8.1 1 4.0 1	1 1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	E TO B E TO C	7742_10002_9137 7742_10002_50266	256 102	40 2 14 1	296 116	11 1	307 117	297 89	30 3 21 3	327 2 110 2	1 348 2 112	41 -10 -13 7	31	10 1	41 16.0% -5 -12.9%	-25.8%	10.4%	92.3% 143.0%	13.3% -4.0%	2.5 1.4	1.7 1.7	1.7	2.5 1.1	2.3 1 0.4 1	1	1	1 1	1 1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	E TO D E TO E A TO B	7742_10002_11006 7742_10002_7742 11070_10002_9137	68 0 89	18 0 12 1	86 0 101	4 0 7	90 0 108	44 0 89	8 0	52 (0 (99 1	0 52 0 0 9 117	-24 -10 0 0	-34 0 -2	-4 · 0	-38 -35.6% 0 9 0.0%	-55.7%	-39.8%	-90.7%	-42.1%	3.2 0.6 0.0	2.8 0.2	4.1 0.6	2.5 0.1 3.3	4.5 1 0.7 1 0.9 1	1	1	1	1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas Pass Pas
Bognor Rd	A TO C A TO D	11070_10002_50266 11070_10002_11006	78 720	13 175 8	91 895	6 97	97 992	40 817	13 102 9	53 6 919 11	5 60 14 1,032	-38 0 97 -73	-38 24	0 .	-37 -48.8% 40 13.4%	2.5%	-41.5%	5.7%	-38.6% 4.1%	5.0	0.1	4.4	0.1	4.2 1 1.3 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	A TO E A TO A B TO C	11070_10002_7742 11070_10002_11070 9135_10002_50266	31 2 25	11 · 0 4	42 2 29	2 2 2	44 4 31	34 0	3 0	37 1 0 0	1 48 0 0	3 -8 -2 0 -25 -4	-5 -2 -29	9 -2 -2	4 9.8% -4 -100.0% -30 -98.4%	-73.0%	-11.9% -100.0% -98.4%	464.1% -100.0% -95.9%	9.7% -100.0% -98.3%	0.5 2.0	3.0	0.8 2.0 7.4	3.6 2.0 1.9	0.6 1 2.8 1 7.7 1	1	1	1	1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas Pass Pas
	B TO D B TO E	9135_10002_11006 9135_10002_7742	279 202	64 3 36 2	343 238	35 11	378 249	362 291	70 4 20 3	432 1 311 2	6 448 1 332	83 6 89 -16	89 73	-19 10	50 50:470 70 29.8% 83 43.9%	9.2%	26.0%	-54.2% 92.2%	18.6% 33.5%	4.6	0.7	4.5 4.4	3.8 2.5	3.5 1 4.9 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	B TO A B TO B C TO D	9135_10002_11070 9135_10002_9137 50266_10002_11006	115 0 31	11 1 0	126 0 39	9	135 0 42	78 0 18	7 0 2	85 1 0 0 20 0	7 102 0 0 0 20	-37 -4 0 0 -13 -6	-41 0 -19	8 .	-33 -31.8% 0 -22 -42.7%	-37.6%	-32.3%	90.4%	-24.1%	3.7	2.8	4.0	2.3	3.0 1 4.0 1	. 1	1	1	1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas Pass Pas
	C TO E C TO A	50266_10002_7742 50266_10002_11070	65 53	9 10	74 63	1 5	75 68	86 65	16 : 13	103 3 77 7	3 105 7 85	21 7 12 3	29 14	2	30 32.9% 17 22.2%	80.6% 25.9%	38.7% 22.8%	152.2% 43.7%	40.2% 24.4%	2.5 1.5	2.0 0.8	3.0 1.7	1.1 0.9	3.2 1 1.9 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	C TO B C TO C C TO D	50266_10002_9137 50266_10002_50266 11007 7952 7750	4 0 25	2 0 10	6 0 35	2 0 1	8 0 36	0 0 64	0	1 (0 (69 1	0 1 0 0 1 70	-4 -2 0 0 39 -5	-5 0 34	-2 0 0	-7 -90.5% 0 34 154.7%	-93.5%	-91.5% 97.4%	-92.8% -42.6%	-91.8% 93.5%	2.4 5.8	1.8	3.0 4.7	0.5	3.5 1 1 4.6 1	1	1 1	1 1	1 1 1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas Pass Pas
	C TO A C TO B	11007_7952_11008 11007_7952_8652	847 2 43	202 1,	,049 50	95 1 1	1,144 51	793 57	98 8 11	891 11 67 2	17 1,008 2 69	-54 -104 14 4	-158 17	22 -	136 -6.4% 18 31.6%	-51.5% 52.9%	-15.1% 34.5%	23.6% 82.2%	-11.8% 35.5%	1.9 1.9	8.5 1.2	5.1 2.3	2.2	4.1 1 2.3 1	0	0	1	1	Pass Pass	Fail Pass	Fail Pass	Pass Pas Pass Pas
Onine Bri	D TO A D TO B D TO C	7750_7952_11008 7750_7952_8652 7750_7952_11007	97 16	15 1 11 1 6	101 108 22	2 1 1	103 109 23	99 121 38	7 : 9 : 3	105 5 130 1 40 0	5 111 1 131 0 40	13 -8 24 -2 22 -3	4 22 18	3 0 -1	8 14.6% 22 24.7% 17 134.8%	-55.4% -20.3% -57.7%	4.2% 20.1% 82.3%	163.0% 49.1% -98.7%	7.3% 20.4% 74.4%	1.3 2.3 4.2	2.5 0.7 1.7	0.4 2.0 3.2	1.7 0.4 1.4	0.7 1 2.0 1 3.0 1	1	1 1	1 1	1 1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas Pass Pas
Oving Rd	A TO B A TO C	11008_7952_8652 11008_7952_11007	78 801	7 223 1,	85 ,024	3 108 1	88 1,132	55 913	6 117 1	60 5 ,030 15	5 66 51 1,181	-23 -1 112 -10	-25	2 · 43	-22 -30.1% 49 14.0%	-16.4%	-29.0% 0.6%	77.0%	-25.3% 4.3%	2.9	0.5	2.9 0.2	1.1 3.8	2.5 1 1.4 1	. 1	1	1	1	Pass Pass	Pass Fail	Pass Pass	Pass Pas Pass Pas
	B TO C B TO D	8652_7952_11007 8652_7952_11007 8652_7952_7750	38 86	16 6 10	76 44 96	3 1 1	79 45 97	38 44 41	6 11 6	44 2 54 1 47 0	4 48 1 55 0 47	-22 -10 6 5 -45 -4	-32 10 -49	0	-31 -36.5% 10 14.7% -50 -52.0%	-60.6% 76.8% -44.7%	-41.6% 23.1% -51.3%	25.4% 21.7% -67.8%	-39.0% 23.1% -51.4%	0.9 5.6	2.9 1.6 1.6	4.1 1.5 5.8	0.4	3.9 1 1.5 1 5.9 1	1	1 1	1 1	1 1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas Pass Pas
	B TO A D TO A	8652_7952_11008 7755_10003_10004	86 14	7	93 17	3	96 17	58 0	5	63 4 0 0	4 67 0 0	-28 -2 -14 -3	-30 -17	1 .	29 -32.6% 17 -100.0%	-23.6%	-31.9%	28.6%	-30.1%	3.3 5.3	0.7	3.4 5.8	0.5	3.2 1 5.8 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	D TO C D TO D	7755_10003_30022 7755_10003_7755	405 294 114	+7 5 27 3 5 1	321 119	5	324 326 119	408 72 6	9	81 5 7 (5 86 0 7	-222 -18 -108 -4	-20 -240 -112	1.3 0 -	240 -75.4% 112 -94.8%	-38.6% -68.6%	-5.1% -74.8% -94.5%	-3.3%	-2.5% -73.7% -94.4%	16.4 13.9	4.9 4.4 2.7	16.9 14.2	0.1 0.4	16.7 0 14.2 0		0	1	0	Fail Fail	Pass Pass Pass	Fail Fail	Pass Pas Pass Fa
	A TO B A TO C	10004_10003_8258 10004_10003_30022 10004_10003_7755	29 135 24	7 28 1 4	36 163 28	10 20 1	46 183 29	0 203 1	0 33 2	0 0 236 2	0 0	-29 -7 68 5 -23 -^	-36 73 -27	-10 ·	46 -100.0% 82 50.5%	-100.0% 18.6%	-100.0% 45.0%	-100.0% 40.6% -64.8%	-100.0% 44.6% -96.1%	7.6 5.2 6.7	3.7 0.9 2.7	8.5 5.2 7.2	4.5 1.7 0.8	9.6 1 5.5 1	1	1	1	1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas
Portfield	A TO A B TO C	10004_10003_10004 30021_10003_30022	1 649	0 184 8	1 833	1 95	2 928	0 719	0 86 8	0 (0 0 26 932		-1 -28	-1 31	-2 -100.0% 4 10.8%	-53.3%	-100.0% -3.3%	-100.0% 32.9%	-100.0% 0.4%	1.4 2.7	8.4	1.4 1.0	1.4 3.0	2.0 1 0.1 1	1	1	1 1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	B TO D B TO A B TO B	30021_10003_7755 30021_10003_10004 30021_10003_8258	432 30 7	41 4	473 37 8	8 9	481 46 8	534 0	14 ·	547 2 0 0	4 571 0 0	102 -27 -30 -7 -7 -1	-37 -8	16 -9	90 23.6% 46 -100.0%	-67.0% -100.0%	15.7% -100.0%	194.0% -100.0%	18.7% -100.0%	4.6 7.7 3.7	5.3 3.7	3.3 8.6 4.0	3.9 4.2	3.9 0 9.6 1 4.0 1	1	1	1	1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas
	C TO D C TO A	30022_10003_7755 30022_10003_10004	, 305 168	25 3 34 2	330 202	5 22	335 224	90 172	7 23	97 4 195 2	4 100 4 219	-215 -18 4 -11	-233	-2 -: 2	-100.0%	-73.4%	-70.7%	-30.0% 10.5%	-70.1%	15.3 0.3	4.6 2.1	16.0 0.5	0.7 0.5	15.9 0 0.3 1		0	1	0	Fail Pass	Pass Pass	Fail Pass	Pass Fai Pass Pas
	C TO B C TO C A TO P	30022_10003_8258 30022_10003_30022 5745_5744_5844	606 2 141	165 7 1 22 1	771 3 163	81 1 4	852 4 167	672 11 38	76 1 9	748 9 12 1 47 1	8 845 1 13 1 47	66 -89 9 0 -103 -13	-23 9 -116	17 0	-7 10.9% 9 447.5% 120 -73.2%	-53.9% 18.0% -59.2%	-3.0% 304.3% -71 3%	20.4% 4.8% -87 3%	-0.8% 229.4% -71.7%	2.6 3.5	8.1 0.2 3.3	0.8	1.7 0.0 2.3	0.2 1 3.1 1 11.6 0	1	1	1	1	Pass Pass	Pass Pass Pass	Pass Pass Fail	Pass Pas Pass Pas
	A TO C A TO D	5745_5744_5743 5745_5744_5544	20 293	0 34 3	20 327	0 17	20 344	18 315	2	21 1 316 1	1 22 .6 332	-2 2 22 -33	-11	1	2 -8.3% -12 7.6%	-98.4%	4.0%	-8.3%	8.6% -3.6%	0.4	2.2 8.1	0.2	1.4 0.4	0.4 1 0.7 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	A TO A B TO C B TO D	5745_5744_5645 5845_5744_5743 5845_5744_5544	17 28 219	2	19 29 232	1 0 3	20 29 235	0 66 174	0 7 27	0 0 73 3 201 0	0 0 3 75 9 210	-17 -2 38 6 -45 14	-19 44 -31	-1 · 3 6	20 -100.0% 46 135.6% 25 -20.6%	-100.0% 565.0% 109.4%	-100.0% 150.4% -13.3%	-100.0%	-100.0% 160.3% -10.6%	5.8 5.5 3.2	2.0 2.9 3.2	6.2 6.1 2.1	1.4 2.4 2.5	6.3 1 6.4 1 1.7 1	1	1	1	1 1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas
Avenue de Chartres /	B TO A B TO B	5845_5744_5645 5845_5744_5844	123 16	19 1 3	142 19	15 1	157 20	165 0	21 : 0	186 1 0 0	3 199 0 0	42 2 -16 -3	44	-2 -1	42 34.5%	8.3%	31.0%	-15.0%	26.6%	3.5	0.4	3.4 6.2	0.6	3.1 1 6.3 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
Via Ravenna Rdb	C TO D C TO A C TO B	5743_5744_5544 5743_5744_5645 5743_5744_5844	42 18 24	1 1	43 19 25	0	43 19 25	43 24 59	5 2 6	48 1 26 1 66 7	1 49 1 27 2 68	1 4 6 1 35 5	5 7 41	1 1 2	6 2.1% 8 34.3% 43 147.7%	397.0% 92.0% 511.0%	11.3% 37.3% 162.2%		13.7% 43.2% 171.6%	0.1	2.3 0.8 2.7	0.7	1.4 1.5 2.2	0.9 1 1.7 1 6.3 1	1	1 1	1	1	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pas Pass Pas
	C TO C D TO A	5743_5744_5743 5544_5744_5645	0 242	0 19 2	0 261	0 14	0 275	0 37	0	0 (0 40 1	0 0	0 0	0	0 -2 -	0 223 -84.5%	-87.7%	-84.8%	-14.8%	-81.2%	17.3	5.1	18.0	0.6	17.5 0	1	1	1	1	Pass Fail	Pass Pass	Pass Fail	Pass Pas Pass Fa
	D TO B D TO C	5544_5744_5844 5544_5744_5743 5544_5744_5544	259 29 3	19 2 1 1	278 30 3	3	281 30 3	370 50	29 3 4	399 5 54 2	5 403 2 56	111 10 21 3	121 24	2 1	22 42.8% 26 71.4%	51.9% 312.0%	43.4% 79.5%	57.5%	43.6% 85.9%	6.3 3.3 2.4	2.0 2.0	6.6 3.7 2.4	0.9 2.0	6.6 0 3.9 1 2.4 1	1	0	1	0	Fail Pass Pass	Pass Pass Pass	Fail Pass Pass	Pass Fai Pass Pas
	A TO B A TO C	650_6648_6748 6650_6648_6543	496 415	73 5 41 4	569 456	18 7	587 463	654 389	68 37 4	722 3 426 2	1 754 2 448	158 -5 -26 -4	-5 153 -30	13 1 15 ·	15 -100.0%	-6.4% -9.7%	26.9% -6.6%	74.9% 214.0%	28.4%	6.6 1.3	0.6 0.6	6.0 1.4	2.7 3.9	6.4 0 0.7 1		0	1 1	0	Fail Pass	Pass Pass	Fail Pass	Pass Pas Pass Pas
Gyratory at Fact St /	B TO C G TO A	6748_6648_6543 20003_6547_6650_6648 6546_6547_20003	446 463 357	62 5 75 5	508 538	19 10	527 548 423	593 472 381	66 (50 !	659 3 522 2 421 4	1 690 6 548	147 4 9 -25	151 -16	12 1 16 2	163 33.1% 0 1.9%	5.7% -33.3%	29.7% -3.0%	61.8% 160.9%	30.9% 0.0% 2.5%	6.5 0.4	0.4	6.3 0.7	2.4 3.8	6.6 0 0.0 1	1	0	1	0	Fail Pass	Pass Pass	Fail Pass Pass	Pass Fai
Market Rd / St Pancras / New Park	F TO A D TO E	6546_6547_6650_6648 6446_6542_6448	461 21	45 5 3	506 24	10 18 1	+23 524 25	181 0	19 2 0	200 3 0 1	433 3 203 1 2	-280 -26 -21 -3	-306 -24	-15 - 0	321 -60.7% -23 -98.2%	-27.2% -57.8% -98.0%	-60.5% -98.2%	-83.1% 17.0%	2.5% -61.3% -93.6%	15.6 6.3	4.6 2.4	16.3 6.7	4.6 0.2	0.3 1 16.8 0 6.4 1		0	1	0	Fass Fail Pass	Pass Pass Pass	Fass Fail Pass	Pass Pas Pass Fal Pass Pas
Rd / The Hornet	D TO F E TO F	6542_6546_6547 6448_6546_6547 6543_6446_6445	471 131 465	46 5 13 1	517 144	21 1	538 145	523 59 40F	52 5 5	575 1 64 2 551 2	1 587 2 67	52 6 -72 -8	58 -80	-10 1	49 11.0% 78 -54.9%	14.0% -60.1%	11.3% -55.4%	-46.9% 142.6%	9.0% -54.0%	2.3 7.4	0.9 2.6 1.7	2.5 7.8	2.5 1.1	2.0 1 7.6 1	1	1	1	1	Pass Pass	Pass Pass	Pass Pass	Pass Pas Pass Pas
	C TO E C TO F	6543_6542_6448 6543_6546_6547	156 223	12 1 44 2	168 267	1 6	169 273	98 389	10 1 37 4	108 5 426 1	5 113 9 444	-58 -2 166 -7	-60 159	4 .	-56 -36.9% 171 74.4%	-16.8%	-35.5% 59.4%	359.1% 209.2%	-33.2% 62.7%	5.1 9.5	0.6	5.1 8.5	2.1 2.1 3.6	4.7 1 9.0 0	1	1 0	1 1	1 0	Pass Fail	Pass Pass	Pass Fail	Pass Pas Pass Fa

		GE	H Statist	ics			Flo	ow Crite	rion			GEH (OR Hourl	y flows	
Pass	93	109	94	123	95	125	135	122	138	125	126	135	125	138	125
Fail	36	15	36	0	35	13	3	16	0	13	12	3	13	0	13
%Pass	72%	88%	72%	100%	73%	91%	98%	88%	100%	91%	91%	98%	91%	100%	91%
















Boad	Movement	SATURN Link			Observ	/ed				Modelled				(Diff	PI	M TUR	N FLOW \	/ALIDATIO	N % Diff					GEH				WebTA	AG flow ci	riterion			WebTAG criterion	GEH or	FLOW
Road	E TO A	4645_9001_4945 4645_9001_5043	Car 390	LGV 25	/ Lights 415	s HGV	Total 419 71	1 Car 475	LGV 25	Lights 499 53	HGV T 7 5	otal 506 57	Car L 85 -7	-2 Li	ghts H 84	GV 1 3	rotal 87 -14	Car 21.7%	-0.3%	Lights 20.3%	HGV 72.2%	Total 20.8%	Car 4.1	LGV 0.0	Lights 3.9	HGV 1.2	Total 4.1	Car 1	LGV 1	Lights 1	HGV 1	Total	Pas	r LGV Lights	Pass	Pass
	E TO C E TO D	4645_9001_11001 4645_9001_4741	1,162	2 169 12	9 1,331 64	1 53	1,384	1,210 76	0 135	1,345 81	61 1, 4	,406 85	48 24	-34 -7	14 17	8	22 20	4.1% 46.3%	-20.1% -62.4%	1.1% 25.9%	15.1% 294.8%	1.6%	1.4	2.8	0.4	1.1	0.6	1	1	1	1	1	Pas	is Pass Pass ss Pass Pass	Pass	Pass Pass
	E TO E A TO B A TO C	4645_9001_4644 4945_9001_5043 4945_9001_11001	0 55 284	0 12 14	0 67 298	0	0 67 298	0 77 184	0 4 14	0 81 198	0 1 1	0 82 199 -	0 22 100	0 -8 0 -	0 14 100	0 1 1	0 15 -99	39.5% -35.3%	-66.4% -0.2%	20.6%		22.2%	2.7	2.8	1.6	1.5	1.7	1 1 0	1 1 1	1 1 0	1 1	1 1	Pas Pas Fai	s Pass Pass s Pass Pass Pass Fail	Pass Pass Pass	Pass Pass Pass
	A TO D A TO E	4945_9001_4741 4945_9001_4644	112 409	4	116 438	2	118 445	167 534	14	181 561	4	185 576	55 125	10	65 123	2 9	67 131	49.1% 30.5%	255.3% -8.0%	56.2% 28.0%	82.4% 124.9%	56.6% 29.5%	4.7 5.8	3.4 0.4	5.3 5.5	1.0 2.6	5.4 5.8	1	1	1 0	1	1	Pas Fai	is Pass Pass Pass Fail	Pass Pass	Pass Fail
	BTO C BTO D	4945_9001_4945 5043_9001_11001 5043_9001_4741	58 83	4	62 92	2	64 92	65 64	4	69 72	2	71 75	7-19	0	7	0	7	12.2% -22.4%	8.5% -10.4%	12.0% -21.3%	-0.2%	11.6%	0.9	0.2	0.9	0.0	0.9	1 1	1 1	1 1 1	1 1	1 1	Pas Pas Pas	is Pass Pass is Pass Pass is Pass Pass	Pass Pass Pass	Pass Pass Pass
Fisbourne	B TO E B TO A	5043_9001_4644 5043_9001_4945	81 40	15 6	96 46	1	97 46	56 45	2	57 49	3	60 49	-25 5	-13 ·	-39 3	2	-37 3	-31.4% 13.6%	-88.5% -39.0%	-40.4% 6.8%	191.7%	-38.0% 7.6%	3.1 0.8	4.6 1.1	4.4 0.5	1.4 0.9	4.2 0.5	1	1	1	1	1	Pas Pas	s Pass Pass s Pass Pass	Pass Pass	Pass Pass
	CTO D CTO E	11001_9001_4741 11001_9001_4644	137	16 3 231	153 1,364	8 1 76	161	169 1,224	59 4 94	227 1,318	3 2 61 1	230 ,379	32 91 -	43 137 ·	74 -46 -	-5 15	69 -61	23.0% 8.1%	267.6% -59.4%	48.6%	-62.0% -19.8%	43.1%	2.6	7.0 10.8	5.4 1.3	2.1 1.8	5.0 1.6	1 1	1 0	1 1	1 1	1 1	Pas Pas Pas	s Pass Pass s Pass Pass s Fail Pass	Pass Pass Pass	Pass Pass Pass
	CTO A CTO B	11001_9001_4945 11001_9001_5043	162 12	15 2	177 14	1	178 14	131	23	154 0	0 1	0	-31 -12	8 ·	-23	-1	-23 -14	-19.1% -99.7%	54.4% -100.0%	-12.8% -99.7%	-71.3%	-13.2% -99.7%	2.5	1.9 2.0	1.8 5.3	0.9 0.1	1.8 5.3	1	1	1	1	1	Pas Pas	s Pass Pass s Pass Pass	Pass Pass	Pass Pass
	D TO E D TO A	4741_9001_11001 4741_9001_4644 4741_9001_4945	13 37 127	6	43 132	0	43	112 105	8	0 119 118	0 7 : 0 :	126 119	-13 75 -22	-2 · 2 · 8 ·	-15 76 -14	0 7 -3	-15 83 -16	-100.0% 201.5% -17.0%	-100.0% 27.2% 159.6%	-100.0% 177.1% -10.3%	-83.9%	-100.0% 192.7% -11.9%	8.6 2.0	2.0 0.6 2.7	5.5 8.5 1.2	3.7 1.9	9.0 1.4	1 1	1 1 1	1 1 1	1 1 1	1 1 1	Pas Pas Pas	s Pass Pass s Pass Pass s Pass Pass	Pass Pass Pass	Pass Pass Pass
	D TO B D TO C	4741_9001_5043 4741_9001_11001	40 165	9 24	49 189	0	49 191	50 150	4	54 174	2 2	56	10 -15	-5 0 ·	5 -15	2	7	25.0% -9.3%	-54.1% -0.1%	10.4% -8.1%	15.4%	14.1% -7.9%	1.5 1.2	1.9 0.0	0.7	1.9 0.2	1.0 1.1	1	1	1	1	1	Pas Pas	s Pass Pass s Pass Pass	Pass Pass	Pass Pass
	D TO A D TO B	4741_9001_4741 11001_5739_5839 11001_5739_11002	41	0 0 189	41 9 1,518	0 3 58	41	58 5 1,17	12 8 140	70 1,317	0 3 61 1	0 72 ,378 -	17 151	0 12 -49 -:	29 201	3 3	0 31 -198	41.1%	-26.0%	70.0%	5.1%	76.4%	2.4	4.9	0.3 3.9 5.3	2.3 0.4	4.2 5.1	1 1	1 1 1	1 1 0	1 1 1	1 1 1	Pas Pas Pas	s Pass Pass s Pass Pass s Pass Fail	Pass Pass Pass	Pass Pass Pass
	D TO C D TO D	11001_5739_50257 11001_5739_11001	360 0	50 0	410 0	5	415	358 0	24	382 0	3 3	385 0	-2 0	-26 · 0	-28 0	-2 0	-30 0	-0.5%	-52.3%	-6.8%	-47.6%	-7.3%	0.1	4.3	1.4	1.2	1.5	1	1	1	1	1	Pas Pas	s Pass Pass s Pass Pass	Pass Pass	Pass Pass
	A TO C A TO D	5839_5739_50257 5839_5739_50257 5839_5739_11001	195 51	15	210 54	5	215	301	21	321 27	9 3	330 : 28	-70 106 -29	6 1 3 ·	-85	4	-84 115 -27	-49.3% 54.2% -57.4%	37.4% 85.0%	-48.8% 53.0% -49.5%	-44.8%	-48.7%	6.7 4.9	1.3	6.8 4.2	1.5 0.1	7.0	0	1 1	0	1 1	0	Fai Pas	Pass Pass Pass Fail ss Pass Pass	Pass	Fail Pass
Stockbridge	A TO A B TO C	5839_5739_5839 11002_5739_50257 11002_5739_11001	1 193	0 18 227	1 211	0	211	0	0	0 122 1.266	0 3 :	0	-1	-1 .	-1 -89	0 3	-1 -86	-97.0% -45.6%	-6.3%	-97.0% -42.2%	14.0%	-97.0% -40.8%	1.4 7.2	0.3	1.4 6.9	2.4	1.4 6.6	1	1	1	1	1	Pas Pas	s Pass Pass s Pass Pass	Pass Pass	Pass Pass
	B TO A B TO B	11002_5739_11001 11002_5739_5839 11002_5739_11002	1,043	11 2	1,280) 08 6 0	1,340	31 0	2	33 0	1 0	34 0	-80 -9	-9 · -2 ·	-89 -11	-5 0	-94 -11	-71.6% -100.0%	-42.2% -85.8% -100.0%	-72.9% -100.0%	-90.9%	-73.8%	9.4 4.2	3.8	10.1 4.7	3.0	10.5 4.7	1	1 1	1 1	1 1	1 1	Pas	S Pass Pass S Pass Pass S Pass Pass	Pass	Pass Pass Pass
	CTO D CTO A	50257_5739_11001 50257_5739_5839 50257_5739_11002	343 128	44 23	387 151 207	9	396 154 213	274 208	33	308 229 343	5 3	313 235 251	-69 · 80	-11 -3	-79 78	4	-83 81 138	-20.0% 62.8%	-24.6% -12.0%	-20.5% 51.5%	-40.0% 122.9%	-21.0% 52.8%	3.9 6.2	1.7 0.6	4.3 5.6	1.3	4.4 5.8	1	1	1	1	1	Pas Pas	s Pass Pass S Pass Pass	Pass Pass	Pass Pass
	CTOC DTOA	50257_5739_50257 50257_5739_50257 11004_6936_7040	0 40	0	0 49	0	0 49	0	0	0 120	0 1	0 127	0 64	0 7	0 71	0 7	0 78	159.4%	81.3%	145.0%	33.376	158.6%	7.5	2.1	7.7	3.6	8.3	1	1 1	1	1 1	1	Pas	is Pass Pass ss Pass Pass	Pass	Pass Pass
	D TO B D TO C	11004_6936_11005 11004_6936_50264	1,227 403	42	5 1,393 445	3 59 7	1,452	2 1,08	6 132 38	1,218 386	58 1 5 3	,276 -	-55	-34 -	175 -59	-1 ·	-176 -62	-11.5%	-20.4% -10.6%	-12.6% -13.4%	-2.2% -29.6%	-12.1%	4.2	2.8 0.7	4.8 2.9	0.2	4.8	1	1	1	1	1	Pas Pas	is Pass Pass ss Pass Pass	Pass Pass	Pass Pass
	A TO B A TO C	7040_6936_11005 7040_6936_50264	44 254	7	51 284	1	52 292	42	0	42 281	2 7 2	44 288	-1 -2 22	-7 -25	-1 -9 -3	1-1	-1 -8 -4	-100.0% -5.5% 8.6%	-93.4% -84.3%	-17.6%	60.9% -7.2%	-100.0%	0.4 1.3	3.4 6.1	1.4 1.3 0.2	0.5	1.4 1.2 0.2	1 1	1 1	1 1	1 1	1 1	Pas Pas Pas	is Pass Pass is Pass Pass is Pass Pass	Pass Pass Pass	Pass Pass Pass
Whyke	A TO D A TO A	7040_6936_11004 7040_6936_7040	90 1	11	101 2	3	104 2	105	19 0	124 0	3 :	0	15 -1	8	-2	0	23	17.0%	68.2% -100.0%	22.6%	-0.6%	21.9%	1.5	2.0	2.1	0.0	2.1	1	1	1	1	1	Pas	is Pass Pass s Pass Pass	Pass Pass	Pass Pass
	B TO D B TO A	11005_6936_50264 11005_6936_11004 11005_6936_7040	1,115	40 5 206 1	220 5 1,321 20	1 55 0	1,376	287 5 1,04 13	1 99 0	1,140 13	53 1, 0	,193 13	-74 - -6	-13 107 - -1	95 181 -7	-2 · 0	-183 -7	-6.6% -34.1%	-51.5% -52.1% -99.0%	43.1% -13.7% -37.4%	-3.1%	-13.3% -37.4%	2.2	8.7 1.4	5.8 5.2 1.9	0.2	5.9 5.1 1.9	1	0	0	1 1	0	Pas Pas	s Pass Pass Pass Pass Pass Pass Pass	Pass Pass Pass	Fail Pass Pass
	B TO B C TO D	11005_6936_11005 50264_6936_11004	0 217 112	2 41	2 258	1 11	3 269	0 218	0	0 257 74	0	0 262 78	0	-2	-2	-1	-3 -7	0.6%	-100.0%	-100.0%	-100.0%	-100.0%	0.1	2.0	2.0	1.4 2.1	2.4	1	1	1	1	1	Pas Pas	is Pass Pass ss Pass Pass	Pass Pass	Pass Pass
	СТОВ	50264_6936_11005 50264_6936_50264	113 135 0	33 31 0	148 166 0	1	130 167 0	203	6	210 0	6 2 0	216 0	68 ·	-25 0	44 0	5 0	49 0	50.5%	-79.6%	26.2%	547.8%	29.4%	5.2	5.7	3.2	2.8	3.5	1 1	1 1	1 1	1 1	1 1	Pas	is Pass Pass is Pass Pass is Pass Pass	Pass	Pass Pass Pass
	D TO E D TO A	11006_10002_7742 11006_10002_11070	64 910	16 216	80 5 1,126	0 5 51	80	21 7 880	0 73	21 953	0 47 1	21	-43 - -30 -	-16 -	-59 173	-4 ·	-59	-66.4% -3.3%	-99.9% -66.1%	-73.1%	-7.1%	-73.1%	6.5 1.0	5.7	8.2 5.4	0.1	8.2 5.4	1	1 0	1 0	1	1 0	Pas Pas	is Pass Pass is Fail Fail	Pass Pass	Pass Fail
	D TO C D TO D	11006_10002_50266 11006_10002_11006	43	2	449	3	400	427 2 0	2	491 0	0	4	-41 -5	0 ·	-41 -5	-3 -1	-44 -6	-95.7% -100.0%	-0.5%	-91.5% -100.0%	-88.4%	-91.3% -100.0%	8.7 3.2	0.0	8.3 3.2	2.0	8.6 3.5	1 1	1 1	1 1	1 1	1 1	Pas	is Pass Pass is Pass Pass is Pass Pass	Pass	Pass Pass Pass
	E TO A E TO B	7742_10002_11070 7742_10002_9137 7743_10003_50366	31 391	35 39	66 430	0	66 441	0 359	0	0 370	0 5 3	0 376	-31 ·	-35 ·	-66	0 -6	-66 -65	-98.5% -8.2%	-99.9% -71.2%	-99.3% -13.9%	-52.3%	-99.2% -14.8%	7.7	8.4 5.5	11.4 3.0	0.1	11.4 3.2	1	1	1	1	1	Pas Pas	is Pass Pass ss Pass Pass	Pass Pass	Pass Pass
	E TO D E TO E	7742_10002_30266 7742_10002_11006 7742_10002_7742	133 130 0	10 19 0	103 149 0	1 0	100 150 0	0	0	0	0 2	0 -	42 130 0	-19 -: 0	149 0	-1 · 0	-150 0	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	16.1	6.2	17.3	1.4	17.3	0	1 1	0	1 1	0	Fai Pas	Pass Pass Pass Pass Pass Pass	Pass	Fail Pass
Bognor Rd	A TO B A TO C	11070_10002_9137 11070_10002_50266	35 92	13	48	5	53 107	225	11 33	236 172	2 2	238 : 178	190 47 21	-2 1 25	188 72	-3	185 71	543.5% 51.3%	-16.0% 308.3%	392.0% 71.9%	-63.7% -7.3%	349.0%	16.7 4.4	0.6	15.8 6.2	1.7 0.2	15.3 6.0	0	1	0	1	0	Pas Pas	Pass Fail s Pass Pass	Pass Pass	Fail Pass
bognor nu	A TO E A TO A	11070_10002_11000 11070_10002_7742 11070_10002_11070	11 0	23	34	1	35	18	3	22 0	2 0	24 0	7	-20	-12	1 0	-11 -1	66.1%	-85.3% -100.0%	-36.3% -100.0%	110.4%	-32.1%	1.9	5.4	2.3	0.9	2.1	1 1	1	1 1	1	1 1	Pas	is Pass Pass ss Pass Pass	Pass	Pass Pass
	B TO C B TO D B TO F	9135_10002_50266 9135_10002_11006 9135_10002_7742	29 365 257	3 62	32 427 316	1	33 442 325	1 592	0 71 10	1 663 295	0 18 6	1 581 3	-28 227	-3 -	-31 236	-1 3	-32 239	-98.1% 62.1%	-98.0% 14.9%	-98.1% 55.3%	-92.2% 19.9%	-97.9% 54.1%	7.4	2.4	7.8	1.3 0.7	7.9	1 0	1	1 0	1	1 0	Pas Fai	is Pass Pass Pass Fail	Pass Pass	Pass Fail
	B TO A B TO B	9135_10002_11070 9135_10002_9137	101 0	19 0	120 0	2	122	60 0	2	62 0	2 0	64 0	-41 0	-17 · 0	-58 0	0	-58 0	-40.9%	-87.9%	-48.3%	23.9%	-47.1%	4.6	5.1	6.1	0.3	6.0	1 1	1 1	1 1	1 1	1 1	Pas	is Pass Pass ss Pass Pass	Pass	Pass Pass
	C TO D C TO E	50266_10002_11006 50266_10002_7742 50266_10002_11070	40 58 58	6 12 8	46 70	1 0 8	47 70 74	2 83 64	2 15 7	4 98 71	0 5 1	4	-38 25	-4 · 3	-43 28	-1 5 -5	-43 33	-95.8% 43.8% 10.2%	-69.7% 23.3%	-92.4% 40.3% 7.7%	-93.0%	-92.4% 47.0%	8.4 3.0	2.1 0.8	8.5 3.1	1.3 3.1	8.6 3.5 0.1	1	1 1	1 1	1 1	1	Pas Pas	s Pass Pass s Pass Pass	Pass Pass	Pass Pass
	СТОВ	50266_10002_9137 50266_10002_50266	0	2	2	0	2	1	0	1 0	0	1 0	1 0	-2 0	-1 0	0	-1 0	10.270	-95.0%	-39.0%	50.770	-34.0%	1.5	1.9	0.6	0.4	0.5	1 1	1 1	1 1	1	1 1	Pas	is Pass Pass ss Pass Pass	Pass	Pass Pass
	CTOD CTOA CTOB	11007_7952_7750 11007_7952_11008 11007_7952_8652	10 896 81	227	17 7 1,123 89	0 3 30 0	17	0 3 903 101	0 57 26	0 960 126	0 51 1,	0,011	-10 7 - 20	-7 170 - 18	-17 163 37	0 21 · 3	-17 -142 40	-99.7% 0.8% 24.4%	-100.0% -74.8% 220.4%	-99.8% -14.5% 42.0%	69.4%	-99.8% -12.3% 44.8%	4.5 0.2 2.1	3.7 14.3	5.8 5.0 3.6	3.3	5.8 4.3 3.8	1 1 1	1 0 1	1 0 1	1 1 1	1	Pas Pas	s Pass Pass s Fail Fail s Pass Pass	Pass Pass Pass	Pass Pass Pass
	D TO A D TO B	7750_7952_11008 7750_7952_8652	76 175	16 11	92 186	0	92 186	122	1 13	124 204	1 1	125 205	46 16	-15 2	32 18	1	33 19	60.6% 9.4%	-90.9% 16.6%	34.3% 9.8%		35.4% 10.2%	4.6	4.9	3.0 1.3	1.5	3.1 1.4	1	1	1	1	1	Pas	is Pass Pass ss Pass Pass	Pass	Pass Pass
Oving Rd	D TO C A TO B A TO C	7750_7952_11007 11008_7952_8652 11008_7952_11007	14 168 753	1 4 209	15 172 962	0 3	15 175 995	145 68 860	5 19 83	150 87 942	0 1	150 : 88 - 994 :	131 100 107 -	4 1 15 · 126 ·	135 -85 -20	0 -2 18	135 -87 -1	933.8% -59.3% 14.2%	418.0% 363.8% -60.4%	899.4% -49.4% -2.0%	-78.7%	900.2% -49.9% -0.1%	14.7 9.2 3.8	2.4 4.3	14.9 7.5 0.6	0.5 1.8 2.8	14.9 7.6	0 1 1	1 1 0	0	1 1 1	0	Pas Pas	Pass Fail ss Pass Pass ss Fail Pass	Pass Pass Pass	Pass Pass
	A TO D B TO C	11008_7952_7750 8652_7952_11007	115 45	21	136 53	1	137 53	146	14	160 203	4 2	164 205	31 140	-7 10 1	24 150	3	27 152	27.2% 310.3%	-33.7% 125.9%	17.8% 282.5%	300.4%	19.8% 286.7%	2.7	1.7 2.8	2.0	1.9	2.2	1 0	1	1 0	1	1	Pas Fai	is Pass Pass Pass Fail	Pass Pass	Pass Fail
	B TO D B TO A D TO A	8652_7952_7750 8652_7952_11008 7755 10003 10004	92 75 23	16 12 6	108 87 29	1 0 1	109 87 30	76 23 0	2	79 24 0	0	79 24 0	-16 -52 -23	-14 · -11 ·	-29 -63 -29	-1 0 -1	-30 -63 -30	-16.9% -69.8% -100.0%	-85.8% -90.7% -100.0%	-27.1% -72.7% -100.0%	-86.1%	-27.7% -72.2% -100.0%	1.7 7.5 6.8	4.5 4.2 3.5	3.0 8.5 7.6	1.1 0.9 1.4	3.1 8.4 7.7	1 1 1	1 1 1	1 1 1	1 1	1 1	Pas Pas Pas	is Pass Pass is Pass Pass ss Pass Pass	Pass Pass Pass	Pass Pass Pass
	D TO B D TO C	7755_10003_8258 7755_10003_30022	714 252	55 20	769 272	2	771 273	885 117	24 10	909 127	6 9 1 1	915 : 128 -	171 135	-31 1	140 145	4 0 ·	144 -145	23.9% -53.8%	-55.7% -47.7%	18.2% -53.3%	213.5% 43.5%	18.7% -53.0%	6.0 10.0	4.9 2.4	4.8 10.3	2.1 0.4	5.0 10.2	0 0	1	0	1	0	Fail Fail	Pass Pass Pass Fail	Pass Pass	Pass Fail
	A TO B A TO C	7755_10003_7755 10004_10003_8258 10004 10003 30022	82 71 160	8 3 24	90 74 184	2	90 76 188	1 26 251	0	2 26 300	0 7	2 26 306	-81 -45 91	-8 · -3 · 25 1	-88 -48 116	0 -2 3	-88 -50 118	-98.4% -63.9% 56.9%	-97.1% -100.0% 102.5%	-98.3% -65.4% 62.8%	-100.0%	-98.3% -66.3% 63.0%	12.5 6.5 6.3	3.8 2.4 4.1	13.1 6.9 7.4	0.2 2.0 1.2	13.1 7.1 7.5	1 1 1	1 1 1	1 1 0	1 1 1	1 1 0	Pas Pas Pas	is Pass Pass is Pass Pass is Pass Pass is Pass Fail	Pass Pass Pass	Pass Pass Fail
Portfield	A TO D A TO A	10004_10003_7755 10004_10003_10004	16 1	2	18	0	18	0	0	1 0	0	1	-16	-2 · 0	-17	-3	-17 -4	-97.3% -100.0%	-96.0%	-97.2% -100.0%	-100.0%	-97.1% -100.0%	5.4 1.4	1.9	5.7 1.4	0.1	5.7 2.8	1	1	1	1	1	Pas Pas	s Pass Pass Pass Pass	Pass Pass	Pass Pass
	B TO C B TO D B TO A	30021_10003_30022 30021_10003_7755 30021 10003 10004	640 493 28	156 64 18	5 796 557 46	46 6 5	842 563 51	693 576 0	55 36 0	749 613 0	48 1 14 6	796 527 0	53 - 83 · -28 ·	101 · -28 -18 ·	-47 56 -46	2 8 -5	-46 64 -51	8.3% 16.9% -100.0%	-64.5% -43.2% -100.0%	-6.0% 10.0% -100.0%	3.3% 132.2% -100.0%	-5.4% 11.3% -100.0%	2.1 3.6 7.5	9.8 3.9 6.0	1.7 2.3 9.6	0.2 2.5 3.2	1.6 2.6 10.1	1 1 1	0 1 1	1 1 1	1 1 1	1 1	Pas Pas Pas	is Fail Pass is Pass Pass ss Pass Pass	Pass Pass Pass	Pass Pass Pass
	B TO B C TO D	30021_10003_8258 30022_10003_7755	5 242	3 26	8 268	0	8 269	0 43	0	0 47	0 2	0 49 -	-5 199	-3	-8 221	0	-8 -220	-100.0% -82.4%	-100.0% -81.8%	-100.0% -82.3%	102.2%	-100.0% -81.6%	3.2 16.7	2.4 5.4	4.0 17.6	0.8	4.0 17.4	1 0	1	1 0	1	1	Pas Fai	is Pass Pass Pass Fail	Pass Pass	Pass Fail
	C TO A C TO B C TO C	30022_10003_10004 30022_10003_8258 30022_10003_30022	143 857 9	62 212 0	205 2 1,069 9	9 9 49 1	214 1,118 10	109 3 882 13	9 44 1	118 927 14	7 : 42 9 0	125 969 14	-34 · 25 · 4	-53 · 168 · 1	-87 143 5	-2 -7 · -1	-89 -149 4	-23.5% 2.9% 49.8%	-85.3% -79.1%	-42.2% -13.3% 58.1%	-27.6% -13.8% -80.9%	-41.6% -13.4% 44.2%	3.0 0.9 1.3	8.9 14.8 1.2	6.8 4.5 1.5	0.9 1.0 1.0	6.8 4.6 1.3	1 1 1	1 0 1	1 0 1	1 1 1	1 0 1	Pas Pas Pas	is Pass Pass ss Fail Pass ss Pass Pass	Pass Pass Pass	Pass Pass Pass
	A TO B A TO C	5745_5744_5844 5745_5744_5743	177 6	27 0	204 6	3	207 6	230 7	13	243 7	1 2	244 8	53 · 1	-14	39 1	-2	37 2	29.8% 14.3%	-51.9%	19.0% 23.0%	-50.9%	18.0% 25.2%	3.7 0.3	3.1 1.0	2.6 0.5	1.0 0.5	2.5 0.6	1	1	1	1	1	Pas Pas	is Pass Pass is Pass Pass	Pass Pass	Pass Pass
	A TO D A TO A B TO C	5745_5744_5544 5745_5744_5645 5845 5744 5743	306 9 9	27	333 10 10	6 1 0	339 11 10	80 0 6	0	80 0 6	8 0 0	88 - 0 6	-9 -4	-27 -	-10 -4	2 · -1 0	-251 -11 -4	-73.9% -100.0% -38.9%	-99.1% -100.0% -57.0%	-75.9% -100.0% -40.7%	35.1%	-74.0% -100.0% -38.6%	16.3 4.2 1.3	7.3 1.4 0.7	17.6 4.5 1.4	0.8 1.4 0.6	17.2 4.7 1.4	0 1 1	1 1 1	0 1 1	1 1 1	0 1 1	Pas Pas	Pass Fail ss Pass Pass ss Pass Pass	Pass Pass Pass	Pass Pass
	B TO D B TO A	5845_5744_5544 5845_5744_5645	240 175	9 17	249 192	2 15	251	278	12	290 133	6 2 5 2	295	38 -49	3 -10	41 -59 -	4	44 -70	15.8% -28.0%	33.9% -60.3%	16.4% -30.8%	180.9% -68.6%	17.7% -33.6%	2.4	0.9 3.0	2.5 4.6	1.9 3.3	2.7	1	1	1	1	1	Pas Pas	is Pass Pass is Pass Pass	Pass Pass	Pass Pass
Avenue de Chartres / Via Ravenna Rdb	B TO B C TO D C TO A	5743_5744_5844 5743_5744_5544 5743_5744 5645	17 105 55	0	17 105 55	1 0 0	18 105 55	0 80 150	0 4 2	U 83 152	U 1 1	0 84 153	-1/ -25 95	U · 4 · 2	-1/ -22 97	-1 1 1	-18 -21 98	-100.0% -24.2% 172.1%		-100.0% -20.7% 176.5%	-100.0%	-100.0% -19.5% 178.2%	5.8 2.6 9.4	2.7	5.8 2.2 9.5	1.4 1.6 1.4	6.0 2.1 9.6	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	Pas Pas Pas	s Pass Pass s Pass Pass s Pass Pass	Pass Pass Pass	Pass Pass Pass
	C TO B C TO C	5743_5744_5844 5743_5744_5743	62 0	0	62 0	0	62 0	176 0	10 0	186 0	2 : 0	189 0	114 0	10 1 0	124 0	2	127 0	183.7%		200.5%		204.5%	10.4	4.6	11.2	2.2	11.3	0 1	1	0	1	0	Fai Pas	Pass Fail	Pass Pass	Fail Pass
	D TO A D TO B D TO C	5544_5744_5645 5544_5744_5844 5544_5744 5743	300 372 4	5 20 0	305 392 4	5 2 0	310 394 4	202 376 4	3 30 0	205 406 5	6 2 3 4 0	210 409 5	-98 4 0	-2 - 10 0	100 14 1	1 · 1 0	-100 15 1	-32.6% 1.2% 11.5%	-48.6% 49.3%	-32.9% 3.6% 21.0%	10.9% 26.1%	-32.2% 3.7% 22.6%	6.2 0.2 0.2	1.2 2.0 0.9	6.3 0.7 0.4	0.2 0.3 0.4	6.2 0.7 0.4	1 1 1	1 1 1	0 1 1	1 1 1	1 1 1	Pas Pas Pas	is Pass Fail is Pass Pass ss Pass Pass	Pass Pass Pass	Pass Pass Pass
	D TO D A TO B	5544_5744_5544 6650_6648_6748	2 811	0 80	2 891	0	2 907	0 1,08	0 7 67	0 1,154	0 24 1	0,178	-2 276	-13	-2 263	0	-2 271	-100.0% 34.0%	-15.7%	-100.0%	48.1%	-100.0%	2.0	1.5	2.0	1.7	2.0	1	1	1 0	1	1	Pas Fai	is Pass Pass	Pass	Pass Fail
	A TO C B TO C G TO A	6748_6648_6543 6748_6648_6543 20003_6547 6650 6648	269 516 436	23 61 60	292 577 496	5 12 7	297 589 503	280 600 592	17 31 37	298 631 629	12 3 15 6 16 6	545 545	11 84 156	-6 -30 -23 1	6 54 133	/ 3 9	13 56 142	4.2% 16.2% 35.8%	-24.3% -49.0% -38.3%	2.0% 9.3% 26.8%	142.8% 22.3% 129.8%	4.3% 9.6% 28.2%	0.7 3.5 6.9	1.2 4.4 3.3	0.3 2.2 5.6	2.4 0.7 2.7	0.7 2.3 5.9	1 1 0	1 1 1	1 1 0	1 1 1	1 1 0	Pas Pas Fai	is Pass Pass is Pass Pass Pass Pass	Pass Pass Pass	Pass Pass Fail
Gyratory at East St / Market Rd / St	F TO G F TO A	6546_6547_20003 6546_6547_6650_6648	500 750	87 33	587 783	4	591 798	526 330	26 23	551 353	9 5	560 356 -	26 420	-61 -	-36 430 -	5 12	-31 -442	5.2%	-70.6%	-6.1% -54.9%	117.0%	-5.2%	1.1 18.1	8.2 1.9	1.5 18.0	1.9 3.8	1.3 18.4	1	1	1 0	1	1	Pas Fai	is Pass Pass	Pass	Pass Fail
Pancras / New Park Rd / The Hornet	D TO E D TO F E TO F	6446_6542_6448 6542_6546_6547 6448 6546 6547	14 706 203	6 35 3	20 741 206	0 18 0	20 759 206	1 890 120	0 58 7	1 948 127	1 8 9 2	1 956 128	-13 184 -83	-6 · 23 2 4 ·	-19 207 - -79	102	-19 197 -78	-96.2% 26.0% -40.9%	-99.0% 66.3% 125.7%	-97.1% 27.9% -38.5%	-53.0%	-94.1% 26.0% -37.7%	5.0 6.5	3.4 3.4 1.7	6.0 7.1 6.1	1.1 2.6 1.9	5.8 6.7 6.0	1 0 1	1 1 1	1 0 1	1 1 1	1 0 1	Pas Fai	IS Pass Pass Pass Fail SS Pass Pass	Pass Pass Pass	Pass Fail
	C TO D C TO E	6543_6446_6445 6543_6542_6448	326	50 9	376 106	16 0	392 106	356	23 5	379 60	13 3	392 62	30 -42	-27	3 -46	-3	0 -44	9.3%	-54.9% -48.9%	0.7%	-16.7%	0.0%	1.6 4.8	4.6	0.1	0.7	0.0 4.8	1	1	1	1	1	Pas Pas	is Pass Pass ss Pass Pass	Pass	Pass Pass
L	C TO F	0343_0546_6547	331	38	369	1	3/0	468	21	490	17 2	502	13/	-1/ []	121	11	152	41.5%	-43.1%	32.1%	1088.7%	35.5%	6.9	3.0	5.8	4.3	0.3	U	1	0	1	U	Fai	Pass Fail	Pass	Fail

		GEH Statistics					Flo	w Criteri	ion			GEH C	OR Hourl	y flows	
Pass	80	96	71	118	73	117	130	112	138	116	117	130	114	138	118
Fail	46	26	57	0	55	21	8	26	0	22	21	8	24	0	20
%Pass	63%	79%	55%	100%	57%	85%	94%	81%	100%	84%	85%	94%	83%	100%	86%



















Appendix E Journey Time Validation

Route	Direction	Section	SATURN Link CATM	Cumulative Distance	Cumulative Observed High IT	AM JOURNEY TIME VALIDA	TION Cumulative Observed Low IT	Model Distance	Cumulative Modelled IT	Difference (seconds)	Difference %	DMRB
1	NB	0-1	9001	0	0	0	0	0	0	Sincrence (Seconds)	Difference //	
1	NB NB	1-2 2-3	11001_5739 11004_6936	2391	84 172	78	73 142	1200 2392	62.15 120.44	-15.85 -17.71	-20% -23%	Pass Pass
1	NB	3-4	11006_10002	3528	353	317	289	3562	233.38	-50.06	-31%	Pass
1	NB	4-5 5-6	11007_7952 30022_10003	4379 4878	452 515	408 466	426	4446 4888	320.69 379.7	-3.69	-4%	Pass
1	NB	0.1	Total	4878	515	466	426	4888	379.7	-86.3	-19%	Fail
1	SB	1-2	11008_7952	437	80	74	66	442	80.84	6.84	9%	Pass
1	SB	2-3	11070_10002	1299	181	167	153	1326	220.61	46.77	50%	Pass
1	SB	4-5	11002_5739	3676	413	369	332	3688	382.8	-33.03	-24%	Pass
1	SB SB	5-6	11001_9001 Total	4881	486	439	400	4888	489.67	36.87	53%	Pass
2	EB	0-1	9001	0	0	0	0	0	0	30.07	11/0	1 0 3 5
2	EB	1-2 2-3	4946_5046 5544 5744	479 1322	40 110	39 105	37 101	492 1327	48.72	9.72	25% 18%	Pass Pass
2	EB	3-4	5747_5648	1764	156	146	137	1734	167.28	-0.62	-2%	Pass
2	EB	4-5 5-6	6055_6054 11009 10005	2283 2800	224 278	206 257	192 240	2296 2833	231.45 289.95	4.17 7.5	7% 15%	Pass Pass
2	EB	6-7	20003_6547	3300	340	312	290	3349	339.48	-5.47	-10%	Pass
2	EB	7-8	6648_6543 6043_6044	4342	387 502	447	401	3650 4434	376.95 492.12	-2.53 20.17	-6%	Pass Pass
2	EB	9-10	5943_5940	4412	555	470	409	4509	552.18	37.06	161%	Pass
2	EB	10-11	50257_5635	5476	698	593	518	5537	665.89	-6.27	-8%	Pass
2	EB W/B	0-1	Total 5635	5476	698	593	518	5537	665.89	72.89	12%	Pass
2	WB	1-2	50257_5739	542	205	166	134	516	140.52	-25.48	-15%	Pass
2	WB	2-3	5940_5943 5943_6044	1085	344 368	260	200	1048	248	13.48	14% 43%	Pass Pass
2	WB	4-5	6446_6542	1894	465	361	287	1895	373.22	15.64	19%	Pass
2	WB WB	5-6	6454_10005 11009 11010	2499 2717	538	424 449	345 368	2551 2776	446.08 475.34	9.86	16%	Pass Pass
2	WB	7-8	5650_5648	3380	643	521	435	3469	553.95	6.61	9%	Pass
2	WB	9-10	5344_5046	4701	751	622	529	4735	670.59	7.23	11%	Pass
2	WB	10-11	4945_9001 Total	5150	806	670	571	5227	720.96	2.37	5%	Pass
3	NB	0-1	6925	0	0	0	0	0	0	50.50	670	1 0 3 3
3	NB	1-2 2-3	50264_6936 7041 7042	1138 1884	152	135	203	1141	104.19	-30.81 13.68	-23%	Pass Pass
3	NB	3-4	7044_7047	2196	346	290	243	2194	261.43	-11.44	-25%	Pass
3	NB	4-5 5-6	6748_6648 20006 7153	2631 3629	439 583	365 487	304 411	2676 3624	309 407.66	-27.43 -23.34	-37% -19%	Pass Pass
3	NB	6-7	7555_7656	4109	631	531	452	4183	474.19	22.53	51%	Pass
3	NB	7-8	7755_10003 Total	4377 4377	664	559	476	4490	515.74	-43.26	48%	Pass Pass
3	SB	0-1	10003	0	0	0	0	0	0	1.52	50/	Dese
3	SB	2-3	20004_7153	817	138	33 125	113	866	31.47 140.76	-1.53 17.29	-5%	Pass
3	SB	3-4	6649_6650	1428	220	194	168	1500	208.09	-1.67	-2%	Pass
3	SB	4-5 5-6	7048_7047	2271	341	248 292	254	2452	357.83	44.6	101%	Pass
3	SB SB	6-7 7-8	7040_6936	3020	547	459	392	3152	433.12	-91.71	-55%	Fail Pass
3	SB	,,,	Total	4154	635	533	458	4293	520.06	-12.94	-2%	Pass
4	EB	0-1 1-2	6543 7048 7047	0 770	0 94	82	0 75	0 793	0 79.55	-2.45	-3%	Pass
4	EB	2-3	7742_10002	1746	208	180	161	1761	190.57	13.02	13%	Pass
4	EB	3-4	9137_9236 Total	3367 3367	290 290	254 254	231 231	3401 3401	256.98	-7.59 2.98	-10%	Pass Pass
4	WB	0-1	9135	0	0	0	0	0	0	C0.0C	210/	7 -11
4	WB	2-3	7345_7047	2639	360	310	267	2618	371.19	-7.67	-9%	Pass
4	WB	3-4	6648_6543 Total	3196	482	409	350	3220	435.16	-35.03	-35%	Pass
5	EB	0-1	40138	0	0	0	0	0	0	20.10	0,0	1 0 3 5
5	EB	1-2 2-3	50255_3958 5854 5953	1032 2608	65 249	61 214	56 186	1071 2729	61.23 220.84	0.23	0%	Pass Pass
5	EB	3-4	11009_10005	3020	292	255	224	3166	270.6	8.76	21%	Pass
5	EB	4-5	7555_7656	4337	455	342 399	301 355	4489	417.51	-6.62	-8%	Pass
5	EB	6-7	7658_10004	4750	500	440	393	4899	447.48	-11.03	-27%	Pass
5	EB	8-9	9471_9773	7093	646	591	529	7211	579.71	-13.8	-16%	Pass
5	EB WB	0-1	Total 9773	7093	646 0	591 0	529 0	7211	579.71	-11.29	-2%	Pass
5	WB	1-2	9471_8765	1361	87	83	79	1227	70.02	-12.98	-16%	Pass
5	WB WB	2-3 3-4	8261_10004 7658_7656	2379 2792	161 213	152 196	143 181	2312 2722	134.62 173.32	-4.4 -5.3	-6% -12%	Pass Pass
5	WB	4-5	20004_7153	3339	313	289	266	3281	282.61	16.29	18%	Pass
5	WB	6-7	5955_5953	4591	413	428	395	4045	425.93	-3.17	9% -6%	Pass
5	WB WB	7-8 8-9	5459_40137 50255_40138	6156 7188	598	544	500	6009 7193	546.22	4.29	4%	Pass
5	WB	•••	Total	7188	661	602	555	7193	606.36	4.36	1%	Pass
6	EB	0-1 1-2	4262 6158 6157	0 2429	0 224	0 205	0 186	0 2548	0 221.19	16.19	8%	Pass
6	EB	2-3	11009_10005	2734	256	235	214	2867	260.73	9.54	32%	Pass
6	EB	3-4 4-5	20004_7253 7253_7349	3594 4070	375 427	339 388	307 353	3717 4180	360.95 418.06	-3.78 8.11	-4% 17%	Pass Pass
6	EB	5-6	7750_7952	4550	570	512	454	4658	538.17	-3.89	-3%	Pass
6	EB	b-/	ob52_8/52 Total	5539	647	583	520	5668	616.88	33.88	6%	Pass
6	WB	0-1	8752	0	0	0	0	0	0	-12.62	-0%	Date
6	WB	2-3	7550_7349	1469	235	209	179	1488	203.55	8.17	16%	Pass
6	WB WB	3-4 4-5	7349_7253 6456 10005	1945 2843	352 474	287	238	1951 2801	269.68 394.85	-11.87 16.17	-15% 15%	Pass
6	WB	5-6	5953_6157	3381	534	452	391	3375	452.9	2.05	4%	Pass
6	WB WB	6-7	5775_4262 Total	5832 5832	708 708	614 614	540 540	5923 5923	622.3 622.3	7.4 8.3	5% 1%	Pass Pass
7	NB	0-1	8024	0	0	0	0	0	0			
7	NB NB	1-2 2-3	8024_50266 50266_10002	1234 1813	74 305	72 241	70 195	1240 1770	70.51 285.69	-1.49 46.18	-2%	Pass Pass
7	NB	3-4	30022_10003	3164	467	390	332	3096	432.01	-2.68	-2%	Pass
7	NB	4-5 5-6	7863_8166 5058_5063	4607	647	483 559	420	4552 5739	513.65	-11.3b 0.25	-12%	Pass
7	NB	0.1	Total	5824	647	559	492	5739	589.9	30.9	6%	Pass
7	SB	1-2	5058_8166	1260	81	76	72	1187	74.8	-1.2	-2%	Pass
7	SB SB	2-3 3-4	10004_10003 11070 10002	2747 4076	200	182	169 325	2643	178.2	-2.6	-2% 31%	Pass
7	SB	4-5	10002_50266	4595	422	388	360	4499	436.33	0.52	1%	Pass
7	SB SB	5-6	50266_8024 Total	5829 5829	504 504	465	433 433	5739 5739	517.69 517.69	4.36 52.69	6% 11%	Pass Pass

No. No. <th>A259-1</th> <th>1405</th> <th></th> <th>0001</th> <th>â</th> <th></th> <th></th> <th>2</th> <th></th> <th></th> <th></th> <th>1</th> <th></th>	A259-1	1405		0001	â			2				1	
MathM	1050 4	WB	0-1	9001	0	0	0	0	0	0	0	240/	
and and bas bas <td>A259-1</td> <td>WB</td> <td>1-2</td> <td>9001_4741</td> <td>326</td> <td>25</td> <td>25</td> <td>25</td> <td>342</td> <td>17.1</td> <td>-7.60</td> <td>-31%</td> <td>Pass</td>	A259-1	WB	1-2	9001_4741	326	25	25	25	342	17.1	-7.60	-31%	Pass
100 0	A259-1	WB	2-3	4741_30001	1013	100	88	76	702	37.35	-50.81	-58%	Pass
Math West Value Math	A259-1	WB	3-4	30001_3451	1292	139	118	98	1352	88.02	-30.48	-26%	Pass
MathNathNathM	A259-1	WB	4-5	3451_2853	1817	174	156	139	1717	115.4	-41.07	-26%	Pass
MADE VAL VAL </td <td>A259-1</td> <td>WB</td> <td>5-6</td> <td>2853_40175</td> <td>3115</td> <td>254</td> <td>236</td> <td>218</td> <td>3189</td> <td>198.2</td> <td>-37.83</td> <td>-16%</td> <td>Pass</td>	A259-1	WB	5-6	2853_40175	3115	254	236	218	3189	198.2	-37.83	-16%	Pass
main main <t< td=""><td>A259-1</td><td>WB</td><td>6-7</td><td>40175_2852</td><td>3295</td><td>266</td><td>248</td><td>230</td><td>3327</td><td>205.96</td><td>-41.79</td><td>-17%</td><td>Pass</td></t<>	A259-1	WB	6-7	40175_2852	3295	266	248	230	3327	205.96	-41.79	-17%	Pass
Apple	A259-1	WB	7-8	2852_2653	3791	305	286	267	3840	247.48	-38.59	-13%	Pass
Dist State State <th< td=""><td>A259-1</td><td>WB</td><td>8-9</td><td>2653 2054</td><td>4948</td><td>362</td><td>343</td><td>324</td><td>5007</td><td>335</td><td>-8.21</td><td>-2%</td><td>Pass</td></th<>	A259-1	WB	8-9	2653 2054	4948	362	343	324	5007	335	-8.21	-2%	Pass
Subi Subi <th< td=""><td>A259-1</td><td>WB</td><td>9-10</td><td>2054 40169</td><td>5915</td><td>419</td><td>399</td><td>379</td><td>5597</td><td>368.19</td><td>-30.89</td><td>-8%</td><td>Pass</td></th<>	A259-1	WB	9-10	2054 40169	5915	419	399	379	5597	368.19	-30.89	-8%	Pass
000 000 <td>A259-1</td> <td>WB</td> <td>10-11</td> <td>40169 1854</td> <td>6150</td> <td>435</td> <td>415</td> <td>395</td> <td>6188</td> <td>401.61</td> <td>-13 50</td> <td>-3%</td> <td>Pass</td>	A259-1	WB	10-11	40169 1854	6150	435	415	395	6188	401.61	-13 50	-3%	Pass
abit abit <t< td=""><td>A259-1</td><td>WB</td><td>11-12</td><td>1854 40159</td><td>7404</td><td>518</td><td>415</td><td>478</td><td>7459</td><td>474.29</td><td>-23.42</td><td>-5%</td><td>Pass</td></t<>	A259-1	WB	11-12	1854 40159	7404	518	415	478	7459	474.29	-23.42	-5%	Pass
	A255-1	WB	11-12	1854_40155	7404	518	450	478	7435	474.25	-23.42	-376	Pass
Bits Bits <th< td=""><td>A255-1</td><td>WB</td><td>12-13</td><td>40135_1255</td><td>0200</td><td>371</td><td>334</td><td>337</td><td>0469</td><td>512.11</td><td>-41.03</td><td>*0/0</td><td>Pass</td></th<>	A255-1	WB	12-13	40135_1255	0200	371	334	337	0469	512.11	-41.03	*0/0	Pass
AbbsBit	A259-1	WB	13-14	1255_1001	9396	724	/1/	710	9468	617.11	-100.22	-14%	Pass
1000100	A259-1	WB	14-15	1001_40119	9770	/58	749	739	9778	640.36	-108.56	-14%	Pass
Abbs Abb Abb </td <td>A259-1</td> <td>WB</td> <td>15-16</td> <td>40119_40042</td> <td>10089</td> <td>797</td> <td>787</td> <td>777</td> <td>10178</td> <td>681.81</td> <td>-104.94</td> <td>-13%</td> <td>Pass</td>	A259-1	WB	15-16	40119_40042	10089	797	787	777	10178	681.81	-104.94	-13%	Pass
AbbiUN<	A259-1	WB	16-17	40042_40040	12031	975	974	973	12126	850.65	-123.37	-13%	Pass
AbisRBBB	A259-1	WB		Total	12031	975	974	973	12126	850.65	-123.37	-13%	Pass
AB35 Q 34 AB36 AB3	A259-2	EB	0-1	40040	0	0	0	0	0	0	0.00		
Appendix Bit Bi	A259-2	EB	1-2	40040_40042	1944	176	172	168	1948	168.08	-3.94	-2%	Pass
400010414134134134134134144154164164001000 <td>A259-2</td> <td>EB</td> <td>2-3</td> <td>40042_40119</td> <td>2263</td> <td>200</td> <td>196</td> <td>193</td> <td>2348</td> <td>198.08</td> <td>1.88</td> <td>1%</td> <td>Pass</td>	A259-2	EB	2-3	40042_40119	2263	200	196	193	2348	198.08	1.88	1%	Pass
199944484848484848484848200444404040404040404020144404040404040404040202444040404040404040402034404040404040404040402034404040404040404040402034404040404040404040402034404040404040404040402034404040404040404040402034040404040404040404040203404040404040404040404020340404040404040404040402034040404040404040404040203404040404040404040404020340404040 <t< td=""><td>A259-2</td><td>EB</td><td>3-4</td><td>40119_1001</td><td>2636</td><td>229</td><td>229</td><td>229</td><td>2658</td><td>221.34</td><td>-7.64</td><td>-3%</td><td>Pass</td></t<>	A259-2	EB	3-4	40119_1001	2636	229	229	229	2658	221.34	-7.64	-3%	Pass
1935 19 49 194	A259-2	EB	4-5	1001 1255	4015	355	354	353	4058	329.35	-24.80	-7%	Pass
1935 19 29 194 195 196 197	A259-2	EB	5-6	1255 40159	4628	410	408	405	4667	363.61	-44.10	-11%	Pass
1939 19 14 1500 1500 1500 1510 <t< td=""><td>A259-2</td><td>EB</td><td>6-7</td><td>40159 1854</td><td>5882</td><td>500</td><td>496</td><td>492</td><td>5938</td><td>435.43</td><td>-60.82</td><td>-12%</td><td>Pass</td></t<>	A259-2	EB	6-7	40159 1854	5882	500	496	492	5938	435.43	-60.82	-12%	Pass
n n isi max max <thmax< th=""> <thmax< th=""> <thmax< th=""></thmax<></thmax<></thmax<>	A259-2	FB	7-8	1854 40169	6117	519	514	509	6529	468.67	-45.27	-9%	Pass
1383 18 191 253,00 190<	A259-2	EB	8-9	40169 2054	7084	573	570	566	7119	501.86	-67.87	-12%	Pass
0300 0 0 0.01 0.01 0.02 <th0< td=""><td>A259-2</td><td>FR</td><td>9-10</td><td>2054 2653</td><td>8747</td><td>636</td><td>632</td><td>629</td><td>8286</td><td>592.4</td><td>-39.96</td><td>-6%</td><td>Pass</td></th0<>	A259-2	FR	9-10	2054 2653	8747	636	632	629	8286	592.4	-39.96	-6%	Pass
CADUE D TADE DUP DUP <td>A259-2</td> <td>FR</td> <td>10-11</td> <td>2653 2852</td> <td>8750</td> <td>675</td> <td>671</td> <td>666</td> <td>8799</td> <td>630.87</td> <td>-39.82</td> <td>-6%</td> <td>Pass</td>	A259-2	FR	10-11	2653 2852	8750	675	671	666	8799	630.87	-39.82	-6%	Pass
Constra Constra <t< td=""><td>A2E0.2</td><td>ED</td><td>11 12</td><td>2055_2052</td><td>0/30</td><td>607</td><td>607</td><td>677</td><td>9077</td><td>638 63</td><td>-33.02</td><td>-6%</td><td>Pace</td></t<>	A2E0.2	ED	11 12	2055_2052	0/30	607	607	677	9077	638 63	-33.02	-6%	Pace
ADVA 0 131 DEN 0 <th0< th=""> 0 0 0</th0<>	A255-2	ED	12 12	40175 2052	10339	765	761	757	10400	721 42	-43.40	-070 E9/	Pass
Addie is Lati Mail Lati Addie Lati Addie Addie<	A259-2	ED	12-13	401/5_2853	10228	601	/01	/5/	10409	721.43	-39.40	-5%	Pass
Ab32 DB Ab32 DB Ab32 DB Ab32 DB Ab32 DB Ab33 DB Ab34 DB Ab34 DB Ab34 DB Ab33 DB Ab33 DB Ab33 DB Ab34 DB DB <thdb< th=""> <thdb< th=""> DB <</thdb<></thdb<>	A259-2	EB	13-14	2853_3451	10/55	843	824	820	10//4	/48.81	-/5.25	-9%	Pass
Acces a barb Add Constrained State	A259-2	EB	14-15	3451_30001	11032	868	848	828	11424	/9/.56	-50.51	-b%	Pass
AD32 B D47 D470 D47	A259-2	EB	15-16	30001_4741	11719	1031	983	935	11784	821.02	-162.24	-17%	Fail
1338 154 164 164 164 164 164 165 <td>A259-2</td> <td>EB</td> <td>16-17</td> <td>4741_9001</td> <td>12041</td> <td>1232</td> <td>1174</td> <td>1117</td> <td>12126</td> <td>1077.91</td> <td>-96.33</td> <td>-8%</td> <td>Pass</td>	A259-2	EB	16-17	4741_9001	12041	1232	1174	1117	12126	1077.91	-96.33	-8%	Pass
AD2 NO D1 D2 D <thd< th=""> <thd< th=""> <thd< th=""> <thd< th=""> <thd< th=""></thd<></thd<></thd<></thd<></thd<>	A259-2	EB		Total	12041	1232	1174	1117	12126	1077.91	-96.33	-8%	Pass
AD2 NO 1.2 1100.00 1100.00 10.67 10.10 10.57 10.00 10.57 10.10 10.57 10.00 10.57 10.10 10.57 10.10 10	A27-2	WB	0-1	5739	0	0	0	0	0	0	0.00		
AD2VP2.8646.0002.801.001.	A27-2	WB	1-2	11001_9001	1218	71	71	70	1200	106.87	36.19	51%	Pass
LAD2 VM A4 6969 B22 136 135 133 295 1942.8 27.2 VM A72 VM 4.4 6951.364 1334 136 1	A27-2	WB	2-3	4644_4050	2148	110	109	108	2009	134.91	26.00	24%	Pass
LAT2 WN 4.5 465. 155. 16.1 16.1 16.1 16.2 16.2 16.3 155. 16.3 155. 16.3 155. 16.3 155. 16.3 155. 16.3 155. 16.3 155. 16.3 155. 16.3 155. 15	A27-2	WB	3-4	4050 4055	2912	136	135	133	2856	164.28	29.73	22%	Pass
AFA2 View 6.4 3126, 268 10.44 10.90 20.8 20.7 60.66 77.4 61.12 11.4 62.6 AF21 View 6.7 3264, 17.0 77.7 50.0 20.9 20.9 10.44 40.31 10.14 62.6 10.14 40.31 10.14 62.6 10.14 40.31 10.15 10.16 10.15	A27-2	WB	4-5	4055 3156	3758	164	163	161	3806	197.22	34.69	21%	Pass
AT2-2 Vie -F 288, VP/0 277 300 399 298 979 170.2 7.6 289 170.2 AT2 Vie 7.6 178, 013.1 1313 443 449 421 1413 1513 425 183 171 183 171 183 171 183 171 183 171 183 171 183 171 183 171 183 171 183 171 183 171 183 171 183	A27-2	WB	5-6	3156 2656	5184	209	208	207	6006	273.49	65.12	31%	Fail
ATP2 We 74 176 178	A27-2	WB	6-7	2656 1760	7978	300	299	298	8799	370.32	71.61	24%	Fail
AD72 WB 19 4011 000 1013 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 0000 0000 0000	A27-2	WB	7-8	1760 40134	11363	410	409	407	12174	497.33	79.39	10%	Fail
AP72 WB 593 2007 2008 1350 1310 1314 1318 13100 1316 1	A27-2	WD WD	2.0	40124 40039	13031	410	403	403	14674	487.55 E74.01	70.58	15%	Enil
AD7.2 W0 D11 X003 R001 L011 X003 R011 R011 R013 R	A27-2	WB	0.10	40134_40035	13531	455	455	452	14074	574.01	80.57	10%	rail Call
Atria With 10:11 00:30, 00:00 13:00 43:0 3:00 3:00 3:00 5:01 7:05 15:00 <th< td=""><td>A27-2</td><td>WB</td><td>9-10</td><td>40039_40035</td><td>14559</td><td>515</td><td>514</td><td>513</td><td>15302</td><td>595.69</td><td>81.36</td><td>16%</td><td>Fail</td></th<>	A27-2	WB	9-10	40039_40035	14559	515	514	513	15302	595.69	81.36	16%	Fail
AD33 With 11:21 A000 A003 16140 570 570 1691 65030 721.4 148. Mass AD23 With 1203 Cold 000 0	A27-2	WB	10-11	40035_40030	15260	542	540	539	16002	620.13	79.87	15%	Pass
AT7.2 With 12.11 4003, 4004 17012 6.04 6.07 6.05 17711 6.80.4 8.1.0 11% Pars AT2.1 40 1.24 4001, 400	A27-2	WB	11-12	40030_40023	16149	573	572	570	16891	650.92	79.14	14%	Pass
AD2.3 With Teal 1072 68 667 665 1773 68.04 81.00 118 Personal AD2.1 68 4.23 4603.4008 101 0	A27-2	WB	12-13	40023_40004	17052	608	607	605	17793	688.04	81.30	13%	Pass
A27.1 B8 6-1 40022 0 0 0 0 0 0 0.000 1 A27.1 B8 14.1 46024,0001 10.7 10.0 16.6 10.7 64.4 1.0.0 10.6 10.7 A27.1 B8 4.5 46024,0003 2.90 9.3 9.2 2.27 4.6.1 1.5 P38 A27.1 B8 4.5 46024,00037 2.040 2.02 2.02.2 2.04.1 1.5 P38 A27.1 B8 4.5 46027,40224 5.67 2.05 2.04 2.02 2.02.6 2.34 2.54 .45 P38 2.55 1.05 2.06 2.01 1.06 0.42 .45 P38 .45	A27-2	WB		Total	17052	608	607	605	17793	688.04	81.30	13%	Pass
A27.1 68 1-3 4004, 4005, 4005, 4005 911 37 37 36 911 40.4 1.76 10% Mass A27.1 68 43 4004, 6005, 4007 210 3 40.4 3.76 10% Mass A27.1 68 4.5 4003, 4007 210.8 3.1	A27-1	EB	0-1	40032	0	0	0	0	0	0	0.00		
A27-1 68 23 4005,4008 177 66 68 68 177 70.29 1.98 3% 985 A27-1 68 44 6005,4003 2.400 9.3 9.1 1.0	A27-1	EB	1-2	40032_40036	911	37	37	36	911	40.44	3.76	10%	Pass
AD7.1 IB 3-4 40038_40043 240 9.3 9.3 9.2 28.8 9.2.2 0.6.1 1.4.7 B.8 5.8 AD7.1 IB 5.6 40097_40124 5667 20.6 20.1 6.0 20.2 20.3.6 2.2.5.4 -3.5.8 5.8 AD7.1 IB 5.6 40024_4006 50.60 20.2.3.6 2.2.5.4 -3.5.8 5.8 AD7.1 IB 5.6 40024_4006 50.60 20.0.5 4.0.6 4.0.6 4.0.7 4.0.7 <t< td=""><td>A27-1</td><td>EB</td><td>2-3</td><td>40036_40038</td><td>1797</td><td>69</td><td>68</td><td>68</td><td>1797</td><td>70.29</td><td>1.98</td><td>3%</td><td>Pass</td></t<>	A27-1	EB	2-3	40036_40038	1797	69	68	68	1797	70.29	1.98	3%	Pass
AZ7.1 IS 4.5 4003,4007 3164 117 116 116 3102 11.74 1.41 1.45 Pess AZ7.1 IS 56 4007,4024 562 203.6 2.25.4 1.55 Pess AZ7.1 IS 6.7 4014,2700 5962 203.6 2.54 1.55 Pess AZ7.1 IS 6.7 10556 1.02 3.05 4.02 0.5 Pess AZ7.1 IS 10.1 4155,4151 1.042 7.22 7.05 5.02 2.14 -9.10 4.55 Pess AZ7.1 IS 11.12 465,901 1.592 7.05 1.07 1.07 1.054 1.77 65.0.4 4.59.0 4.15 1.0 AZ7.1 IS 1.1.2 1.001 1.112 1.064 1.774 65.0.4 4.59.0 4.15 1.0 AZ7.1 IS Total 445.0 0.06 4.26 488.8 379.7	A27-1	EB	3-4		2440	93	93	92	2438	02.2		4.07	Pass
A27.1 EB 5-6 49097_60124 5887 205 204 202 502 201.26 2.5.4 .9.5 PBs A27.1 EB 67 40124_1760 5084 221 319 317 8977 318.65 -0.52 .0% PBs A27.1 EB 7.4 1760_2556 11870 432 421 410 1170 414.72 -6.52 .3% PBs A27.1 EB 8.9 2565.156 13288 531 .560 .467 13970 40.056 -18.42 .4% PBs A27.1 EB 9.10 13154.156 .14144 .631 .650 .273.4 .213 .415.9 .457.8 .457.8 .457.8 .415.8 .415.8 .233 .415.8 .415.8 .233 .415.8 .415.8 .234 .213.8 .415.8 .245.9 .415.8 .415.8 .245.9 .415.8 .245.9 .415.8 .245.9 .415.8 .245.9	A27-1	EB		40038_40043	2440					92.2	-0.61	-1%	
AP7-1 EB F7 40124_3760 9964 321 339 317 8977 318.06 0.92 0% P885 A27.1 EB F8 1700 443.0 11700 441.0 11700 441.0 11700 440.85 -18.42 -4% P895 A27.1 EB 901 3156 455 11244 651 600 14202 523.74 40.13 -1%% P895 A27.1 EB 101 4156 413.4 651 600 14202 523.74 40.13 -1%% P895 A27.1 EB 101.1 4156 1100 1010 1012 1064 1774 650.64 402.30 413.5 101 A27.1 EB 102 1061 1100 1112 1064 1774 650.64 402.30 413.5 101 A27.1 EB 102 1065 1007 650.4 402.30 413.5 101 <	A27-1		4-5	40038_40043 40043_40097	3104	117	116	116	3102	114.74	-0.61 -1.41	-1%	Pass
A27.1 EB 7.8 1702 2656 11870 422 421 410 1170 44.472 6.35 -1% Pass A27.1 EB 9-10 3156,4156 11288 531 550 600 14920 523.74 41.63 -1% Pass A27.1 EB 10.11 4156,4151 14924 762 755 749 15575 554.02 -211.38 -228% 501 A27.1 EB 10.12 4645,9001 15842 1005 1107 987 1557 550.02 -211.38 -228% 501 A27.1 EB 12.13 1100,5793 1160 1112 1064 1774 659.04 -452.90 41% 501 A27.1 EB Total 407.7 16.00 110.0 1112 1064 1774 659.04 -452.90 41% 501 A27.4 EB Total 407.7 10.00 000000000000000000000000000000000000	A27-1	EB	4-5 5-6	40038_40043 40043_40097 40097_40124	3104	117 205	116 204	116 202	3102 5602	114.74 201.26	-0.61 -1.41 -2.54	-1% -1% -1%	Pass Pass
A27.1 E8 9.0 2555 3156 1328 531 509 487 13970 480.85 -13.82 -4% Pass A27.1 E8 10.01 3155 631 651 600 14920 532.7 916.8 -15% Pass A27.1 E8 11.22 4655 500.1 1584 208.6 201.8 208.6 201.8 208.6 201.8 208.6 201.8 208.6 201.8 208.6 201.8 208.6 201.8 208.6 201.8 208.6 201.8		EB EB	4-5 5-6 6-7	40038_40043 40043_40097 40097_40124 40124 1760	3104 5687 9084	117 205 321	116 204 319	116 202 317	3102 5602 8977	114.74 201.26 318.06	-0.61 -1.41 -2.54 -0.92	-1% -1% -1% 0%	Pass Pass Pass
A27.1 FB 9.10 3155 4156 14.44 611 615 600 14.620 52.24.4 -9.16 1.15 600 14.620 52.24.4 -9.16 1.15 7.5 7.49 1575 55.4(2) 21.13 1.25 7.5 7.49 1575 55.4(2) 21.13 22.8 7.5 7.49 1575 55.4(2) 21.13 22.8 7.5 7.49 1575 55.4(2) 21.13 22.8 7.5 7.49 1575 55.4(2) 21.13 22.8 7.5 7.49 1575 55.4(2) 21.13 22.8 7.5 7.49 157.5 156.4 27.7 65.04 44.52.9 41.% 150 A27.1 EB 12.3 1001.579.9 10761 1160 1112 1064 177.74 65.04 45.2.9 41.% 100 A27.1 EB 12.3 1001.64 107.77 65.65 10.66 20 48.8 37.7 66.3 119% 80.8	A27-1	EB EB EB	4-5 5-6 6-7 7-8	40038_40043 40043_40097 40097_40124 40124_1760 1760_2656	3104 5687 9084 11870	117 205 321 432	116 204 319 421	116 202 317 410	3102 5602 8977 11770	32.2 114.74 201.26 318.06 414.72	-0.61 -1.41 -2.54 -0.92 -6.25	-1% -1% -1% 0% -1%	Pass Pass Pass Pass
1 1	A27-1 A27-1	EB EB EB FB	4-5 5-6 6-7 7-8 8-9	40038_40043 40043_40097 40097_40124 40124_1760 1760_2656 2656_3156	3104 5687 9084 11870 13288	117 205 321 432 531	116 204 319 421 509	116 202 317 410 487	3102 5602 8977 11770 13970	92.2 114.74 201.26 318.06 414.72 490.86	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42	-1% -1% -1% 0% -1% -4%	Pass Pass Pass Pass Pass
Image Image <th< td=""><td>A27-1 A27-1 A27-1</td><td>EB EB EB EB FB</td><td>4-5 5-6 6-7 7-8 8-9 9-10</td><td>40038_40043 40043_40097 40097_40124 40124_1760 1760_2656 2656_3156 3156_4156</td><td>3104 5687 9084 11870 13288 14144</td><td>117 205 321 432 531 631</td><td>116 204 319 421 509 615</td><td>116 202 317 410 487 600</td><td>3102 5602 8977 11770 13970 14920</td><td>22.2 114.74 201.26 318.06 414.72 490.86 523.74</td><td>-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63</td><td>-1% -1% -1% 0% -1% -4% -15%</td><td>Pass Pass Pass Pass Pass Pass</td></th<>	A27-1 A27-1 A27-1	EB EB EB EB FB	4-5 5-6 6-7 7-8 8-9 9-10	40038_40043 40043_40097 40097_40124 40124_1760 1760_2656 2656_3156 3156_4156	3104 5687 9084 11870 13288 14144	117 205 321 432 531 631	116 204 319 421 509 615	116 202 317 410 487 600	3102 5602 8977 11770 13970 14920	22.2 114.74 201.26 318.06 414.72 490.86 523.74	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63	-1% -1% -1% 0% -1% -4% -15%	Pass Pass Pass Pass Pass Pass
International Internat International International	A27-1 A27-1 A27-1 A27-1	EB EB EB EB EB FB	4-5 5-6 6-7 7-8 8-9 9-10 10-11	40038_40043 40043_40097 40097_40124 40124_1760 1760_2656 2656_3156 3156_4156 4156_4151	3104 5687 9084 11870 13288 14144 14994	117 205 321 432 531 631 782	116 204 319 421 509 615 765	116 202 317 410 487 600 749	3102 5602 8977 11770 13970 14920 15795	32.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38	-1% -1% -1% 0% -1% -4% -15% -28%	Pass Pass Pass Pass Pass Pass Fail
International Interna International International<	A27-1 A27-1 A27-1 A27-1 A27-1	EB EB EB EB EB FB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12	40038 40097 40097 40124 40124 1760 1760 2656 2655 3155 3156 4156 4156 4151 4665 9001	104 3104 5687 9084 11870 13288 14144 14924 15842	117 205 321 432 531 631 782 1026	116 204 319 421 509 615 765 1007	116 202 317 410 487 600 749 987	3102 5602 8977 11770 13970 14920 15795 16574	32.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 596.89	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80	-1% -1% -1% 0% -1% -4% -15% -28% -41%	Pass Pass Pass Pass Pass Pass Fail
No. Los Hold Gala Hold Gala Hold Gala Hold Gala Hold	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1	EB EB EB EB EB EB FB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13	40033 40043 40043 40097 40097 40124 40124_1750 1760 2656 2656 3156 3156 4156 4156 4151 4645 9001	3104 5687 9084 11870 13288 14144 14924 15842 17061	117 205 321 432 531 631 782 1026 1160	116 204 319 421 509 615 765 1007 1112	116 202 317 410 487 600 749 987 1064	3102 5602 8977 11770 13970 14920 15795 16574 17774	22.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 556.89 650.04	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90	-1% -1% -1% 0% -1% -4% -15% -28% -41% -41%	Pass Pass Pass Pass Pass Pass Fail Fail
Barbone Construction Stature Section SATURN Link CATM Cumulative Observed High JT Cumulative Observed Mean JT Cumulative	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1	EB EB EB EB EB EB EB FR	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13	4003,40043 4003,40097 40097_40124 40124_1760 1760_2656 2656_3156 3156_4156 4156_4156 4156_4151 4645_9001 11001_5739 Total	3104 5687 9084 11870 13288 14144 14924 15842 17061	117 205 321 432 531 631 782 1026 1160 1160	116 204 319 421 509 615 765 1007 1112 1112	116 202 317 410 487 600 749 987 1064 1064	3102 5602 8977 11770 13970 14920 15795 16574 17774	22.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 556.89 659.04 659.04	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90	-1% -1% -1% 0% -1% -4% -15% -28% -41% -41% -41%	Pass Pass Pass Pass Pass Fail Fail Fail Fail
Bortection Section SATURN Link CATM Cumulative Observed High JT Cumulative Observed Mean J Model Distance Support Distance Support Distance Support Distance Support Distance Support Distance Suport Distance	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1	EB EB EB EB EB EB EB EB EB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13	4003, 40043 4003, 40097 40124, 40097 40124, 1760 1760, 2656 2656, 3156 3156, 4156 4156, 4151 4665, 9001 11001_5739 Total	3104 5687 9084 11870 13288 14144 14924 15842 17061 17061	117 205 321 432 531 631 782 1026 1160 1160	116 204 319 421 509 615 765 1007 1112 1112	116 202 317 410 487 600 749 987 1064 1064	3102 5602 8977 11770 13970 14920 15795 16574 17774 17774	32.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 596.89 659.04	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90	- 1% - 1% - 1% - 1% - 1% - 1% - 15% - 28% - 41% - 41% - 41%	Pass Pass Pass Pass Pass Fail Fail Fail Fail
Bounce Section SATURN Link CATM Cumulative Distance Cumulative Distance Cumulative Observed Mean JT Cumulative Observed Low JT Model Distance Cumulative Mana JT Cumulative Observed Low JT Model Distance Cumulative Distance Difference % DMRB 1 NB Total 4488 515 466 426 4488 379.7 -86.3 -19% Tail 2 BB Total 44881 4465 439 400 4888 489.67 50.67 12% Pass 2 BB Total 5476 668 593 518 5537 665.89 72.89 12% Pass 3 NB Total 4154 6655 5333 458 4490 515.74 -43.26 4% Pass 4 WB Total 3367 290 254 231 3401 256.98 2.98 1% Pass 5 BB Total 7093 6661 602 555 <th>A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1</th> <th>EB EB EB EB EB EB EB EB EB</th> <th>4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13</th> <th>4003,40043 4003,40097 40124 40124_1760 1760_2656 2656_3156 4156_4151 4645_9001 11001_5739 Total</th> <th>104 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061</th> <th>117 205 321 432 531 631 782 1026 1160 1160</th> <th>116 204 319 421 509 615 765 1007 1112 1112</th> <th>116 202 317 410 487 600 749 987 1064 1064</th> <th>3102 5602 8977 11770 13970 14920 15795 16574 17774 17774</th> <th>32.2 114.74 201.26 318.06 414.72 490.86 522.74 554.02 596.89 659.04 659.04</th> <th>-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90</th> <th>- 1% -1% -1% -1% -1% -4% -15% -2.8% -41% -41%</th> <th>Pass Pass Pass Pass Pass Pass Fail Fail Fail Fail</th>	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1	EB EB EB EB EB EB EB EB EB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13	4003,40043 4003,40097 40124 40124_1760 1760_2656 2656_3156 4156_4151 4645_9001 11001_5739 Total	104 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061	117 205 321 432 531 631 782 1026 1160 1160	116 204 319 421 509 615 765 1007 1112 1112	116 202 317 410 487 600 749 987 1064 1064	3102 5602 8977 11770 13970 14920 15795 16574 17774 17774	32.2 114.74 201.26 318.06 414.72 490.86 522.74 554.02 596.89 659.04 659.04	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90	- 1% -1% -1% -1% -1% -4% -15% -2.8% -41% -41%	Pass Pass Pass Pass Pass Pass Fail Fail Fail Fail
1 N8 Total 4878 515 466 426 4888 379.7 483.3 1.10 1.10 1 59 Total 4881 486 439 400 4888 439.7 50.67 12% Pars 2 E8 Total 5150 806 670 571 5227 72.056 50.96 8% Pars 3 N8 Total 4154 635 533 466 429 515.74 443.26 48% Pars 3 N8 Total 4154 635 533 458 4293 520.06 12.94 2.96 895 4 W5 Total 3196 482 409 350 320.06 12.94 2.96 Pars 5 E8 Total 7093 646 591 529 7211 57.71 11.29 -2% Pars 6 W8 Total 7039 664	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1	EB EB EB EB EB EB EB EB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13	4003, 40043 4003, 40097 40124 40124 (1760 1760, 2656 2656, 3156 3156, 4156 4156, 4151 14645, 9001 11001_5739 Total	3104 5687 9084 11870 13288 14144 14924 15842 17061 17061	117 205 321 432 531 631 782 1026 1160 1160	116 204 319 421 509 615 765 1007 1112 1112 M JOURNEY TIME VALIDATION	116 202 317 410 487 600 749 987 1064 1064 SUMMARY	3102 5602 8977 11770 13970 14920 16574 17774 17774	32.2 114.74 201.26 318.06 414.72 490.86 522.74 554.02 596.89 659.04 659.04	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90	- 1% -1% -1% -1% -1% -4% -15% -28% -41% -41% -41%	Pass Pass Pass Pass Pass Pass Fail Fail Fail
- -	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1	EB EB EB EB EB EB EB Direction	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13	4003, 40043 4003, 40097 40124, 40097 40124, 1760 1760, 2656 2656, 3156 3156, 4156 4156, 4151 4665, 9001 11001_5739 Total	3104 3104 5687 9084 11870 13288 14144 14924 17061 17061 2000 200 2000 2	117 205 321 432 531 631 782 1026 1160 1160 Cumulative Observed High IT	116 204 319 421 509 615 765 1007 1112 1112 AM JOURNEY TIME VALIDATION Cumulative Observed Mean JT	116 202 317 410 487 600 749 987 1064 1064 SUMMARY Cumulative Observed Iow IT	3102 5602 8977 11770 13970 14920 15795 16574 17774 17774 17774	22.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 596.89 659.04 659.04 Cumulative Modelled IT	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90	- 1% - 1% - 1% - 0% - 1% - 4% - 15% - 28% - 41% - 41% - 41%	Pass Pass Pass Pass Pass Fail Fail Fail Fail
2 10 100	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1	EB EB EB EB EB EB EB EB Direction	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 Section	40033,40043 40034,40057,40124 40027,40124 40124,1760 1760,2656 2656,3156 3156,4156 4156,4151 4645,9001 11001_5739 Total	2444 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 Cumulative Distance 4878	117 205 321 432 531 631 782 1026 1160 1160 1160 205erved High JT 535	116 204 319 421 509 615 765 1007 1112 1112 AM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 466	116 202 317 410 487 600 749 987 1064 1064 SUMMARY Cumulative Observed Low JT 426	3102 5602 8977 11770 13970 14920 15795 16574 17774 17774 Model Distance 4888	22.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 596.89 659.04 659.04 Cumulative Modelled JT 379.7	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90 -452.90	- 1% - 1% - 1% - 1% - 0% - 4% - 4% - 4% - 41% - 41% - 41% - 41% - 0)ifference % - 19%	Pass Pass Pass Pass Pass Fail Fail Fail Fail Fail
2 WB Total JH0 JH0 JH2 JH2 <td>A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1</td> <td>EB EB EB EB EB EB EB Direction NB SR</td> <td>4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 Section</td> <td>4003, 40043 4003, 40097 40124, 40097 40124, 1750 1760, 2656 2656, 3156 3155, 4156 4156, 4151 4645, 9001 11001, 5739 Total SATURN Link CATM Total Total</td> <td>2440 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 2000 Cumulative Distance 4878 4881</td> <td>117 205 321 432 531 631 782 1026 1160 1160 1160 1160 205erved High JT 515 486</td> <td>116 204 319 421 509 615 765 1007 1112 1112 AM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 466 430</td> <td>116 202 317 410 487 600 749 987 1064 1064 1064 SUMMARY Cumulative Observed Low JT 426 400</td> <td>3102 5602 8977 11770 13970 14920 15795 16574 17774 17774 17774 Model Distance 4888 4888</td> <td>22.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 596.89 659.04 659.04 Cumulative Modelled JT 379.7 489.67</td> <td>-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90 Difference (seconds) -86.3 -50.67</td> <td>- 17% - 17% - 17% - 0% - 1% - 4% - 4% - 4% - 41% - 41% - 41% - 41% - 41% - 41% - 19%</td> <td>Pass Pass Pass Pass Pass Fail Fail Fail Fail PARB</td>	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1	EB EB EB EB EB EB EB Direction NB SR	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 Section	4003, 40043 4003, 40097 40124, 40097 40124, 1750 1760, 2656 2656, 3156 3155, 4156 4156, 4151 4645, 9001 11001, 5739 Total SATURN Link CATM Total Total	2440 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 2000 Cumulative Distance 4878 4881	117 205 321 432 531 631 782 1026 1160 1160 1160 1160 205erved High JT 515 486	116 204 319 421 509 615 765 1007 1112 1112 AM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 466 430	116 202 317 410 487 600 749 987 1064 1064 1064 SUMMARY Cumulative Observed Low JT 426 400	3102 5602 8977 11770 13970 14920 15795 16574 17774 17774 17774 Model Distance 4888 4888	22.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 596.89 659.04 659.04 Cumulative Modelled JT 379.7 489.67	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90 Difference (seconds) -86.3 -50.67	- 17% - 17% - 17% - 0% - 1% - 4% - 4% - 4% - 41% - 41% - 41% - 41% - 41% - 41% - 19%	Pass Pass Pass Pass Pass Fail Fail Fail Fail PARB
A Ho Ho Jun	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 2 2	EB EB EB EB EB EB EB Direction NB SB FR	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 Section	40033, 40043 40043, 40097 40097, 40124 40124, 1750 1750, 2656 3156, 4156 4155, 4151 4645, 9001 11001_5739 Total SATURN Link CATM Total Total Total	2434 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 20061 20061 20061 20061 20061 20061 20061 20061 20061 20062 2000	117 205 321 432 531 631 782 1026 1160 1160 1160 205 486 609	116 204 319 421 509 615 765 1007 1112 1112 AM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 466 439 502	116 202 317 410 487 600 749 987 1064 1064 SUMMARY Cumulative Observed Low JT Cumulative Observed Low JT 426 400 518	3102 \$602 \$977 11770 13970 14920 15795 16574 17774 17774 Wodel Distance 4888 4888 \$527	22.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 556.89 659.04 659.04 659.04 Cumulative Modelled JT 379.7 489.67 665 99	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90 -452.90 -86.3 -86.3 -50.67 -7.7.90	- 1% - 1% - 1% - 1% - 0% - 4% - 4% - 4% - 41% -	Pass Pass Pass Pass Pass Pass Fail Fail Fail Fail Fail Pass Pass Pass
b item 437 009 309 47b 4490 515.74 -43.2b -8% Pass 3 58 Total 4154 635 533 4458 4293 520.06 -11.29 -2% Pass 4 E8 Total 3367 290 254 231 3401 256.98 2.98 1% Pass 4 W8 Total 3196 482 409 350 3220 435.16 26.16 6% Pass 5 E8 Total 7093 646 591 529 7211 579.71 -11.29 -2% Pass 6 E8 Total 7188 661 602 555 7193 606.35 4.36 1% Pass 6 W8 Total 5532 708 616.88 33.88 1% Pass 7 N8 Total 582 708 62.3 5739 517.69	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 1 2 1 2 2	EB EB EB EB EB EB EB Direction NB SB EB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 10-11 11-12 12-13 Section	4003, 40043 4003, 40097 40124 40124 (1760 1760, 2656 2656, 3156 3156, 4151 4665, 9001 11001_5739 Total SATURN Link CATM Total Total Total Total	2440 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 17061 Cumulative Distance 4878 4881 5476 5476	117 205 321 432 531 631 782 1026 1160 1160 1160 1160 Cumulative Observed High JT 515 486 698 806	116 204 319 421 509 615 765 1007 1112 1112 AM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 466 439 593 670	116 202 317 410 487 600 749 987 1064 1064 SUMMARY Cumulative Observed Low JT 426 400 518 57'	3102 5602 8977 11770 13970 14920 16574 17774 17774 17774 Model Distance 4888 4888 5537 5327	22.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 596.89 659.04 659.04 659.04 Cumulative Modelled JT 379.7 489.67 665.89 720.95	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90 -452.90 -452.90 -86.3 -50.67 -72.89 -50.66	- 17% - 17% - 11% - 11% - 41% - 42% - 42% - 41% - 41% - 41% - 41% - 42% - 42%- 42% - 42%	Pass Pass Pass Pass Pass Pass Fail Fail Fail Fail Fail Pass Pass Pass Pass
3 30 10tain 41,94 655 535 408 42/30 520,06 -12,94 -2% Pass 4 EB Total 3367 290 254 231 3401 256,58 2.98 1% Pass 4 WB Total 3396 422 409 350 3220 435.16 26.16 6% Pass 5 EB Total 7093 666 591 529 7211 579.1 -11.29 -2% Pass 5 WB Total 7188 661 602 555 7193 606.36 4.36 1% Pass 6 WB Total 5539 647 583 520 568 616.88 33.88 6% Pass 7 NB Total 5824 647 559 492 5739 58.9 30.9 6% Pass A259.1 WB Total 5824	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 1 1 2 2 2	EB EB EB EB EB EB EB Direction NB SB EB WB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 Section	40033 40043 40034 40097 40124 40124 4750 1750 2656 2656 3156 3156 4151 4645 9001 11001_5739 Total SATURN Link CATM Total Total Total	2430 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 Cumulative Distance 4878 4881 5476 5150 4377	117 205 321 432 531 631 782 1026 1160 1160 1160 Cumulative Observed High JT 515 486 698 806 675	116 204 319 421 509 615 765 1007 1112 1112 1112 1112 AM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 466 439 593 670 575	116 202 317 410 487 600 749 987 1064 1064 SUMMARY Cumulative Observed Low JT 426 400 518 571 437	3102 5602 8977 11770 13970 14920 15795 16574 17774 17774 17774 Model Distance 4888 4888 4888 5537 5227 4022	22.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 596.89 659.04 659.04 659.04 659.04 659.04 720.96 614 77 720.96	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90 Difference (seconds) -86.3 -50.67 72.89 50.96 4.3 ° °	- 1% - 1% - 1% - 1% - 0% - 1% - 4% - 4% - 4% - 4% - 4% - 41% - 42% - 41% - 41% - 41% - 41% - 41% - 42% - 41% - 41%	Pass Pass Pass Pass Pass Pass Pass Fail Fail Fail Pail Pass Pass Pass Pass Pass
4 tbs iotai 3367 290 254 251 3401 255.88 2.98 1% Pass 4 WB Total 3196 482 409 350 3220 435.16 26.16 6% Pass 5 EB Total 7093 646 591 529 7211 579.71 -11.29 -2% Pass 6 EB Total 7188 661 602 555 7193 606.36 4.36 1% Pass 6 EB Total 5539 647 583 520 5668 616.88 33.88 6% Pass 6 WB Total 5832 708 614 540 5923 622.3 8.3 1% Pass 7 NB Total 5824 647 559 492 5739 589.9 30.9 6% Pass 7 S8 Total 12031 975	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 1 1 2 2 2 3 3	EB EB EB EB EB EB EB Direction NB SB EB WB NB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 Section	4003, 40043 4003, 40097 40124 40124 (1760 1760, 2656 2656, 3156 3156, 4156 4156, 4151 166, 4151 11001_5739 Total 5ATURN Link CATM Total Total Total Total Total Total	2444 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 17061 Cumulative Distance 4878 4881 5476 5150 4377 4377	117 205 321 432 531 631 782 1026 1160 1160 200 200 200 200 200 200 200 2	116 204 319 421 509 615 765 1007 1112 1112 AM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 466 439 593 670 559 733	116 202 317 410 487 600 749 987 1064 SUMMARY Cumulative Observed Low JT 426 400 518 571 476	3102 5602 8977 11770 13970 14920 15795 16574 17774 17774 17774 Model Distance 4888 4888 4888 5537 5227 4490 400	22.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 596.89 659.04 659.04 659.04 Cumulative Modelled JT 379.7 489.67 665.89 720.96 515.74 23.0 cf	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -452.91 -100 -100 -100 -100 -100 -100 -100 -1	- 17% - 17% - 17% - 13% - 15% - 48% - 41% -	Pass Pass Pass Pass Pass Pass Fail Fail Fail Pail Pail Pass Pass Pass Pass Pass
4 W8 Total 3196 482 409 350 3220 435.16 26.16 6% Pass 5 EB Total 7030 646 591 529 7211 579.11 -11.29 -2% Pass 5 W8 Total 7188 661 602 555 7193 606.36 4.36 1% Pass 6 W8 Total 5539 647 583 520 5668 616.88 33.88 6% Pass 6 W8 Total 5822 708 614 540 5923 62.33 8.3 1% Pass 7 N8 Total 5824 647 559 492 5739 58.9 30.9 6% Pass A259.1 W8 Total 5829 504 465 433 579 517.69 52.6 11% Pass A259.1 W8 Total 12031	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 1 1 1 2 2 3 3 3	EB EB EB EB EB EB EB EB Direction NB SB EB WB WB SB SB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 Section	4003, 40043 4003, 40097 40124, 40097, 40124 40124, 1760 1760, 2656 2656, 3156 3156, 4156 4156, 4151 4645, 9001 11001, 5739 Total SATURN Link CATM Total Total Total Total Total Total Total	2444 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 Cumulative Distance 4878 4881 5476 5150 4377 4154	117 205 321 432 531 631 782 1026 1160 1160 1160 205 515 486 698 806 664 635 535	116 204 319 421 509 615 765 1007 1112 1112 1112 Cumulative Observed Mean JT 466 439 533 670 559 533	116 202 317 410 487 600 749 987 1064 1064 000 202 317 410 987 1064 1064 200 518 571 476 458	3102 5602 8977 11770 13970 14920 15795 16574 17774 17774 17774 Model Distance 4888 4888 4888 4888 4888 4888 4888 4888 4890 4293	22.2 114.74 201.26 318.06 414.72 490.86 522.74 554.02 596.89 659.04 659.04 659.04 659.04 659.04 659.04 659.04 659.04 515.74 520.96 515.74 520.06	-0.61 -1.41 -2.54 -0.92 -6.25 -11.8.42 -91.63 -211.38 -409.80 -452.90 -452.90 -452.90 -452.90 -163 -721.88 -452.90 -432.64 -72.89 -50.96 -43.26 -12.94 -12.94 -12.94	- 1% - 1% - 1% - 1% - 0% - 4% - 5% - 2% - 8% - 2% - 8% - 2% - 8% - 2% - 8% - 2% - 8% - 2% - 2%	Pass Pass Pass Pass Pass Pass Fall Fall Fall Pass Pass Pass Pass Pass Pass Pass P
5 68 Total 7093 646 591 529 7211 579.71 -11.29 -2% Pass 5 W8 Total 718 661 602 555 7193 606.36 4.36 1% Pass 6 E8 Total 553 66 616.88 33.88 66% Pass 6 W8 Total 5832 708 614 540 5223 622.3 8.3 1% Pass 7 N8 Total 582 708 614 540 5233 622.3 8.3 1% Pass 7 N8 Total 5824 647 559 492 5739 589.9 30.9 6% Pass 7 S8 Total 12031 975 974 973 12126 176 -123 -13% Pass A259-1 W8 Total 12041 1223 1174 11117 1	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 2 2 3 3 4	EB B B B B SB EB SB EB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 11-12 12-13 Section	40034 40043 40043 40097 40027 40124 40124 1760 1760 2656 2656 3156 4156 4151 4645 9001 11001_5739 Total Total Total Total Total Total Total Total Total Total Total	2434 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 Cumulative Distance 4878 4881 5476 5150 4377 4154 3367	117 205 321 432 531 631 782 1026 1160 1160 1160 200 515 486 698 806 664 635 290	116 204 319 421 509 615 765 1007 1112 1112 0000 2044 439 593 670 559 533 254	116 202 317 410 487 600 749 987 1064 1064 SUMMARY Cumulative Observed Low JT 426 400 518 571 476 458 231	3102 5602 8977 11770 13970 14920 15795 16574 17774 17774 17774 17774 Model Distance 4888 4888 4888 4888 4888 4888 4888 4888 4888 4888 4893 5227 4490 4293 3401	22.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 596.89 659.04 659.04 659.04 Cumulative Modelled JT 379.7 489.67 665.89 720.96 515.74 520.06 256.98	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90 -452.90 -452.90 -86.3 50.67 72.89 50.96 -43.26 -12.94 2.98	- 1% - 1% - 1% - 1% - 0% - 4% - 5% - 6% - 6% - 6% - 6% - 6% - 7% - 7%	Pass Pass Pass Pass Pass Pass Fail Fail Fail Fail Pass Pass Pass Pass Pass Pass Pass Pas
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A27-2 W8 Total 17052 608 607 605 17793 688 81 13% Pass A27-1 EB Total 17061 1160 1112 1064 17774 659 -453 -41% Fall	A27-1 A27-1	EB B B B B B B B B B B B B B WB B NB SB SB SB WB NB SB WB NB SB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 Section	40033 40043 40043 40097 40124 40124 4750 1750 2656 2656 3156 3156 4151 4645 9001 11001_5739 Total SATURN Link CATM Total	2430 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 2007 4076 4878 4881 5476 5150 4377 4154 3367 3367 3396 7093 7188 5539 5832 5824 5824 5829 12031	117 205 321 432 531 631 782 1026 1160 1160 1160 Cumulative Observed High JT 515 486 698 806 664 635 290 482 664 661 647 708 647 504 975	116 204 319 421 509 615 765 1007 1112 1112 1112 204 Cumulative Observed Mean JT 466 439 593 670 559 533 254 409 591 602 583 614 559 974	116 202 317 410 487 600 749 987 1064 1064 Cumulative Observed Low JT 426 400 518 571 476 458 231 350 529 555 520 540 492 433 973	3102 3102 8777 11770 13970 14920 15795 16574 17774 17774 17774 4888 4888 4888 4888 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5923 5739 5739 5739 5739 1226	22.2 114.74 201.26 318.06 414.72 490.86 522.74 554.02 596.89 659.04	-0.61 -1.41 -2.54 -0.92 -6.25 -11.84.2 -91.63 -211.38 -409.80 -452.90 -452.90 -452.90 -452.90 -86.3 -50.67 72.89 -50.96 -43.26 -12.94 -12.94 -2.98 -2.616 -11.29 -4.35 -33.88 -8.3 -30.9 -1.23	- 1% - 1% - 1% - 1% - 0% - 4% - 4% - 4% - 4% - 4% - 4% - 4% - 41% - 41%	Pass Pasi Pail Pail Pail Pass
A27-1 EB Total 17061 1160 1112 1064 17774 659 -453 41% Fail	A27-1 A259-1 A259-2	EB EB EB EB EB EB EB EB EB B	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 Section	40033_40043 40043_40043 40027_40124 40124_1760 1760_2656 2655_3156 3155_4156 4155_4151 4645_9001 11001_5739 Total	2444 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 2001 2476 5150 4377 4377 4376 5150 4377 4154 3367 5150 4377 3196 7093 7188 5539 5832 5832 5832 5832 5824 5829 12031 12041	117 205 321 432 531 631 782 1026 1160 1160 1160 205 486 698 806 664 665 299 482 646 661 647 708 647 504 975 1232	116 204 319 421 509 615 765 1007 1112 1112 AM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 466 439 533 670 559 533 254 409 533 254 409 533 254 409 559 559 559 559 559 559 559 5	116 202 317 410 487 600 749 987 1064 1064 202 317 487 600 749 987 1064 1064 200 518 571 476 458 231 350 529 555 520 540 492 433 973 1117	3102 5602 8977 11770 13970 14920 15795 16574 17774 17774 17774 17774 Model Distance 4888 4888 4888 4888 4888 5537 5227 4490 3220 7211 7193 5668 5923 5739 5739 5739 5739 12126	32.2 114.74 201.26 318.06 414.72 490.86 523.74 556.02 59.04 659.04 659.04 655.05 720.96 515.74 520.06 256.98 435.16 579.71 606.36 616.88 622.3 589.9 517.69 851 1078	-0.61 -1.41 -2.54 -0.92 -6.25 -118.42 -91.63 -211.38 -409.80 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -43.26 -12.94 -2.98 -2.99 -2.98 -2.90 -2.98 -2.90 -2.98 -2.98 -2.98 -2.90 -2.98 -2.90 -2.98 -2.90 -2.98 -2.90 -2.98 -2.90 -2.98 -2.90 -2.98 -2.90 -2.98 -2.90 -2.92 -2.92 -2.92 -2.92 -2.92 -2.92 -2.92 -2.92 -2.92 -2.92 -2.92 -2.93 -2.95 -2.94 -2.95 -2.94 -2.95	- 1% - 1% - 1% - 1% - 1% - 4% - 4% - 4% - 4% - 4% - 4% - 41% - 4% - 6% - 7% -	Pass Pass Pass Pass Pass Pass Pass Pall Pall
	A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-1 A27-2 A27-1 A27-2 A2 A27-2 A2 A27-2 A2 A27-2 A2 A27-2 A2 A27-2 A2 A27-2 A2 A27-2 A2 A27-2 A2 A27-2 A2 A27-2 A2 A27-2 A2 A27-2 A2 A27-2 A2 A27-2	EB B B B B B B B B B B B WB EB WB EB WB EB WB EB WB SB WB SB WB WB WB WB	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 5ection	4003, 40043 4003, 40097 40124 40124 (1760 1760, 2656 2656, 3156 31356, 4151 4645, 9001 11001_5739 Total SATURN Link CATM Total	2430 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 2007 4878 4881 5476 5150 4377 4154 3367 3196 7093 7188 5539 5539 5832 5824 5829 12031 12041 17052	117 205 321 432 531 631 782 1026 1160 1160 1160 Cumulative Observed High JT 515 486 698 806 664 633 290 482 646 661 647 708 647 504 647 504 647 504 647 504 647 505 608	116 204 319 421 509 615 1007 1112 1112 1112 466 439 593 670 559 533 254 409 591 602 583 614 559 465 974 1174	116 202 317 410 487 600 749 987 1064 1064 202 317 410 487 600 749 987 1064 1064 50 518 571 426 400 518 571 476 458 231 350 529 520 540 492 433 973 1117 605	3102 3102 8077 11770 13970 14920 15795 16574 17774 17774 17774 17774 17774 17774 4888 4888 4888 4888 4888 4888 4888 4890 4293 3401 3220 7211 7193 5668 5923 5739 5739 5739 5739 12126 1276	32.2 114.74 201.26 318.06 414.72 490.86 522.74 554.02 596.89 655.04 659.04 655.89 720.96 515.74 520.06 256.89 435.16 579.71 605.36 616.88 622.3 589.9 517.69 851 1078 688	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -43.26 -12.94 -2.98 -26.16 -11.29 -4.36 -33.88 -8.3 -30.9 -52.69 -123 -96 -81	- 1% - 1% - 1% - 1% - 0% - 4% - 5% - 2% - 6% - 2% - 6% - 2% - 7% - 6% - 6% - 2% - 1% - 6% - 3% - 2% - 1% - 6% - 3% - 2% - 1% - 3% - 2% - 3% - 2% - 1% - 3% - 2% - 1% - 3% - 2% - 3% - 3% - 2% - 3% - 3%	Pass Pass Pass Pass Pass Pass Pass Pail Fail Fail Fail Fail Fail Pail Pass Pass Pass Pass Pass Pass Pass Pas
	A27-1 A25-9 A27-2 A27-2 A27-1	EB EB EB EB EB EB EB EB EB SB EB WB SB SB B SB SB B SB B SB B B B B B B B	4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 Section	40033, 40043 40043, 40043 40043, 40043 40027, 40124 40124, 1750 1760, 2656 2656, 3156 3156, 4151 4645, 9001 11001_5739 Total	2434 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 24878 4878 4881 5476 5150 4377 4154 3367 3367 3367 3367 3396 7093 7188 5539 5832 5832 5832 5824 5829 12031 12041 17052 17061	117 205 321 432 531 631 782 1026 1160 1160 1160 Cumulative Observed High JT 515 486 698 806 664 665 290 482 646 661 647 708 647 504 975 1232 608 1160	116 204 319 421 509 615 765 1007 1112 1112 1112 1112 1112 1112 509 670 593 670 559 533 254 409 591 602 583 614 559 974 1174 607 1112	116 202 317 410 487 600 749 987 1064 1064 1064 202 317 410 487 600 749 987 1064 1064 500 518 571 476 458 231 350 529 555 520 540 492 433 973 1117 605 1064	3102 3102 877 11770 13970 14920 15795 16574 17774 17774 17774 Wodel Distance 4888 4888 4888 4888 4888 4888 4888 4888 4888 4888 4888 4888 4888 4888 489 4293 3401 3220 7211 7193 5668 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 5739 575 575	32.2 114.74 201.26 318.06 414.72 490.86 523.74 554.02 59.04 659.04 659.04 658.9 720.96 515.74 520.06 256.88 435.16 579.71 606.36 616.88 622.3 589.9 517.69 851 1078 688 659	-0.61 -1.41 -2.54 -0.92 -6.25 -18.42 -91.63 -211.38 -409.80 -452.90 -452.90 -452.90 -452.90 -452.90 -452.90 -43.26 -12.94 -2.98 -2.61 -11.29 -4.35 -3.38 -3.38 -3.09 -52.69 -123 -96 -81 -453	- 1% - 1% - 1% - 1% - 1% - 4% - 4% - 4% - 41% - 41% - 41% - 4	Pass Pasi Path Path

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 16

 Fail
 2

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 89%







































						IP JOURNEY TIME VALIDA					
Route 1	Direction	Section 0-1	SATURN Link CATM 9001	Cumulative Distance 0	Cumulative Observed High JT 0	Cumulative Observed Mean JT 0	Cumulative Observed Low JT 0	Model Distance 0	Cumulative Modelled JT 0	Difference (seconds)	Difference %
1	NB	1-2	11001_5739	1178	79	74	70	1200	63.58	-10.42	-14%
1	NB	2-3	11004_6936	2391	149	142	136	2392	123.09	-8.49	-12%
1	NB	3-4	11006_10002	3528	236	222	210	3562	234.47	-17.04	-19%
1	NB	5-6	30022_10003	4878	384	361	340	4888	341.51	-14.92	-29%
1	NB		Total	4878	384	361	340	4888	341.51	-19.49	-5%
1	SB	0-1	10003	0	74	69	0	0	0 87.44	18.44	27%
1	SB	2-3	11070_10002	1299	204	184	166	1326	150.83	-51.61	-45%
1	SB	3-4	11005_6936	2466	294	262	238	2496	210.58	-18.25	-23%
1	SB	4-5	11002_5739	3676	486	426	372	3688	287.26	-87.32	-53%
1	SB	5-0	Total	4881	564	498	440	4888	350.44	-147.56	-12%
2	EB	0-1	9001	0	0	0	0	0	0		
2	EB	1-2	4946_5046	479	40	38	37	492	41.31	3.31	9%
2	EB	2-3	5544_5744	1322	108	103	98	1327	116.21	-2.74	-6%
2	EB	4-5	6055_6054	2283	233	208	189	2296	219.66	1.19	2%
2	EB	5-6	11009_10005	2800	290	260	238	2833	276.12	4.46	9%
2	EB	6-7	20003_6547	3300	372	327	294	3349	327.79	-15.33	-23%
2	EB	8-9	6043_6044	4342	584	487	425	4434	468.44	-10.73	-9%
2	EB	9-10	5943_5940	4412	598	498	434	4509	528.4	48.96	445%
2	EB	10-11	5839_5739	4989	802	659	558	5021	600.05	-89.35	-55%
2	EB	11-12	Total	5476	864	712	605	5537	644.51	-67.49	-9%
2	WB	0-1	5635	0	0	0	0	0	0		
2	WB	1-2	50257_5739	542	84	73	65	516	71.88	-1.12	-2%
2	WB	3-4	5940_5943	1085	202	182	129	1048	212.02	6.26	29%
2	WB	4-5	6446_6542	1894	341	278	232	1895	302.4	-5.62	-6%
2	WB	5-6	6454_10005	2499	417	347	294	2551	373.93	2.53	4%
2	WB	6-7 7-8	5650 5648	3380	444 519	442	318	3469	473.83	-2.47	-10%
2	WB	8-9	5745_5744	3831	562	481	420	3900	521.31	8.48	22%
2	WB	9-10	5344_5046	4701	638	552	486	4735	591.41	-0.9	-1%
2	WB	10-11	4945_9001 Total	5150	697	604	533	5227	642.9	-0.51 38.9	-1%
3	NB	0-1	6925	0	0	0	0	0	0	58.5	078
3	NB	1-2	50264_6936	1138	102	91	83	1141	83.88	-7.12	-8%
3	NB	2-3	7041_7042	1884	266	231	207	1841	203.62	-20.26	-14%
3	NB	4-5	6748 6648	2631	381	326	245	2676	282.77	-13.04	-6%
3	NB	5-6	20006_7153	3629	540	465	409	3624	377.58	-44.19	-32%
3	NB	6-7	7555_7656	4109	598	518	459	4183	445.45	14.87	28%
3	NB	7-8	Total	4377	632	549	487	4490	482.93	-66.07	-12%
3	SB	0-1	10003	0	0	0	0	0	0		
3	SB	1-2	7755_7656	277	40	36	34	307	28.35	-7.65	-21%
3	SB	2-3	20004_/153	81/	209	117	108	1500	94.76	-14.59 -5.34	-18%
3	SB	4-5	7048_7047	1958	266	237	217	2099	216.69	7.27	14%
3	SB	5-6	7044_7042	2271	373	300	246	2452	310.8	31.11	49%
3	SB	6-7 7-8	50264 6925	3020	504	472	323	4293	476.81	-19.73	-20%
3	SB		Total	4154	585	472	394	4293	476.81	4.81	1%
4	EB	0-1	6543	0	0	0	0	0	0		
4	EB	1-2	7048_7047	1746	90	190	173	793	77.68	-4.32	-5%
4	EB	3-4	9137_9236	3367	292	264	243	3401	270.03	-7.55	-10%
4	EB		Total	3367	292	264	243	3401	270.03	6.03	2%
4	WB	0-1	9135	0	0	0	0	0	0	16.51	1.4%
4	WB	2-3	7345 7047	2639	229	207	188	2618	213.59	-9.92	-11%
4	WB	3-4	6648_6543	3196	332	289	258	3220	276.02	-19.57	-24%
4	WB		Total	3196	332	289	258	3220	276.02	-12.98	-4%
5	EB	1-2	50255 3958	1032	67	62	58	1071	51.14	-10.86	-18%
5	EB	2-3	5854_5953	2608	206	186	172	2729	174.66	-0.48	0%
5	EB	3-4	11009_10005	3020	252	228	210	3166	222.42	5.76	14%
5	EB	4-5	7555 7656	3/85	452	402	303	3930	305.94	-22.48	-21%
5	EB	6-7	7658_10004	4750	499	444	404	4899	403.93	-11.88	-28%
5	EB	7-8	8362_8765	5733	574	514	469	5984	472.08	-1.85	-3%
5	EB	8-9	94/1_9//3 Total	7093	669	601	549	7211	542.48	-10.0	-19%
5	WB	0-1	9773	0	0	0	0	0	0		
5	WB	1-2	9471_8765	1361	98	91	84	1227	87.89	-3.11	-3%
5	WB WB	2-3 3-4	8261_10004 7658 7656	2378	232	213	152	2312	152.46	-6.43	-9%
5	WB	4-5	20004_7153	3339	323	295	272	3281	258.52	-15.59	-19%
5	WB	5-6	6456_10005	4109	428	385	352	4045	351.8	3.28	4%
5	WB	7-8	5459 40137	6156	620	+38 558	510	6009	513.18	0.32	-23%
5	WB	8-9	50255_40138	7188	687	620	567	7193	573.04	-2.14	-3%
5	WB		Total	7188	687	620	567	7193	573.04	-46.96	-8%
6	EB	1-2	6158 6157	2429	205	186	172	2548	188.48	2.48	1%
6	EB	2-3	11009_10005	2734	240	217	200	2867	226.57	7.09	23%
6	EB	3-4	20004_7253	3594	386	341	309	3717	329.29	-21.28	-17%
6	EB	4-5 5-6	7750 7952	4070	455	402 490	362	4180	387.03	-3.26 21.93	-5%
6	EB	6-7	8652_8752	5539	637	562	504	5668	576.3	7.34	10%
6	EB		Total	5539	637	562	504	5668	576.3	14.3	3%
6	WB	0-1	8752	0	U 149	U 122	U 92	0	U 137 97	15 97	13%
6	WB	2-3	7550_7349	1469	205	174	141	1488	197.24	7.27	14%
6	WB	3-4	7349_7253	1945	300	253	205	1951	258.47	-17.77	-22%
6	WB	4-5	6456_10005	2843	428	364	304	2801	369.46	-0.01	0%
6	WB WB	5-b 6-7	5955_6157 5775 4262	5832	489 679	422	525	5923	420.19 591.21	-7.27 -5.98	-13%
6	WB		Total	5832	679	599	525	5923	591.21	-7.79	-1%
7	NB	0-1	8024	0	0	0	0	0	0		
7	NB	2-3	5024_50266 50266 10002	1234	82	207	13	1240	/0.3	-0./	-9%
7	NB	3-4	30022_10003	3164	374	341	308	3096	276.21	-31.96	-23%
7	NB	4-5	7863_8166	4607	473	434	397	4552	357.46	-11.75	-13%
7	NB NB	5-6	5058_5063 Total	5824	551	507	466	5739	432.63	-74.37	-15%
7	SB	0-1	5063	0	0	0	0	0	0		
7	SB	1-2	5058_8166	1260	84	79	73	1187	75.15	-3.85	-5%
7	SB	2-3	11070 10002	4076	422	377	343	2043	332.94	-4.04 -36.17	-4%
7	SB	4-5	10002_50266	4595	460	413	377	4499	370.67	1.73	5%
7	SB	5-6	50266_8024	5829	563	498	452	5739	469.51	13.84	16%
	20	1	IULAI	3029	202	430	404	3/39	403.31	-20.49	-070



259-1		1									1
	WB	0-1	9001	0	0	0	0	0	0	0	
259-1	WB	1-2	9001_4741	326	24	24	24	342	17.1	-6.58	-28%
259-1	WB	2-3	4741_30001	1013	78	77	76	702	37.35	-40.02	-52%
259-1	WB	3-4	30001_3451	1292	118	108	98	1352	87.57	-20.60	-19%
259-1	WB	4-5	3451 2853	1817	158	148	138	1717	114.95	-32.88	-22%
259-1	WB	5.6	2853 40175	3115	239	233	226	3189	197.75	-34.76	-15%
250 1	14/0	5-0	40175 2052	3305	2.37	200	220	202	201.73	-34.70	-13%
259-1	WB	6-7	40175_2852	3295	251	245	238	3327	205.51	-39.32	-16%
59-1	WB	7-8	2852_2653	3791	290	284	277	3840	247.01	-36.60	-13%
59-1	WB	8-9	2653_2054	4948	350	344	337	5007	334.53	-9.27	-3%
59-1	WB	9-10	2054 40169	5915	409	404	399	5597	367.72	-36.40	-9%
59-1	WB	10-11	40169 1854	6150	427	421	415	6188	401.03	-20.02	-5%
0 1	WB NAR	11 12	1854 40150	7404		500	F03	7450	401.05	24.09	79/
59-1	WB	11-12	1854_40159	7404	515	509	503	7459	4/4.1	-34.98	-7%
9-1	WB	12-13	40159_1255	8017	572	567	561	8068	511.45	-55.05	-10%
59-1	WB	13-14	1255_1001	9396	695	695	695	9468	616.45	-78.60	-11%
59-1	WB	14-15	1001 40119	9770	729	728	726	9778	639.7	-87.87	-12%
59-1	WB	15-16	40119 40042	10089	760	759	757	10178	678.49	-80.13	-11%
E0 1	WB NAR	16 17	40043 40040	12021	028	022	018	10170	825.05	07.00	10%
33-1	WB	10-17	40042_40040	12031	928	923	918	12120	833.03	-87.88	-10%
59-1	WB		Iotai	12031	928	923	918	12126	835.05	-87.88	-10%
59-2	EB	0-1	40040	0	0	0	0	0	0	0.00	
59-2	EB	1-2	40040_40042	1944	171	169	166	1948	163.83	-5.04	-3%
59-2	EB	2-3	40042 40119	2263	197	194	191	2348	193.83	-0.12	0%
50.2	FR	3.4	40119 1001	2636	228	225	222	2658	217.13	-9.22	-4%
55-2		3-4	40115_1001	2050	220	225	225	2050	217.15	-0.55	-476
59-2	EB	4-5	1001_1255	4015	348	345	343	4058	325.14	-20.16	-6%
59-2	EB	5-6	1255_40159	4628	397	396	394	4667	359.4	-36.29	-9%
59-2	EB	6-7	40159_1854	5882	484	482	481	5938	431.13	-51.15	-11%
59-2	EB	7-8	1854 40169	6117	501	499	497	6529	464.37	-34.50	-7%
59-2	FR	8-0	40169 2054	7084	558	555	557	7110	497.56	-57.58	-10%
50.2		0.10	2054 2054	/004	530	535	332	, 115		-57.50	-10%
o9-2	ЕВ	9-10	2054_2653	8242	b23	620	618	8286	588.09	-32.08	-5%
59-2	EB	10-11	2653_2852	8750	661	658	656	8799	626.56	-31.91	-5%
9-2	EB	11-12	2852_40175	8930	673	671	668	8937	634.32	-36.29	-5%
9-2	EB	12-13	40175 2853	10228	755	752	750	10409	717.12	-35.19	-5%
9-2	FR	12-14	2853 2451	10753	819	807	706	10774	744 5	-62.22	-94/
		10-14	2000_3431	10/33	010	007	/50	10//4	702.25	-02.23	-0/0
9-Z	EB	14-15	3451_30001	11032	841	830	820	11424	793.25	-36.86	-4%
9-2	EB	15-16	30001_4741	11719	895	887	878	11784	816.01	-70.62	-8%
9-2	EB	16-17	4741 9001	12041	952	949	946	12126	870.64	-78.48	-8%
9-2	EB		 Total	12041	952	949	946	12126	870.64	-78.48	-8%
7.2	LU NA/P	0.1	E720	0	0	0	0	0	0	0.00	0,0
/-2	WB	0-1	3/39	0	0	0	0	0	0	0.00	
7-2	WB	1-2	11001_9001	1218	80	77	74	1200	63.18	-13.77	-18%
-2	WB	2-3	4644_4050	2148	120	120	119	2009	90.44	-29.31	-24%
-2	WB	3-4	4050 4055	2912	147	146	146	2856	118.98	-27.41	-19%
2	WR	4-5	4055 3156	3758	176	175	175	3806	150.99	-24 29	-14%
-	14/0		2156 2050	5104	10	1/3	1/3	5000	1.0.35	-24.27	-1470
2	WB	5-6	3156_2656	5184	230	228	226	6UUb	225.12	-2.84	-1%
2	WB	6-7	2656_1760	7978	328	325	322	8799	319.23	-5.92	-2%
-2	WB	7-8	1760_40134	11363	443	439	435	12174	432.95	-5.95	-1%
-2	WB	8-9	40134 40039	13931	533	527	522	14674	517.19	-10.21	-2%
7 2	NA/P	0.10	40030 40035	14550	EE4	E40	E43	15202	E 28 24	10.34	29/
	WB	9-10	40039_40033	14339	334	349	343	13302	338.34	-10.34	=2.76
/-Z	WB	10-11	40035_40030	15260	580	5/5	569	16002	562.02	-12.68	-2%
7-2	WB	11-12	40030_40023	16149	612	607	601	16891	591.91	-14.70	-2%
7-2	WB	12-13	40023_40004	17052	647	641	635	17793	625.93	-14.63	-2%
7-2	WB		Total	17052	647	641	635	17793	625.93	-14.63	-2%
7-1	EB	0-1	40032	0	0	0	0	0	0	0.00	
1.4		1.2	40032	011	24	34	24	011	25.07	0.00	CN/
/-1	EB	1-2	40032_40036	911	34	34	34	911	35.97	1.90	6%
7-1	EB	2-3	40036_40038	1797	66	65	65	1797	65.72	0.61	1%
7-1	EB	3-4	40038_40043	2440	90	89	89	2438	87.57	-1.84	-2%
7-1	EB	4-5	40043 40097	3104	113	112	112	3102	109.94	-2.48	-2%
7-1	FR	5-6	40097 40124	5687	203	201	100	5602	194 15	-6.64	-30/
7.4		5-0	40124	0001	203	201	177	0077	1.04.13	-0.04	-5/6
/-1	EB	6-7	40124_1760	9084	316	315	314	8977	307.83	-7.28	-2%
7-1	EB	7-8	1760_2656	11870	409	409	408	11770	401.91	-6.91	-2%
7-1	EB	8-9	2656_3156	13288	457	457	456	13970	476.01	19.46	4%
7-1	EB	9-10	3156 4156	14144	487	486	484	14920	508.01	22.23	5%
7-1	ER	10-11	4156 4151	14974	518	514	511	15795	537 48	22.99	4%
71		11 12	4645 0001	15943	510	514	511	16574	537.40	14.04	·*/0
-1		11-12	4045_9001	13042	110	000	500	105/4	573.00	14.04	2%
/-1	EB	12-13	11001_5739	17061	654	648	642	17774	643.24	-4.90	-1%
-1	EB	1	Total	17061	654	648	642	17774	643.24	-4.90	-1%
-											
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-							CUID 40 4 4 DV/				D://
***	Direction	Soutien	CATURN Link CATA	Cumulative Distance	Cumulative Observed Liek IT	IP JOURNEY TIME VALIDATION	SUMMARY	Model Distance	Cumulative Medalled IT	Difforonce	1000000000
te	Direction	Section	SATURN Link CATM	Cumulative Distance	Cumulative Observed High JT	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT	SUMMARY Cumulative Observed Low JT	Model Distance	Cumulative Modelled JT	Difference (seconds)	Different
te	Direction NB	Section	SATURN Link CATM	Cumulative Distance	Cumulative Observed High JT 384	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361	SUMMARY Cumulative Observed Low JT 340	Model Distance 4888	Cumulative Modelled JT 341.51	Difference (seconds) -19.49	-5%
te	Direction NB SB	Section	SATURN Link CATM Total Total	Cumulative Distance 4878 4881	Cumulative Observed High JT 384 564	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498	SUMMARY Cumulative Observed Low JT 340 440	Model Distance 4888 4888	Cumulative Modelled JT 341.51 350.44	Difference (seconds) -19.49 -147.56	-5% -30%
e	Direction NB SB EB	Section	SATURN Link CATM Total Total Total	Cumulative Distance 4878 4881 5476	Cumulative Observed High JT 384 564 864	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712	SUMMARY Cumulative Observed Low JT 340 440 605	Model Distance 4888 4888 5537	Cumulative Modelled JT 341.51 350.44 644.51	Difference (seconds) -19.49 -147.56 -67.49	-5% -30% -9%
e	Direction NB SB EB WB	Section	SATURN Link CATM Total Total Total Total	Cumulative Distance 4878 4881 5476 5150	Cumulative Observed High JT 384 564 864 697	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604	SUMMARY Cumulative Observed Low JT 340 440 605 533	Model Distance 4888 4888 5537 5227	Cumulative Modelled JT 341.51 350.44 644.51 642.9	Difference (seconds) -19.49 -147.56 -67.49 38.9	-5% -30% -9% 6%
2	Direction NB SB EB WB NB	Section	SATURN Link CATM Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377	Cumulative Observed High JT 384 564 864 697 632	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549	SUMMARY Cumulative Observed Low JT 340 440 605 533 487	Model Distance 4888 4888 5537 5227 4490	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07	-5% -30% -9% 6% -12%
2	Direction NB SB EB WB NB SB	Section	SATURN Link CATM Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154	Cumulative Observed High JT 384 564 864 697 632 585	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472	SUMMARY Cumulative Observed Low JT 340 440 605 533 487 394	Model Distance 4888 4888 5537 5227 4490 4293	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81	-5% -30% -9% 6% -12% 1%
	Direction NB SB EB WB NB SB EB	Section	SATURN Link CATM Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 2367	Cumulative Observed High JT 384 564 864 697 632 585 202	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264	SUMMARY Cumulative Observed Low JT 340 440 605 533 487 394 242	Model Distance 4888 4888 5537 5227 4490 4293 3401	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.02	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 -6.02	-5% -30% -9% 6% -12% 1%
2	Direction NB SB EB WB NB SB EB WC	Section	SATURN Link CATM Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367	Cumulative Observed High JT 384 564 864 697 632 585 292 322	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 264	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 270	Model Distance 4888 4888 5537 5227 4490 4293 3401 2220	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 976.62	Difference (seconds) -19.49 -147.55 -67.49 38.9 -66.07 4.81 6.03 4.81 -6.02	-5% -30% -9% 6% -12% 1%
e	Direction NB SB EB WB NB SB EB WB	Section	SATURN Link CATM Total Total Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 3196	Cumulative Observed High JT 384 564 864 697 632 585 292 332	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 258	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 6.03 -12.98	-5% -30% -9% 6% -12% 1% 2% -4%
e	Direction NB EB WB NB SB EB WB EB	Section	SATURN Link CATM Total Total Total Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 3196 7093	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289 601	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 258 549	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48	Difference (seconds) -19.49 -147.56 -67.49 -66.07 -66.07 -4.81 -6.03 -12.98 -58.52	-5% -30% -9% 6% -12% 1% 2% -4% -10%
	Direction NB SB EB WB NB SB EB WB EB WB WB	Section	SATURN Link CATM Total Total Total Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289 601 620	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 258 549 567	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04	Difference (seconds) -19.49 -147.56 -67.49 -66.07 4.81 -60.03 -12.98 -58.52 -46.96	-5% -30% -9% 6% -12% 1% 2% -4% -10% -8%
e	Direction NB SB EB WB SB EB WB EB WB FR	Section	SATURN Link CATM Total Total Total Total Total Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 3166 7093 7188 5520	Cumulative Observed High JT 384 564 684 697 632 585 292 332 669 687 637	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289 601 601 620 562	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 258 549 567 504	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 566e	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04 576.9	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 6.03 -12.98 -58.52 -46.96 14 2	-5% -30% -9% 6% -12% 1% 2% -4% -10% -8% -8%
te	Direction NB SB EB WB SB EB WB EB WB EB WB EB WB	Section	SATURN Link CATM Total Total Total Total Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188 5539 5539	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 637	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289 601 620 562 762	SUMMARY Cumulative Observed Low JT 340 440 605 533 487 394 243 258 549 567 567 504	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5668	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 5773.04 576.3 20.57 576.3	Difference (seconds) -19.49 -147.56 -67.49 -38.9 -66.07 -4.81 -6.03 -12.98 -58.52 -46.96 -14.3 -12.98 -58.52 -46.96 -14.3 -14.3 -14.3 -14.3 -14.3 -14.3 -14.3 -14.5 -14.	
	Direction NB SB EB WB SB EB WB EB WB EB WB EB WB	Section	SATURN Link CATM Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 3196 7093 7188 5539 5832	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 679	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289 601 620 562 562 599	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 258 549 567 504 504 525	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5923	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04 576.3 591.21	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 6.03 -12.98 -58.52 -46.96 14.3 -7.79	
	Direction NB SB EB WB SB EB WB EB WB EB WB NB NB	Section	SATURN Link CATM Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188 5539 5832 5832	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 679 551	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 472 264 289 601 620 562 599 507	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 258 549 567 504 525 466	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5923 5739	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 577.3.04 576.3 591.21 432.63	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 -6.03 -12.98 -58.52 -46.96 14.3 -7.79 -74.37	-12% -30% -9% -6% -12% -12% -12% -4% -4% -4% -10% -8% -3% -1% -1% -15%
	Direction NB SB EB WB SB EB WB EB WB EB WB EB WB SB	Section	SATURN Link CATM Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188 5539 5832 5832 5824 5829	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 679 551 553	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 472 264 601 620 562 562 599 507 498	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 258 549 567 567 504 525 466 452	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5923 5739 5739	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04 576.3 591.21 432.63 469.51	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 6.03 -12.98 -58.52 -46.96 14.3 -7.79 -74.37 -28.49	-15% -30% -9% -12% -12% -12% -12% -4% -4% -3% -1% -15% -6%
	Direction NB SB EB WB SB EB WB EB WB EB WB NB SB WB	Section	SATURN Link CATM Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188 5539 5832 5832 5832 5824 5824 5829 12031	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 679 551 553 928	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 472 264 289 601 620 562 599 507 498 973	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 258 549 567 504 525 466 452 918	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5923 5739 5739 17126	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04 576.3 591.21 432.63 469.51 835	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 -6.03 -12.98 -58.52 -46.96 14.3 -7.79 -74.37 -28.49 -88	-10% -5% -30% -9% -6% -12% -12% -12% -4% -4% -10% -8% -3% -11% -15% -6%
9-1	Direction NB SB EB WB SB EB WB EB WB EB WB EB WB NB SB WB SB	Section	SATURN Link CATM Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 3166 7093 7188 5539 5832 5824 5829 12031 1204*	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 679 551 553 928 928	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 601 620 562 562 599 507 498 907 498	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 258 549 567 504 555 466 452 918 046	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5923 5739 5739 12126 13135	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04 576.3 591.21 432.63 469.51 835 871	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 -6.03 -12.98 -58.52 -46.96 14.3 -7.79 -74.37 -72.84 -88 -76	5% 30% 9% 9% 12% 12% 12% 12% 12% 12%
9-1 9-2	Direction NB SB EB WB SB EB WB EB WB EB WB SB NB SB WB SB WB	Section	SATURN Link CATM Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188 5539 5832 5832 5824 5829 12031 12041	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 637 637 551 551 553 928 952	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289 601 620 562 599 507 498 923 949	SUMMARY Cumulative Observed Low JT 340 6005 533 487 394 243 258 549 567 504 525 466 452 918 918	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5923 5739 5739 12126 12126	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04 576.3 591.21 432.63 469.51 835 871 835	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 -6.03 -12.98 -58.52 -46.96 14.3 -7.79 -74.37 -28.49 -88 -78	
9-1 9-2 	Direction NB SB EB WB SB EB EB WB EB WB NB SB WB WB WB WB	Section	SATURN Link CATM Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188 5539 5832 5824 5824 5824 12031 12041 17052	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 679 551 553 928 952 647	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 601 620 562 562 599 507 498 903 949 641	SUMMARY Cumulative Observed Low JT 340 605 533 487 243 258 549 567 504 567 504 525 466 452 918 946 635	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5923 5739 5739 12126 12126 17793 1256	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04 576.3 591.21 432.63 469.51 835 871 626	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 6.03 -12.98 -58.52 -46.96 14.3 -7.79 -74.37 -28.49 -58 -78 -15	
	Direction NB S8 EB WB S8 EB WB EB	Section	SATURN Link CATM Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188 5539 5832 5824 5829 12031 12041 17052 17061	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 637 679 551 553 928 952 647 654	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289 601 620 562 599 507 498 923 949 641 648	SUMMARY Cumulative Observed Low JT 340 6005 533 487 394 243 258 549 567 504 525 466 452 918 946 635 642	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5923 5739 5739 12126 12126 17774	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04 576.3 591.21 432.63 469.51 835 871 626 643	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 -6.03 -12.98 -58.52 -46.96 14.3 -7.79 -74.37 -28.49 -88 -78 -15 -5	5% 30% 9% 9% 12% 12% 12% 12% 12% 10% 15% 6% 15% 15% 6% 10% 2% 2% 2% 2% 2% 2% 2%
oute 1 1 2 2 3 4 4 5 6 6 6 7 7 259-1 227-2 27-1 27-1	Direction NB S8 EB WB EB WB EB WB NB EB WB NB S8 WB EB WB EB	Section	SATURN Link CATM Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188 5539 5882 5882 5822 5824 5829 12031 12041 17052 17061	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 679 551 563 928 952 647 654	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289 601 620 552 599 507 498 923 949 641 648	SUMMARY Cumulative Observed Low JT 340 6005 533 487 243 243 243 258 549 567 504 567 504 466 452 918 946 635 642	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5923 5739 5739 12126 12793 17774 17774	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04 576.3 591.21 432.63 469.51 835 871 626 643	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 6.03 -12.98 -58.52 -46.96 14.3 -7.79 -74.37 -28.49 -88 -78 -15 -5	
	Direction NB S8 E8 NB S8 E8 W8 E8 W8 E8 W8 E8 NB S8 W8 NB S8 W8 S8 W8 E8 E8 E8 E8 E8	Section	SATURN Link CATM Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188 5539 5832 5832 5832 5824 5824 12031 12041 17052 17061	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 679 551 563 928 952 647 654	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289 601 520 599 507 498 923 949 641 648	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 258 549 567 504 525 466 452 918 946 635 642	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5739 5739 12126 12726 17793 17774	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 2770.03 276.02 542.48 573.04 576.3 591.21 432.63 469.51 835 871 625 643	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 -4.81 -6.03 -12.98 -58.52 -46.96 14.3 -7.79 -74.37 -28.49 -88 -78 -15 -5 -5 -5 -5 -5 -75	-54 -33 -39 -69 -6 -12 -12 -12 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4
	Direction NB SB EB WB SB EB WB EB WB WB NB NB SB WB EB EB	Section	SATURN Link CATM Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188 5539 5882 5882 5829 12031 12041 17052 17061	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 679 551 563 928 952 647 654	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289 601 620 552 599 507 498 923 949 641 648	SUMMARY Cumulative Observed Low JT 340 6005 533 487 243 243 243 258 549 567 504 567 504 466 452 918 946 635 642	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5923 5739 5739 12126 12793 17774 17774	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04 576.3 591.21 432.63 469.51 835 871 626 643	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 4.81 -6.03 -12.98 -58.52 -46.96 14.3 -7.79 -74.37 -28.49 -88 -78 -15 -5 Pass Call	
	Direction NB S8 E8 S8 S8 E8 WB E8 WB E8 WB E8 WB NB S8 WB NB S8 WB E8 E8 E8 E8 E8 E8	Section	SATURN Link CATM Total	Cumulative Distance 4878 4881 5476 5150 4377 4154 3367 7093 7188 5539 5832 5832 5832 5824 5824 12031 12041 17052 17061	Cumulative Observed High JT 384 564 864 697 632 585 292 332 669 687 637 679 551 563 928 952 647 654	IP JOURNEY TIME VALIDATION Cumulative Observed Mean JT 361 498 712 604 549 472 264 289 601 520 599 507 498 923 949 641 648	SUMMARY Cumulative Observed Low JT 340 605 533 487 394 243 258 549 567 504 525 466 452 918 946 635 642	Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211 7193 5668 5739 5739 12126 12726 17793 17774	Cumulative Modelled JT 341.51 350.44 644.51 642.9 482.93 476.81 270.03 276.02 542.48 573.04 576.3 591.21 432.63 469.51 835 871 626 643	Difference (seconds) -19.49 -147.56 -67.49 38.9 -66.07 -4.81 -6.03 -12.98 -58.52 -46.96 14.3 -7.79 -74.37 -28.49 -88 -78 -15 -5 -5 -5 -5 -5 -75 -5 -75 -5 -75 -5 -75 -5 -75 -7	

	IP JOURNEY TIME VALIDATION SUMMARY													
Route	Direction	Section S	GATURN Link CATM	Cumulative Distance	Cumulative Observed High JT	Cumulative Observed Mean JT	Cumulative Observed Low JT	Model Distance	Cumulative Modelled JT	Difference (seconds)	Differenc			
1	NB	T	otal	4878	384	361	340	4888	341.51	-19.49	-5%			
1	SB	Т	otal	4881	564	498	440	4888	350.44	-147.56	-30%			
2	EB	Т	otal	5476	864	712	605	5537	644.51	-67.49	-9%			
2	WB	Т	otal	5150	697	604	533	5227	642.9	38.9	6%			
3	NB	Т	otal	4377	632	549	487	4490	482.93	-66.07	-12%			
3	SB	T	otal	4154	585	472	394	4293	476.81	4.81	1%			
4	EB	Т	otal	3367	292	264	243	3401	270.03	6.03	2%			
4	WB	T	otal	3196	332	289	258	3220	276.02	-12.98	-4%			
5	EB	T	otal	7093	669	601	549	7211	542.48	-58.52	-10%			
5	WB	T	otal	7188	687	620	567	7193	573.04	-46.96	-8%			
6	EB	T	otal	5539	637	562	504	5668	576.3	14.3	3%			
6	WB	Т	otal	5832	679	599	525	5923	591.21	-7.79	-1%			
7	NB	Т	otal	5824	551	507	466	5739	432.63	-74.37	-15%			
7	SB	T	otal	5829	563	498	452	5739	469.51	-28.49	-6%			
A259-1	WB	T	otal	12031	928	923	918	12126	835	-88	-10%			
A259-2	EB	T	otal	12041	952	949	946	12126	871	-78	-8%			
A27-2	WB	T	otal	17052	647	641	635	17793	626	-15	-2%			
A27-1	EB	T	otal	17061	654	648	642	17774	643	-5	-1%			

	Pass
	Pass
	-
	Pass
	Pass
	Pass
_	PdSS
	Pass
	PdSS
	Pass
	Pass
	. 435

DMRB
Pass
Fail
Pass





































						PM JOURNEY TIME VALIDA	ATION				
Route 1	Direction	Section 0-1	SATURN Link CATM 9001	Cumulative Distance	Cumulative Observed High JT	Cumulative Observed Mean JT	Cumulative Observed Low JT	Model Distance	Cumulative Modelled JT	Difference (seconds)	Difference %
1	NB	1-2	11001_5739	1178	153	139	126	1200	114.38	-24.62	-18%
1	NB	2-3	11004_6936	2391	226	207	190	2392	178.61	-3.77	-6%
1	NB	3-4	11006_10002	3528	315	285	261	3562	269.86	13.25	17%
1	NB	5-6	30022_10003	4878	466	425	390	4888	420.44	-12.5	-26%
1	NB		Total	4878	466	425	390	4888	420.44	-4.56	-1%
1	SB	0-1	10003	437	93	0	0	442	158.14	76.14	93%
1	SB	2-3	11070_10002	1299	345	316	297	1326	257.68	-134.46	-57%
1	SB	3-4	11005_6936	2466	460	411	382	2496	332.15	-20.53	-22%
1	SB SB	4-5	11002_5739	3676	646 798	572	520	3688	440.92	-52.23	-32%
1	SB	50	Total	4881	798	708	646	4888	552.75	-155.25	-22%
2	EB	0-1	9001	0	0	0	0	0	0		
2	EB	1-2	4946_5046	479	40	38	36	492	41.12	3.12	8%
2	EB	3-4	5747_5648	1764	171	156	140	1734	157.34	-8	-16%
2	EB	4-5	6055_6054	2283	311	267	219	2296	243.53	-24.81	-22%
2	EB	5-6	20003 6547	2800	366	318	268	2833	300.72	6.19	12%
2	EB	7-8	6648_6543	3585	523	414	377	3650	433.58	-7.68	-21%
2	EB	8-9	6043_6044	4342	653	548	459	4434	545.97	14.39	15%
2	EB	9-10	6044_5943	4412	674	560	467	4489	552.16	-5.81	-1%
2	EB	11-12	50257_5635	5476	1025	817	657	5537	803.12	-6.39	-13%
2	EB		Total	5476	1025	817	657	5537	803.12	-13.88	-2%
2	WB	0-1	5635	542	0	0	0	516	81.9	-23.1	-22%
2	WB	2-3	5940_5943	1085	283	183	143	1048	193.24	33.34	43%
2	WB	3-4	5943_6044	1166	316	210	167	1103	222.53	2.29	8%
2	WB WB	4-5	6446_6542 6454_10005	1894	435	310	253	1895	328.29	5.76	6% 8%
2	WB	6-7	11009_11010	2717	547	409	342	2776	435.97	3.31	11%
2	WB	7-8	5650_5648	3380	629	480	405	3469	522.1	15.13	21%
2	WB WB	8-9 9-10	5745_5744	3831 4701	675	521	441	3900 4735	564.34 633.81	-3.53	3%
2	WB	10-11	4945_9001	5150	932	735	619	5227	742.51	-32.3	-23%
2	WB	-	Total	5150	932	735	619	5227	742.51	7.51	1%
3	NB NB	0-1	6925 50264 6936	0	92	0 84	0	0 1141	0 84.24	0.24	0%
3	NB	2-3	7041_7042	1884	242	222	201	1841	167.62	-54.62	-40%
3	NB	3-4	7044_7047	2196	290	264	237	2194	200.4	-9.22	-22%
3	NB	4-5	6748_6648	2631	348	313 486	281	2676	248.02	-1.38	-3%
3	NB	6-7	7555_7656	4109	601	539	477	4183	441.92	42.54	80%
3	NB	7-8	7755_10003	4377	650	575	505	4490	479.52	1.6	4%
3	NB SB	0-1	Total 10003	4377	650	575	505	4490	479.52	-95.48	-17%
3	SB	1-2	7755_7656	277	39	33	29	307	29.5	-3.5	-11%
3	SB	2-3	20004_7153	817	141	128	116	866	137.43	12.93	14%
3	SB	3-4	6649_6650	1428	210	189 243	169	1500	226.99	28.56	47%
3	SB	5-6	7044_7042	2271	320	281	250	2452	336.34	16.8	44%
3	SB	6-7	7040_6936	3020	516	426	362	3152	442.58	-38.76	-27%
3	SB	7-8	50264_6925 Total	4154	604	501	430	4293	521.97	4.39	6% 4%
4	EB	0-1	6543	0	0	0	0	0	0		
4	EB	1-2	7048_7047	770	92	83	77	793	72.96	-10.04	-12%
4	EB	2-3	7742_10002	3367	325	276	239	1761	298.13	-4.09	17%
4	EB	54	Total	3367	399	347	307	3401	365.04	18.04	5%
4	WB	0-1	9135	0	0	0	0	0	0		
4	WB WB	2-3	9135_10002 7345_7047	2639	125	201	104	2618	88.62	-25.38	-22%
4	WB	3-4	6648_6543	3196	304	271	247	3220	229.57	-8.59	-12%
4	WB		Total	3196	304	271	247	3220	229.57	-41.43	-15%
5	EB	0-1	40138	1032	0	63	0	0	51.98	-11.02	-17%
5	EB	2-3	5854_5953	2608	210	192	177	2729	176.8	-4.18	-3%
5	EB	3-4	11009_10005	3020	253	233	215	3166	224.79	6.99	17%
5	EB	4-5	7053_7153	3785	421	375	335	3930	314.52	-52.27	-37%
5	EB	6-7	7658_10004	4750	542	485	436	4899	440.5	-9.56	-24%
5	EB	7-8	8362_8765	5733	612	551	498	5984	501.53	-4.97	-8%
5	EB	8-9	94/1_9/73 Total	7093	703	635	5// 577	7211	572.54	-12.99 -62.46	-15%
5	WB	0-1	9773	0	0	0	0	0	0		
5	WB	1-2	9471_8765	1361	96	90	85	1227	71.83	-18.17	-20%
5	WB	3-4	7658 7656	2379	228	212	152	2312	130.94	-5.39	-8%
5	WB	4-5	20004_7153	3339	333	308	285	3281	290.48	11.93	12%
5	WB WB	5-6	6456_10005 5955 5952	4109 4591	445	399	367	4045	388.55	7.07	8% -10%
5	WB	7-8	5459_40137	6156	650	581	531	6009	565.58	0.69	1%
5	WB	8-9	50255_40138	7188	716	641	587	7193	626.4	0.82	1%
5	WB FR	0.1	Total 4262	7188	716	641	587	7193	626.4	-14.6	-2%
6	EB	1-2	6158_6157	2429	200	182	167	2548	187.75	5.75	3%
6	EB	2-3	11009_10005	2734	233	212	196	2867	226.01	8.26	28%
6	EB	3-4	20004_7253	3594	422	374	333	3717	356.49	-31.52	-19%
6	EB	5-6	7750_7952	4550	603	531	468	4658	570.74	33.55	33%
6	EB	6-7	8652_8752	5539	685	606	537	5668	652.88	7.14	10%
6	EB W/R	0.1	Total 8752	5539 n	685 0	606	537	5668	652.88 0	46.88	8%
6	WB	1-2	8652_7952	989	179	156	135	1010	146.85	-9.15	-6%
6	WB	2-3	7550_7349	1469	236	205	178	1488	205.82	9.97	20%
6	WB WB	3-4	7349_7253 6456_10005	1945	327	276	235	1951 2801	283.41	6.59	9% 2%
6	WB	5-6	5953_6157	3381	531	451	394	3375	460	-0.93	-1%
6	WB	6-7	5775_4262	5832	716	624	557	5923	635.41	2.41	1%
6	WB	0.1	Total 8024	5832	716	624	557	5923	635.41 0	11.41	2%
7	NB	1-2	8024_50266	1234	88	85	81	1240	70.12	-14.88	-18%
7	NB	2-3	50266_10002	1813	168	146	129	1770	138.55	7.43	12%
7	NB NB	3-4	30022_10003 7863_8166	3164 4607	319 417	286	259	3096	289.13 370.46	-11.67	8% -13%
7	NB	5-6	5058_5063	5824	493	452	415	5739	446.12	2.66	4%
7	NB		Total	5824	493	452	415	5739	446.12	-5.88	-1%
7	SB SB	0-1	5053 5053	1260	80	75	0	1187	76.04	1.04	1%
7	SB	2-3	10004_10003	2747	212	196	181	2643	187.2	-9.84	-8%
7	SB	3-4	11070_10002	4076	561	516	481	3969	444.88	-62.32	-19%
7	SB SB	4-5	50266 8024	4595	596	548	512	4499 5739	483.4 568.96	-0.44	-1%
7	SB		Total	5829	694	634	588	5739	568.96	-65.04	-10%



									0	1	
4350.1	14/0	0.1	0001	0	0	0	0	0		0	
A259-1	WB	0-1	9001	U	0	U	0	0	U	0	
A259-1	WB	1-2	9001 4741	326	24	24	23	342	17.1	-6.55	-28%
1050.4	11/0		1711 00001	1013	74	74	72	702	27.25	26.40	100/
A259-1	WB	2-3	4741_30001	1013	/4	/4	/3	702	37.35	-30.49	-49%
A259-1	WB	3-4	30001 3451	1292	118	107	96	1352	87.54	-19.40	-18%
1050 4	14/10			1017	450		121	1717	444.02	20.02	240/
A259-1	WB	4-5	3451_2853	1817	156	145	134	1/1/	114.92	-29.92	-21%
A259-1	WB	5-6	2853 40175	3115	236	227	217	3189	197.72	-29.00	-13%
1050.4	11/0	6.7	10175 2052	3395	240	240	222	2227	205.40	24.05	4.49/
A259-1	WB	6-7	401/5_2852	3295	249	240	230	3327	205.48	-34.05	-14%
A259-1	WB	7-8	2852 2653	3791	294	281	267	3840	247	-33.73	-12%
1200 1			2052_2055	5751	234	201	207	5040	247	55.75	12/0
A259-1	WB	8-9	2653_2054	4948	355	341	326	5007	334.52	-6.20	-2%
Δ259-1	WB	9-10	2054 40169	5915	413	408	403	5597	367 71	-40.33	-10%
1255 2		5 10	2034_40105	3313	415	400	405	5551	507.71	40.55	10/0
A259-1	WB	10-11	40169_1854	6150	431	425	418	6188	401.01	-23.49	-6%
A250-1	W/B	11-12	1854 40159	7404	518	512	506	7459	472.96	-30.30	-9%
A233-1	VVD	11-12	1034_40133	7404	510	512	500	7455	472.50	-33.33	-070
A259-1	WB	12-13	40159_1255	8017	578	576	575	8068	510.39	-65.86	-11%
A250-1	W/B	12-14	1255 1001	0306	744	717	691	9468	615 30	-102.04	-1/1%
ALJJ-1	VVD	13-14	1255_1001	2220	/44	/1/	051	5400	015.55	-102.04	-1470
A259-1	WB	14-15	1001_40119	9770	788	756	724	9778	638.64	-117.26	-16%
A250-1	W/B	15-16	40119 40042	10089	822	780	756	10178	678.88	-109.98	-1/1%
A235-1	VVD	13-10	40119_40042	10085	822	789	730	10178	078.88	-105.58	-14/0
A259-1	WB	16-17	40042 40040	12031	983	950	916	12126	837.53	-112.24	-12%
4350.1	14/0		Tetal	12021	092	050	016	10100	837.53	112.24	1.20/
A235-1	WD		TULAI	12031	565	930	910	12120	637.33	*112.24	=1276
A259-2	EB	0-1	40040	0	0	0	0	0	0	0.00	
A3E0.3	ED	1 2	40040 40043	1044	207	196	164	1049	176.04	0.71	E9/
A235-2	ED	1-2	40040_40042	1944	207	180	104	1548	170.94	-8.71	*376
A259-2	EB	2-3	40042_40119	2263	233	211	189	2348	206.94	-4.17	-2%
A3E0.3	ED	2.4	40110 1001	2626	262	242	221	2659	220.22	12.10	E9/
A235-2	ED	3**	40119_1001	2030	203	242	221	2038	230.22	-12.10	*376
A259-2	EB	4-5	1001 1255	4015	383	377	372	4058	338.27	-39.06	-10%
A3E0.3	ED	E 6	1355 40150	4629	420	435	421	4667	272 52	E2 71	1.29/
A235-2	ED	3-0	1233_40139	4028	423	423	421	4007	372.33	-32.71	=12/0
A259-2	EB	6-7	40159_1854	5882	515	512	509	5938	444.42	-67.66	-13%
A250.2	FR	7-9	1854 40160	6117	522	520	526	6520	477.66	-51 80	_10%
n£J3-2	LD	/*o	1034_40103	011/		523	320	0325	477.00	-31.00	-1070
A259-2	EB	8-9	40169_2054	7084	611	601	592	7119	510.85	-90.35	-15%
A250.2	FR	9,10	2054 2652	8242	671	663	655	8286	601.39	-61.82	.0%
n£33*4	-	210	2034_2033	0242	0/1	000	000	0200	001.30	-01.02	-370
A259-2	EB	10-11	2653_2852	8750	709	700	692	8799	639.85	-60.64	-9%
A250.2	FR	11-17	2852 40175	8030	720	710	704	8037	647.61	-64 36	.0%
M233-2	ED	11-12	2032_401/3	0550	720	/12	/04	0757	047.01	-04.50	-270
A259-2	EB	12-13	40175_2853	10228	798	789	780	10409	730.41	-58.85	-7%
4350.3	50	12.14	2052 2451	10753	969	044	810	10774	757 70	85.70	1.0%
M239-2	ED.	13-14	2033_3451	10/03	606	044	913	10/74	151.19	-03./9	-10%
A259-2	EB	14-15	3451 30001	11032	892	866	840	11424	806.54	-59.74	-7%
A2E0.2	ED	15 16	20001 4741	11710	046	020	80F	11794	820.80	80.54	1.09/
A235-2	ED	13-10	30001_4741	11/19	540	320	893	11/84	830.89	-85.34	-10%
A259-2	EB	16-17	4741_9001	12041	1074	1021	968	12126	931.49	-89.53	-9%
4350.3	50		Tetal	12041	1071	1021	068	10100	031.40	80.53	0%
A259-2	ED		Iotai	12041	1074	1021	908	12126	931.49	-89.55	-9%
A27-2	WB	0-1	5739	0	0	0	0	0	0	0.00	
	14/0	1.2	11001 0001	1218	114	02	70	1300	111.00	10.82	220/
* 27 2	WB	1-Z	11001_9001	1218	114	92	70	1200	111.85	19.85	22%
A27-2				2140	100	122	109	2000			
A27-2 A27-2	WB	2-3	4644 4050	2140	133	1.72		2009	140.24	8.27	6%
A27-2 A27-2	WB	2-3	4644_4050	2148	133	152	105	2009	140.24	8.27	6%
A27-2 A27-2 A27-2	WB WB	2-3 3-4	4644_4050 4050_4055	2912	155	152	135	2009 2856	140.24 169.98	8.27 11.82	6% 7%
A27-2 A27-2 A27-2 A27-2	WB WB WB	2-3 3-4 4-5	4644_4050 4050_4055 4055 3156	2912 3758	181	152	135	2009 2856 3806	140.24 169.98 203.34	8.27 11.82 16.23	6% 7% 9%
A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB	2-3 3-4 4-5	4644_4050 4050_4055 4055_3156	2148 2912 3758	133 181 210	152 158 187	135 164	2009 2856 3806	140.24 169.98 203.34	8.27 11.82 16.23	6% 7% 9%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB	2-3 3-4 4-5 5-6	4644_4050 4050_4055 4055_3156 3156_2656	2912 3758 5184	133 181 210 257	152 158 187 234	135 164 211	2009 2856 3806 6006	140.24 169.98 203.34 280.6	8.27 11.82 16.23 46.12	6% 7% 9% 20%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB	2-3 3-4 4-5 5-6 6-7	4644_4050 4050_4055 4055_3156 3156_2656 2656 1760	2912 2912 3758 5184 7978	133 181 210 257 351	132 158 187 234 328	135 164 211 304	2009 2856 3806 6006 8799	140.24 169.98 203.34 280.6 378.68	8.27 11.82 16.23 46.12 51.06	6% 7% 9% 20% 16%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7	4644_4050 4050_4055 4055_3156 3156_2656 2656_1760	2148 2912 3758 5184 7978	133 181 210 257 351	152 158 187 234 328	135 164 211 304	2009 2856 3806 6006 8799	140.24 169.98 203.34 280.6 378.68	8.27 11.82 16.23 46.12 51.06 56.00	6% 7% 9% 20% 16%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8	4644_4050 4050_4055 4055_3156 3156_2656 2656_1760 1760_40134	2912 2912 3758 5184 7978 11363	133 181 210 257 351 466	158 158 234 328 440	135 164 211 304 415	2009 2856 3806 6006 8799 12174	140.24 169.98 203.34 280.6 378.68 497.2	8.27 11.82 16.23 46.12 51.06 56.90	6% 7% 9% 20% 16% 13%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9	4644_4050 4050_4055 4055_3156 3156_2656 2656_1760 1760_40134 40134_40039	2148 2912 3758 5184 7978 11363 13931	133 181 210 257 351 466 554	152 158 187 234 328 440 527	135 164 211 304 415 501	2009 2856 3806 6006 8799 12174 14674	140.24 169.98 203.34 280.6 378.68 497.2 584.99	8.27 11.82 16.23 46.12 51.06 56.90 57.85	6% 7% 9% 20% 16% 13% 11%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9	4644_4050 4050_4055 3156_2656 2656_1760 1760_40134 40134_40039 40035_40035	2912 3758 5184 7978 11363 13931	133 181 210 257 351 466 554 576	152 158 187 234 328 440 527 549	135 164 211 304 415 501 522	2009 2856 3806 6006 8799 12174 14674 14674	140.24 169.98 203.34 280.6 378.68 497.2 584.99 6.05 E 2	8.27 11.82 16.23 46.12 51.06 56.90 57.85 F 9.27	6% 7% 9% 20% 16% 13% 11%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10	4644 4050 4055 4055 3156 2656 1760 1760 40134 40134 40039 40039 40035	2148 2912 3758 5184 7978 11363 13931 14559	133 181 210 257 351 466 554 575	158 158 234 328 440 527 548	135 164 211 304 415 501 522	2009 2856 3806 6006 8799 12174 14674 15302	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27	6% 7% 9% 20% 16% 13% 11%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11	4644_4050 4055_4055 4055_3156 2656_1760 1760_40134 40134_40039 40039_40035 40035_40030	2146 2912 3758 5184 7978 11363 13931 14559 15260	133 181 210 257 351 466 554 554 575 603	158 158 234 328 440 527 548 575	135 164 211 304 415 501 522 547	2009 2856 3806 6006 8799 12174 14674 15302 16002	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99	6% 7% 9% 20% 16% 13% 11% 11% 10%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11	4644_4050 4055_4055 3156_2656 2656_1760 1760_40134 40134_40039 40033_40039 40033_40030	2146 2912 3758 5184 7978 11363 13931 14559 15260 16140	133 181 210 257 351 466 554 575 603 641	158 158 187 234 328 440 527 548 575 610	135 164 211 304 415 501 522 547 579	2009 2886 3806 6006 8799 12174 14674 15302 16002 15801	140.24 169.98 203.34 280.6 378.68 497.2 584.99 6005.53 630.8 651.62	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54	6% 7% 9% 16% 13% 11% 11% 11%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB WB WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12	4644_4050 4055_4055 3156_2656 2656_1760 1760_40134 40134_40039 40033_40035 40033_40030 40030_40023	2140 2912 3758 5184 7978 11363 13931 14559 15260 16149	133 181 210 257 351 466 554 575 603 642	158 158 234 328 440 527 548 575 610	135 164 211 304 415 501 522 547 578	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54	6% 7% 9% 20% 16% 13% 11% 11% 10% 8%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB WB WB WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13	4644_4050 4055_4055 4055_3156 3156_2656 2656_1760 1760_40134 40034_40039 40039_40035 40032_40030 40032_40003	2140 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052	133 181 210 257 351 466 554 575 603 603 642 685	125 158 187 234 328 440 527 548 575 610 648	135 164 211 304 415 501 522 547 578 611	2009 2856 3806 6006 8799 12174 14674 15302 16602 16891 17793	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59	6% 7% 20% 16% 13% 11% 11% 10% 8% 14%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB WB WB WB WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13	4644_4050 4050_4055 4055_3156 2656_2656 1760_40134 40134_40039 40039_40035 40035_40030 40033_40030 40032_40004 17031	2149 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052	133 181 210 257 351 466 554 554 575 603 642 685 685	158 158 234 328 440 527 548 575 610 648 649	135 164 211 304 415 501 522 547 578 611	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 660.53 661.62 736.98 736.98	8.27 11.82 16.23 46.12 51.06 57.85 58.27 55.99 51.54 88.59 98.59	6% 7% 20% 16% 13% 11% 11% 10% 8% 14%
A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2 A27-2	WB WB WB WB WB WB WB WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13	4644_4050 4050_4055 3156_2656 2656_1760 1760_40134 40134_40039 40033_40035 40033_40033 40033_40023 40003_40004 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052	133 181 210 257 351 466 554 575 603 642 685 685	158 159 234 328 440 527 548 575 610 648 648	135 164 211 304 415 501 522 547 578 611 611	2009 2856 3806 6006 8799 12174 14674 14674 15302 16002 16681 17793 17793	140.24 169.98 203.34 280.6 378.68 497.2 584.99 605.53 630.8 661.62 736.98 736.98	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 88.59	6% 7% 9% 20% 16% 13% 11% 11% 10% 8% 14%
A 27-2 A 27-2	WB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1	4644_4050 4050_4055 3156_2656 3156_2656 1760_40134 40134_40039 40039_40033 40033_40033 40034_40023 40023_40004 Total 40032_40004	2140 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0	133 181 210 257 351 466 554 575 603 642 685 685 685 0	158 158 234 328 440 527 548 575 610 648 648 0	135 164 211 304 415 501 522 547 578 611 0	2009 2856 3806 6006 8799 12174 15302 16002 16002 16091 17793 17793 0	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 88.59 0.00	6% 7% 9% 20% 16% 13% 11% 11% 10% 8% 14%
A 27-2 A	WB FR	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2	4644_4050 4050_4055 3156_2656 2656_1760 1760_40134 40134_40039 40035_40030 40035_40030 40035_40030 40032_40004 Total 40032_40036	2149 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911	133 181 210 257 351 466 554 575 603 642 685 685 685 0 39	158 159 234 328 440 527 548 575 610 648 648 0 36	135 164 211 304 415 501 522 547 578 611 611 0 34	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 17793 0 911	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 115.49	8.27 11.82 16.23 46.12 51.06 57.85 58.27 55.99 51.54 88.59 88.59 0.00 79.13	6% 7% 9% 20% 16% 13% 11% 11% 10% 8% 14% 218%
A 27-2 A 27-1 A	WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2	4644_4050 4050_4055 3156_2656 2656_1760 1760_40134 40034_40039 40033_40030 40033_40030 40033_40023 40033_40023 40032_40034 40032_40036	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911	133 181 210 257 351 466 554 575 603 642 685 685 685 0 0 39	128 158 187 234 328 440 527 548 575 610 648 648 0 36	135 164 211 304 415 501 522 547 578 611 611 0 34	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 0 0 911	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 0 115.49	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 88.59 0.00 79.13	6% 7% 9% 20% 16% 13% 11% 11% 10% 8% 14% 14% 218%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 10-11 11-12 12-13 0-1 1-2 2-3	4644_4050 4050_4055 3156_2656 2656_2656 40134_40039 40039_40035 40033_40030 40033_40023 40033_40023 40032_40004 Total 40032_40036	2149 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797	133 181 210 257 351 466 575 603 642 685 685 0 39 71	158 158 187 234 328 440 527 548 575 610 648 648 0 36 648 648 648 648 648 648 648 64	135 164 211 304 415 501 522 547 578 611 611 0 34 64	2009 2856 3806 6006 8799 12174 14674 15302 16691 17793 0 0 911 1797	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 661.62 736.98 736.98 0 0 115.49 145.9	8.27 11.82 16.23 46.12 51.06 57.85 58.27 55.99 51.54 88.59 88.59 0.00 79.13 78.03	6% 7% 9% 20% 16% 13% 11% 10% 8% 14% 14% 218%
A 27-2 A 27-1 A	WB WB WB WB WB WB WB WB WB EB EB EB EB EB EB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4	4644_4050 4050_4055 3156_2656 2656_1760 1760_40134 40034_40039 40033_40035 40033_40030 40033_40004 Total 40032_40004 Total 40032_40036 40032_40036	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440	133 181 210 257 351 466 554 575 603 642 685 685 0 39 71 97	159 159 187 234 328 440 527 548 575 610 648 648 648 0 36 68 93	135 164 211 304 415 501 522 547 578 611 611 0 34 64 89	2009 2856 3806 6006 8799 12174 14674 15302 16002 16002 16091 17793 0 911 1793 0 911	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 115.49 145.9 168.74	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10	6% 7% 9% 20% 16% 13% 11% 11% 10% 8% 14% 14% 218% 218%
A 27-2 A 27-1 A	WB EB EB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4	4644_4050 4050_4055 4055_3156 3156_2656 2656_1760 1760_40134 40134_40039 40039_40035 40033_40030 40032_40004 Total 40032_40004 40032_40036 40038_40038 40038_40033	2149 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 1797 2440	133 181 210 257 351 466 575 603 642 685 0 39 71 97	158 158 187 234 328 440 527 548 575 610 648 648 0 36 68 93 	135 164 211 304 415 501 522 547 578 611 61 0 34 64 89	2009 2856 3806 6006 8799 12174 14674 15302 16082 16082 17793 0 7793 0 911 1797 2438	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 660.53 660.62 736.98 736.98 0 115.49 145.9 168.74	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 88.59 0.00 79.13 78.03 76.10	6% 7% 9% 20% 16% 13% 11% 10% 8% 14% 14% 218% 115% 82%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5	4644_4050 4050_4055 3156_2656 2656_1760 1760_40134 40134_40039 40035_40030 40035_40030 40035_40030 40032_40004 Total 40032_40036 40032_40036 40038_40038 40038_40038	21449 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104	133 181 210 257 351 466 554 575 603 642 685 685 0 39 71 97 120	158 159 187 234 328 440 527 548 575 610 648 648 648 0 36 68 93 116	135 164 211 304 415 501 522 547 578 611 611 0 34 64 89 111	2009 2856 3806 6006 8799 12174 14674 15302 15002 16891 17793 17793 0 911 1797 2438 3102	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 115.49 145.9 145.9 168.74 191.91	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 58.27 55.99 51.54 88.59 88.59 0.00 79.13 78.03 76.10 76.40	6% 7% 9% 20% 16% 13% 11% 10% 8% 14% 14% 115% 218% 115% 82% 66%
A 27-2 A 27-1 A	WB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6	4644_4050 4050_4055 3156_2656 3156_2656 1760_40134 40134_40039 40039_40033 40033_40033 40032_40004 Total 40032_40004 Total 40032_40036 40032_40036 40033_40033 40033_40033	21440 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 17052 0 911 1797 2440 3104	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205	128 158 187 234 328 440 527 548 575 610 648 648 0 36 68 93 116 200	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196	2009 2856 3806 6006 8799 12114 14674 15302 16002 16891 17793 0 911 17793 0 911 1797 2438 3102 5602	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 115.49 145.9 168.74 191.91 279.16	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 88.59 0.00 79.13 78.03 76.10 76.40 78.77	6% 7% 9% 20% 16% 13% 11% 11% 11% 21% 8% 218% 218% 82% 66% 39%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6	4644_4050 4050_4055 3156_2656 2656_2656 1760_40134 40134_40039 40033_40035 40033_40035 40033_40023 40033_40023 40032_40004 Total 40032_40036 40032_40036 40033_40037 40033_40037 40033_40037 40033_40037 40033_40037 40037_40124	2143 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104 5687	133 181 210 257 351 466 575 603 642 685 0 39 71 97 120 205	158 158 187 234 328 440 527 548 575 610 648 648 0 36 68 93 116 2000	135 164 211 304 415 501 522 547 578 611 611 0 34 64 89 111 196	2009 2856 3806 6006 8799 12174 14674 15302 16602 16691 17793 0 0 911 1797 2438 3102 5602 5602	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 0 115.49 145.9 168.74 191.91 279.16	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 78.77	6% 7% 9% 20% 16% 13% 11% 11% 10% 10% 14% 14% 14% 218% 115% 82% 66% 39%
A 27-2 A 27-1 A	WB WB WB WB WB WB WB WB WB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7	4644_4050 4050_4055 4055_3156 2656_1760 1760_40134 40134_40039 40033_40035 40033_40033 40003_40004 Total 40032_40004 Total 40032_40036 40032_40036 40033_40043 40034_40043 40043_40047_40124 40124_1760	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 17052 0 911 1797 2440 3104 5687 9084	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321	128 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308	2009 2856 3806 6006 8799 12174 14674 15302 16002 16002 16691 17793 0 911 1793 0 911 1797 2438 3102 5602 8977	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 78.77 82.54	6% 7% 9% 20% 16% 13% 11% 11% 10% 8% 14% 14% 218% 218% 218% 218% 39% 26%
A 27-2 A 27-1 A	WB WB WB WB WB WB WB WB WB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 10-11 10-11 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8	4644_4050 4050_4055 4055_3156 2656_2656 1760_40134 40134_40039 40039_40035 40033_4003 40033_4003 40032_40034 40032_4004 Total 40032_40036 40032_40036 40033_40043 40034_40037 40037_40124_1760 1760_2656	2149 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104 5687 9084 11870	133 181 210 257 351 466 575 603 642 685 0 39 71 97 120 205 321 434	158 158 187 234 328 440 527 548 575 610 648 648 0 0 36 68 93 116 200 314 417	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 0 911 1797 0 911 1797 2438 3102 5602 8977 11770	140.24 169.98 203.34 280.6 378.68 497.2 584.99 660.53 630.8 661.62 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41	8.27 11.82 16.23 46.12 51.06 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 78.77 82.54 77.65	6% 7% 9% 20% 16% 13% 11% 11% 10% 8% 14% 218% 218% 218% 66% 39% 26% 39%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 2-3 3-4 8-9 8-9 8-9 8-9 8-9 8-9 8-9 8-9	4644_4050 4050_4055 4055_3156 2656_1760 1760_40134 40134_40039 40035_40030 40032_40035 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40035_4003840038 40035_40038 40035_4003840038 4003640056 400	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104 5687 9084 11870 13799	133 181 210 257 351 466 554 575 603 642 685 685 0 39 71 97 120 205 321 434	158 159 187 234 328 440 527 548 575 610 648 648 648 648 648 648 648 166 93 116 200 314 417 427	135 164 211 304 415 501 522 547 578 611 611 611 0 34 64 89 111 196 308 400 444	2009 2856 3806 6006 8799 12174 14674 15302 15002 16891 17793 0 911 17793 0 911 1797 2438 3102 5602 8977 11770	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 736.98 0 115.49 145.9 145.9 168.74 191.91 279.16 396.94 494.41 571.10	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 78.77 82.54 27.65 101.29	6% 7% 9% 20% 16% 13% 11% 11% 10% 8% 14% 218% 115% 66% 39% 26% 26% 19%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9	4644_4050 4050_4055 4055_3156 3156_2656 2656_1760 1760_40134 40034_40039 40035_40030 40032_40035 40034_40034 40032_40034 40032_40036 40032_40036 40032_40036 40038_40043 40043_40055 40556 40055	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 17052 0 911 1797 2440 3104 5687 9084 11870 13288	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 495	115 115 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444	2009 2856 3806 6006 8799 12174 14674 15302 16801 17793 17793 0 911 1797 2438 3102 5602 8977 11770 13970	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 0 115.49 168.74 191.91 279.16 336.94 494.41 571.19	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 78.77 82.54 77.65 101.28	6% 7% 9% 20% 16% 13% 11% 11% 10% 8% 14% 218% 218% 218% 66% 39% 26% 19% 22%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10	4644_4050 4050_4055 4055_3156 2656_1760 1760_40134 40034_40039 40035_40030 40033_40035 40032_40004 70tal 40032_40004 40032_40036 40032_40036 40033_40043 40033_40043 40033_40043 40033_40043 40033_40097 40124_1760 1766_2656 2656_3156 31356_4156	2143 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 17052 0 911 1797 2440 3104 5687 9084 11870 13288 14144	133 181 210 257 351 466 554 603 642 685 685 0 39 71 97 120 205 321 434 495 548	115 115 187 234 328 440 527 548 575 610 648 648 63 93 116 200 314 417 470 510	135 164 211 304 415 501 522 547 578 611 611 611 9 34 64 89 111 196 308 400 444 472	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 77.65 101.28 94.54	6% 7% 9% 20% 20% 16% 13% 11% 11% 10% 10% 21% 21% 21% 66% 39% 26% 26% 19% 22%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8-8 9-9 9-10 0-1 1-2 2-3 3-3 4-4 5-5 6-7 7-8-9 8-9 9-10 10-11 1-12 1-23 1-23 1-23 1-23 1-23 1-23 1	4644_4050 4050_4055 4055_3156 2656_1760 1760_40134 40034_40039 40033_40035 40033_40033 40003_40004 Total 40032_40004 Total 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40033_40043_10097 40057_40124 40124_1760 13156_4156 3156_4156	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 495 548 609	128 159 187 234 328 440 527 548 575 610 648 648 0 36 68 93 116 200 314 417 470 510	135 164 211 304 415 501 522 547 578 611 611 0 34 64 89 111 196 308 400 444 472 497	2009 2856 3806 6006 8799 12174 14674 15302 16002 16002 16691 17793 0 911 17793 0 911 1797 2438 3102 5602 8977 11770 13970 13970	140.24 169.98 203.34 280.6 378.68 497.2 584.99 605.53 630.8 661.62 736.98 736.98 0 115.49 168.74 191.91 279.16 396.54 494.41 571.19 604.34 634.89	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.40 77.65 101.28 94.54 86.56	6% 7% 9% 20% 16% 13% 11% 11% 10% 8% 24% 66% 66% 66% 66% 66% 66% 39% 39% 26% 19% 22%
A 27-2 A 27-1 A	WB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11	4644_4050 4050_4055 4055_3156 2656_2656 1760_40134 40134_40039 40039_40035 40033_40033 40033_40023 40033_40023 40032_40034 40032_40034 40032_40036 40032_40036 40033_40043 40034_40037_40124 40034_40037_40124 40124_1760 1760_2656 2656_3156 3156_4151	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 17052 0 911 1797 2440 3104 5587 9084 11870 13288 114144 14924	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 495 548 600	128 158 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497	2009 2856 3806 6006 8799 12174 14674 15302 16691 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920	140.24 169.98 203.34 280.6 378.68 497.2 584.99 660.53 660.53 630.8 661.62 736.98 0 115.49 145.9 168.74 191.91 279.16 396.54 494.41 571.19 604.34 634.88	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.40 78.77 82.54 77.65 101.28 94.54 86.26	6% 7% 9% 20% 16% 13% 11% 10% 8% 14% 218% 218% 218% 66% 39% 26% 39% 26% 19% 22%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 11-12 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12	4 644, 4050 4 050, 4055 3 1356, 2656 2 6556, 1760 1 760, 40134 4 0134, 40039 4 0033, 40030 4 0032, 40030 4 0032, 40030 4 0032, 40030 4 0032, 40034 4 0032, 40034 4 0032, 40034 4 0032, 40034 4 0032, 40033 4 0033, 40043 4 0034, 40037 4 0032, 40035 4 0035, 40033 4 0035, 40033 4 0036, 40033 4 0036, 40035 1 760, 2656 2 656, 3156 3 1356, 4156 4 6155, 9001	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104 5687 9314 11870 11288 14144 14924 15842	133 181 210 257 351 466 554 575 603 642 685 685 0 39 71 97 120 205 321 434 495 548 600 703	128 187 234 328 440 527 548 575 610 648 648 648 648 648 0 36 68 93 116 200 314 417 470 510 549 624	135 164 211 304 415 501 522 547 578 611 611 614 89 111 196 308 400 444 472 497 545	2009 2856 3806 6006 8799 12174 14674 15302 16891 17793 0 911 17793 0 911 1779 2438 3102 5602 8977 11770 13970 14920 15795	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 736.98 0 115.49 145.9 145.9 145.9 168.74 191.91 279.16 336.94 494.41 571.19 604.34 634.88 678.43	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 77.65 101.28 94.54 86.26 54.24	6% 7% 9% 20% 16% 13% 11% 11% 10% 8% 14% 218% 66% 39% 26% 19% 22% 19% 16% 9%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 12-	4 644, 4050 4 050, 4055 3 156, 2656 2 656, 1760 1 760, 40134 4 0032, 40033 4 0033, 40033 4 0003, 40023 4 00032, 40034 4 00032, 40004 Total 4 00032, 40034 4 00032, 40033 4 00032, 40033 4 00032, 40033 4 00032, 40033 4 00032, 40033 4 00032, 40035 4 00032, 40036 4 00032, 40037 4 00032, 40036 4 00032, 40038 4 0056 4 0056	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104 5687 9084 11870 13288 14144 14924 15842 17061	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 495 548 600 703	115 115 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 549 624 724	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545	2009 2856 3806 6006 8799 12174 14674 15302 16801 17793 0 911 17793 0 911 17793 0 911 1797 2438 3402 5602 8977 11770 14920 14920 14920 15795	140.24 169.98 203.34 280.6 378.68 497.2 584.99 6005.53 630.8 661.62 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 702.91	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.40 77.65 101.28 94.54 88.59 101.28 94.54 88.59 101.28 94.54 102.25 103.2	6% 7% 9% 20% 16% 13% 11% 11% 14% 21% 218% 218% 66% 39% 26% 56% 19% 22% 19% 22% 19% 22%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13	4644_4050 4050_4055 3156_2656 2656_1760 1760_40134 40033_40039 40033_40035 40033_40030 40033_40031 40032_40004 Total 40032_40034 40032_40036 40033_40037 40032_40036 40033_40037 40032_40036 40033_40037 40032_40036 40032_40036 40032_40036 40032_40037 40023_40037 40124_1760 1760_2656 2656_3156 2156_3156 31356_4151 4156_4151 4156_4151 11001_5739	21443 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104 5687 9984 11870 13288 14144 14924 15842 17061	133 181 210 257 351 466 554 575 603 642 685 685 0 39 71 97 120 205 321 434 495 548 600 703 909	115 115 187 234 328 440 527 548 575 610 648 648 68 93 116 200 314 417 470 510 624 774	135 164 211 304 415 501 522 547 578 611 611 611 9 111 196 308 400 444 472 497 545 638	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 0 911 17793 0 911 1797 2438 3102 5602 8977 11770 13970 13970 13970 13970	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 792.81	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25	6% 7% 9% 20% 16% 13% 11% 11% 10% 10% 21% 21% 66% 39% 26% 26% 19% 22% 9% 2%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-3 4-5 5-6 6-7 7-8-8 9-9 9-10 10-11 11-12 12-13	4 644 4050 4 050 4055 4 055 3156 2 656 2656 2 656 1760 1 760 40134 4 0032 40033 4 0033 40033 4 0032 40033 4 0023 4004 7 0031 4 0032 4004 4 0032 40034 4 0032 40033 4 0032 40033 4 0032 40033 4 0032 40033 4 0032 40033 4 0032 40033 1 0032 40033 4 0032 40037 4 0037 4 0037	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 11870 13288 14144 14924 15842 17061	133 181 210 257 351 466 554 575 603 642 685 0 39 71 205 321 434 495 548 600 703 909	128 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 549 624 774	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638	2009 2856 3806 6006 8799 12174 14674 15302 16002 16002 16091 17793 0 911 17793 0 911 1797 2438 3102 5602 8977 11770 14920 15795 16574 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 605.53 630.8 661.62 736.98 736.98 0 115.49 168.74 191.91 279.16 396.54 494.41 571.19 604.34 634.88 678.43 792.81 792.81	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.00 76.40 77.65 101.28 94.54 94.54 86.26 54.24 19.25 19.25	6% 7% 20% 20% 16% 13% 11% 11% 10% 8% 24% 66% 66% 66% 66% 66% 39% 39% 26% 26% 19% 16% 9% 2% 2%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 10-11 11-12 10-11 11-12 11-12	4644_4050 4050_4055 3156_2656 2656_1760 1760_40134 40033_40039 40033_40035 40033_40035 40033_40031 40033_40032 40032_40004 Total 40032_40036 40033_40037 40032_40036 40033_40037 40032_40036 40033_40037 40032_40036 40033_40037 40124_1760 1760_2656 2655_3156 2156_3156 4156_4151 4665_9001 11001_5739 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 17052 0 911 1797 2440 3104 5587 9084 11870 13288 11870 13288 14144 14924 15642 17061	133 181 210 257 351 466 554 603 642 685 0 39 71 97 120 205 321 434 495 548 600 703 909 909	128 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 549 624 774	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920 15795 16574 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 792.81	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 19.25	6% 7% 9% 20% 16% 13% 11% 11% 10% 14% 14% 14% 14% 14% 218% 115% 82% 66% 39% 26% 26% 26% 26% 2% 2%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13	4 644 4050 4 050 4055 4 055 3156 3 155 2656 2 655 1760 1 760 40134 4 0133 40039 4 0033 40030 4 0032 40030 4 0032 40030 4 0032 4004 1 70tal 4 0032 40036 4 0032 40036 4 0032 40036 4 0032 40038 4 0033 4 0043 3 4 0043 4 0043 4 0057 4 0124 4 0124 1 760 1 760 2656 2 655 3 156 3 155 4 151 4 645 9 901 1 1001 5 739 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104 5687 5687 11870 13288 14144 14924 15842 17061	133 181 210 257 351 466 554 575 603 642 685 685 0 39 71 97 120 205 321 434 495 548 600 703 909 909	128 187 234 328 440 527 548 575 610 648 648 648 648 93 116 200 314 417 470 510 549 624 774	$\begin{array}{c} 135\\ 164\\ 211\\ 304\\ 415\\ 501\\ 522\\ 547\\ 611\\ 611\\ 611\\ 611\\ 611\\ 611\\ 611\\ 64\\ 89\\ 111\\ 196\\ 308\\ 400\\ 444\\ 472\\ 497\\ 545\\ 638\\ 638\\ 638\\ 638\\ \end{array}$	2009 2856 3806 6006 8799 12174 14674 15302 16891 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920 15795 1574 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 779.81 792.81	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 19.25	6% 7% 20% 20% 16% 13% 11% 11% 10% 8% 14% 218% 14% 218% 66% 39% 26% 19% 16% 19% 16% 22% 2%
A 27-2 A 27-1 A	WB EB EB	2.3 3.4 4.5 5.6 6.7 7.8 8.9 9.10 10.11 11.12 12.13 	4 644, 4050 4 050, 4055 3 1156, 2656 2 656, 1760 1 760, 40134 4 0032, 40033 4 0033, 40033 4 0033, 40033 4 00032, 40034 4 00032, 40004 Total 4 00032, 40034 4 00032, 40034 4 00032, 40034 4 00032, 40034 4 00032, 40035 4 00032, 40036 4 00032, 40037 4 00032, 40037 4 00032, 40037 4 00032, 40038 4 00032, 40038 4 00032, 40038 4 00032, 40037 4 00037 4 0007 4 007 4 00	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 17052 0 911 1797 2440 3104 5687 9084 11870 13288 14144 14924 15842 17061	133 181 210 257 351 466 554 575 603 642 685 0 39 71 205 321 434 495 548 600 703 909 909	128 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 549 624 774	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638	2009 2856 3806 6006 8799 12174 14674 15302 16801 17793 0 911 17793 0 911 17793 0 911 17793 3102 8977 11770 13970 14920 14920 14920 15795 16574 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 0 115.49 168.74 191.91 168.74 191.91 279.16 396.94 494.41 577.19 604.34 634.88 678.43 792.81	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.10 76.10 76.40 78.77 82.54 101.28 94.54 86.26 54.24 19.25 19.25	6% 7% 9% 20% 16% 13% 11% 10% 8% 14% 21% 115% 8% 26% 66% 39% 26% 66% 39% 26% 19% 16% 9% 22%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13	4 644 4050 4 050 4055 4 055 3156 2 656 1760 1 760 40134 4 0033 40035 4 0033 40035 4 0033 40030 4 0033 40033 4 0033 40032 4 0032 4004 7 0tal 4 0032 4004 4 0032 40034 4 0032 40034 4 0033 4004 3 4 0033 4004 3 4 0033 4004 3 4 0033 4004 4 0124 4 1750 1 760 2656 2 655 3156 3 1356 4151 4 156 4151 4 1150 4151 1 11001 5739 7 0tal	21443 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104 5687 9084 11870 13288 14144 14924 15842 17061	133 181 210 257 351 466 554 575 603 642 685 685 0 39 71 97 120 205 321 434 495 548 600 703 909 909	115 115 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 624 774 774 PM JOURNEY TIME VALIDATION	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 538	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 0 911 17793 0 911 1797 2438 3102 5602 8977 11770 13970 13970 13970 14920 15795 16574 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 792.81	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 19.25	6% 7% 9% 20% 16% 13% 11% 11% 10% 10% 21% 21% 66% 39% 26% 26% 19% 22% 2% 2%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-7 8-8 9-9-10 10-2 1-2 2-3 3-4 4-5 5-6 6-7 7-7 8-9 9-9-10 10-2 11 1-12 2-3 3-4 4-5 5-7 7-8 9-9-10 10-11 11-12 2-3 5-6 7 7-8 9-9-10 10-11 11-12 2-3 5-6 7 7-8 9-9-10 10-11 11-12 2-3 5-6 7 7-8 9-9-10 10-11 11-12 2-3 5-6 7 7-8 9-9-10 10-11 11-12 2-3 5-6 7 7-8 9-9-10 10-11 11-12 2-3 5-6 7 7-7 8 9-9-10 10-11 11-12 2-3 7-7 8 9-9-10 10-11 11-12 2-3 7-7 8 9-9-10 10-11 11-12 2-3 7-7 8 9-9-10 11-12 2-3 7-7 8 9-9-10 11-12 12-2 7-7 8 9-9-10 10-11 11-12 2-3 7-7 8 9-9-10 11-12 12-2 7-7 8 9-9-10 11-12 12-2 7-7 8 9-9-10 11-12 12-2 7-7 8 9-9-10 11-12 12-2 7-7 8 9-9-10 11-12 12-2 7-7 8 9-9-10 11-12 2-3 7-7 7 8 9-9-10 11-12 2-3 7-7 8 9-9-10 11-12 2-3 7-7 7 7 8 9-9-10 11-12 2-3 7 7 7 8 9-9-10 11-12 2-3 7 7 7 8 9-9-10 11-12 2-3 7 7 7 8 9-9-10 11-12 2-3 7 7 7 8 9-9-10 11-12 2-3 7 7 7 8 9-9-10 11-12 2-3 7 7 7 8 9-9-10 11-12 2-3 7 7 7 7 7 8 9-9-10 11-12 2-3 7 7 7 7 8 9-9-10 11-12 2-2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	4 644 4050 4 050 4055 4 050 4055 3 156 2656 2 656 1760 1 760 40134 4 0032 40033 4 0033 40033 4 0033 40033 4 0003 40023 4 0003 40004 1 70tal 4 0032 40036 4 0032 40038 4 0038 40088 4 0038 40088 40088 4 0 0058 400	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17051 1288 14144 14924 15842 17061	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 495 548 600 703 909 909	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 624 774 774 PM JOURNEY TIME VALIDATION	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 638	2009 2856 3806 6006 8799 12174 14674 15302 16002 16002 10793 0 911 17793 0 911 1797 2438 3102 5602 8977 11770 14920 15795 16574 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 605.53 630.8 661.62 736.98 736.98 0 115.49 168.74 191.91 279.16 396.54 494.41 571.19 604.34 634.88 678.43 792.81 792.81	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.03 76.10 76.40 78.77 82.54 77.65 101.28 94.54 86.26 54.24 19.25	6% 7% 20% 16% 13% 11% 11% 10% 8% 14% 218% 14% 218% 66% 39% 26% 26% 26% 26% 22%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 12-13 12-1	4644_4050 4050_4055 4055_3156 2656_2656 2656_1760 1760_40134 40134_40039 40033_40035 40033_40035 40033_40032 40032_40004 Total 40032_40036 40033_40037 40032_40036 40033_40037 40032_40036 40033_40037 40037_40124 40124_1760 1760_2656 2656_3156 2156_3156 4156_4151 4645_9001 11001_5739 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 17052 0 911 1797 2440 3104 5687 9084 9084 11870 13288 14144 14824 15842 17061	133 181 210 351 466 554 575 603 642 685 0 39 71 120 205 321 434 495 548 600 703 909 909 209	115 158 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 PM JOURNEY TIME VALIDATION Cumulative Observed Mean JT	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 308 400 444 422 497 545 638 638 SUMMARY Cumulative Observed Low JT	2009 2856 3806 6006 8799 12114 14674 15302 16891 17793 0 911 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920 14920 15795 16574 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 792.81 792.81	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.10 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 Difference (seconds)	6% 7% 9% 20% 16% 13% 11% 11% 10% 10% 14% 14% 14% 14% 218% 14% 218% 218% 26% 26% 26% 26% 26% 26% 22% 2% 2%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 1-12 1-2 2-3 3-4 4-5 5-7 7-8 9-10 1-2 1-2 2-3 3-4 4-5 7-7 7-8 9-10 1-2 1-2 2-3 3-4 4-5 7-7 7-8 9-10 1-2 1-12 1-2 2-3 3-4 4-5 7-7 7-8 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 1-12 12-13 7-7 8-9 9-10 10-11 12-12 7-7 8 9-10 10-11 12-12 7-7 8 9-10 10-11 12-12 7-7 8 9-10 10-11 12-12 7-7 8 9-10 10-11 12-12 7-7 8 9-10 10-11 12-12 7-7 8 9-10 10-11 12-12 7-7 8 9-10 10-11 12-13 7-7 8 9-10 10-11 12-13 7-7 8 9-10 10-11 11-12 12-13 11 11-12 12-13 11 11-12 12-13 11 11-12 12-13 11 11-12 12-13 11 11-12 12-13 11 11-12 12-13 11 11-12 11 11-12 11 11-12 11 11-12 11 11-12 11 11-12 12 11 11-12 12-13 11 11 11 12-13 11 11 11 11 11 11 11 11 11 11 11 11 1	4 644 4050 4 0050 4055 4 0050 4055 3 1356 2656 2 6556 1760 1 760 40134 4 0033 40033 4 0033 40030 4 0032 40023 4 0032 40023 4 0032 40023 4 0032 40036 4 0032 40036 4 0032 40036 4 0032 40037 4 0032 40038 4 0038 40033 4 0038 40043 4 0038 40043 4 0038 40043 4 0035 4156 1 156 4156 3 156 4156 4 156 4151 1 1001 5739 Total SATURN Link CATM Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104 5687 5687 11870 13288 1487 13288 14144 14924 15842 17061	133 181 210 257 351 466 554 575 603 642 685 685 0 39 71 97 120 205 321 434 495 548 600 703 909 909 909 909 909	125 159 187 234 328 440 527 548 575 610 648 648 6 93 116 200 314 417 470 510 549 624 774 PM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 425	135 164 211 304 415 501 522 547 578 611 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 SUMMARY Cumulative Observed Low JT	2009 2856 3806 6006 8799 12174 14674 15302 16891 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920 15795 1574 15774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 736.98 736.98 736.98 115.49 145.9 145.9 145.9 145.9 168.74 191.91 279.16 3396.94 494.41 571.19 604.34 634.88 678.43 792.81 792.81	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 19.25 201fference (seconds)	6% 7% 20% 20% 16% 13% 11% 11% 10% 8% 14% 218% 66% 39% 26% 19% 22% 26% 19% 16% 22% 2% 2%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 12-13 12-13 4-5 5-6 6-7 7-8 8-9 9-10 10-11 1-2 2-3 4 4-5 5-7 6-7 7-8 8-9 9-910 10-11 11-12 12-13 12	4 644, 4050 4 0050, 4055 4 0052, 4156 2 6565, 1760 1 760, 40134 4 0013, 40039 4 0003, 40033 4 0003, 40023, 40030 4 00032, 40004 Total 4 00032, 40034 4 00032, 40034 4 00032, 40034 4 00032, 40033 4 00032, 40033 4 00032, 40034 4 00032, 40034 4 00032, 40034 4 00032, 40034 4 00032, 40034 4 00132, 40035 4 0037, 40037 4 0037, 40037 4 0037, 40037 4 0037, 40037 4 0037, 40034 4 00132, 40044 4 01124, 1750 4 0156 4 0157 4 01	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 17052 0 911 1797 2440 3104 5687 9084 11870 13288 14314 14924 15842 17061 17061	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 455 600 703 909 909 909 909 909 909 909 909 909	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 549 624 774 774 PM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 425	135 164 211 304 415 501 522 547 578 611 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 SUMMARY Cumulative Observed Low JT 390	2009 2856 3806 6006 8799 12174 14674 15302 16891 17793 0 911 17793 0 911 17793 0 911 17793 2438 3102 5602 8977 11770 14920 14920 14920 14920 14920 1574 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 6005.53 630.8 661.62 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 792.81 792.81 792.81	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.40 76.40 76.40 76.40 76.5 101.28 94.54 54.24 19.25 19.25 Difference (seconds) 4.55	6% 7% 20% 16% 13% 11% 11% 10% 8% 24% 66% 66% 66% 66% 26% 22% 19% 22% 22% 22% 22% 16% 9% 22% 22% 16%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 	4 644 4050 4 4050 4055 4 4050 4055 3 1356 2656 2 6556 1760 1 760 40134 4 40134 40039 4 40039 40035 4 40035 40030 4 40032 40030 4 40032 40004 1 70tal 1 40032 40034 4 40032 40036 4 40032 40034 4 40032 40036 4 40032 40038 4 40032 40038 4 40032 40036 4 40032 40036 4 40032 40036 1 70tal 1 1001 5739 1 70tal 1 70tal 1 70tal 1 70tal 1 70tal 1 70tal	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 17052 0 911 1797 2440 3104 5687 911 1797 2440 3104 5687 11870 11971 1197 1197 1197 1197 1197 1197 1	133 181 210 257 351 466 554 575 603 642 685 685 685 0 39 71 97 120 205 321 434 495 548 600 703 909 909 909 909 909 909 909 909 909 909 909 909 909	115 115 187 234 328 440 527 548 575 610 648 648 6 36 68 93 116 200 314 417 470 510 549 624 774 774 PM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 425 708	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 444 472 497 545 638 638 638 638 5390 646	2009 2856 3806 6006 8799 12174 14674 15302 16801 17793 0 911 17793 0 911 1797 2438 3102 5602 8977 11770 13970 13970 13970 14920 15795 16574 15774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 792.81 792.81 Cumulative Modelled JT 420.44 552.75	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 58.27 58.29 51.54 88.59 0.00 79.13 78.03 76.10 77.63 77.65 101.28 94.54 86.26 54.24 19.25 19.25 Difference (seconds) -4.56 -155.25	6% 7% 9% 20% 16% 13% 11% 11% 10% 10% 218% 14% 218% 14% 218% 218% 26% 26% 26% 26% 22% 2% 2% 2% 2%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 1-2 2-3 3-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-2 1-2 1-2 2-3 4 4-5 5-6 6-7 1-2 1-2 1-2 2-3 4 4-5 5-7 1-2 1-2 1-2 1-2 1-2 1-2 1-2 1-2 1-2 1-2	4 644 4050 4 0050 4055 4 0050 4055 3 1365 2656 2 6565 1760 1 760 40134 4 0032 40033 4 0033 40033 4 0033 40033 4 0032 40004 1 Total 4 0032 40034 4 0032 40034 4 0032 40034 4 0032 40034 4 0032 40033 4 0032 40033 4 0032 40033 4 0032 40033 4 0032 40034 4 0032 40035 1 761 1 761	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052	133 181 210 257 351 466 554 575 603 642 685 0 39 71 120 205 321 434 495 548 600 703 909 909 909 909 909 909 909 909	125 159 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 549 624 774 774 PM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 425 708	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 538 545 638 638 538 545 638 638 538 545 545 545 545 545 545 545 54	2009 2856 3806 6006 8799 12174 14674 15302 16002 16002 17793 0 911 17793 0 911 17793 0 911 1797 2438 3102 5602 5602 3602 15795 16574 17774 17774 Model Distance 4888 4888	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 0 115.49 168.74 191.91 279.16 396.54 494.41 571.19 604.34 634.88 678.43 792.81 792.81 792.81 792.81	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.00 76.40 77.65 101.28 94.54 86.26 54.24 19.25 Difference (seconds) 4.55 -155.25 13.88	6% 7% 20% 16% 13% 11% 11% 10% 8% 14% 14% 218% 115% 66% 39% 26% 26% 19% 16% 16% 16% 26% 22% 22%
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A 27-2 A 27-1 A	WB EB SB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 1-12 12-13 3-4 4-5 5-6 6-7 7-8 9-10 10-11 11-12 12-13 10-11 10-11 10-11 10-12 10 10-12 10 10-12 10 10-12 10 10-12 10 10-12 10 10 10 10 10 10 10 10 10 10 10 10 10	4 644 4050 4 0050 4055 4 0050 4055 3 1356 2656 2 6556 1760 1 760 40134 4 0033 40033 4 0033 40033 4 0033 40030 4 0032 40023 4 0032 40036 4 0032 40036 4 0032 40036 4 0032 40037 4 0032 40038 4 0038 40033 4 0038 40033 4 0038 40033 4 0038 40033 4 0038 40033 4 0035 4156 1 3 156 4156 3 156 4156 3 156 4156 3 156 4151 1 1001 5739 Total Total Total Total Total Total Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 17052 0 911 1797 2440 3104 5687 5087 13288 11870 13288 14144 1424 15842 17061 17061 17061	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 600 703 909 909 909 909 909 909 909 909 909 909 909 909 909	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 PM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 425 708 817 735	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 638 646 657 619	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 0 911 1797 2438 3102 5602 5602 5602 5602 11970 14920 15795 16574 17774 17774 Model Distance 4888 4888 5537 5227	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 736.98 736.98 736.98 736.98 115.49 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 7792.81 792.81 792.81 792.81 792.81 201.44 20.44	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 19.25 0liference (seconds) -4.56 -155.25 -13.88 7.51	6% 7% 20% 20% 16% 13% 11% 11% 10% 8% 14% 218% 66% 39% 22% 66% 39% 22% 26% 19% 16% 19% 16% 22% 2% 2%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 12-13 12-13 12-13 12-13 12-14 12-12 12-13 12-	4 644, 4050 4 4050, 44055 4 4052, 44055 3 1156, 2656 2 6565, 1760 1 760, 40134 4 0013, 40039 4 0003, 40033 4 0003, 40003 4 0003, 40004 Total 4 0003, 40004 4 0003, 40003 4 0003, 40033 4 0003, 40043 4 0003, 40043 4 0003, 40043 4 0013, 40043 4 0014 1 001, 5739 1 001 1	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 17052 17050	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 455 600 703 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 903 904 650	115 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 510 549 624 774 774 PM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 425 708 817 735	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 638 646 657 619 505	2009 2856 3806 6006 8799 12174 14674 15302 16891 17793 0 911 17793 0 911 17793 0 911 17793 2438 3102 5602 8977 11770 14920 15795 16574 17774 17774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 600.53 630.8 661.62 736.98 0 115.49 105.74 145.9 168.74 191.91 279.16 396.94 494.41 577.19 604.34 634.88 634.88 634.88 634.88 678.43 792.81 792.81 792.81	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.40 76.40 77.65 101.28 94.54 54.24 19.25 19.25 Difference (seconds) 4.56 -155.25 -13.88 7.51 -3.54 -3.55 -3.54 -3.54 -3.54 -3.55 -	6% 7% 20% 20% 16% 13% 11% 11% 14% 218% 14% 218% 14% 228% 66% 66% 66% 66% 66% 26% 29% 22% 22% 22% 2% 2% 2% 2% 2% 2% 2% 2% 2%
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 10-11 11-12 12-13 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 1	4 644 4050 4 4050 4055 4 4050 4055 3 1356 2656 2 6556 1760 1 760 40134 4 40134 40039 4 40039 40035 4 40035 40030 4 40032 40036 4 40032 40004 1 70tal 4 40032 40036 4 40032 40036 4 40032 40036 4 40032 40036 4 40032 40037 4 40032 40036 4 40032 40037 4 40032 40036 4 40032 40037 4 40032 40037 4 40032 40036 1 70tal 1 1001 5739 T otal 1 70tal 1 70tal	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104 5687 911 1797 2440 3104 5687 11870 13288 14144 14924 15842 17061 17061 17061 27061	133 181 210 257 351 466 554 575 603 642 685 685 685 71 97 120 205 321 434 495 548 600 703 909 932 650 604	125 187 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 774 774 708 817 735 575	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 638 637 646 657 619 505	2009 2856 3806 6006 8799 12174 14674 15302 16801 17793 0 911 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920 15795 16574 117774 13770	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 0 115.49 145.9 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 779.281 792.81 Cumulative Modelled JT 420.44 552.75 803.12 742.51 757 757 757 757 757 757 757 7	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 58.27 58.27 58.29 51.54 88.59 0.00 79.13 78.03 76.10 77.63 77.65 101.28 94.54 86.26 54.24 19.25 19.25 Difference (seconds) -4.56 -155.25 -13.88 7.51 -95.48 20.27	6% 7% 9% 20% 16% 13% 11% 11% 10% 10% 21% 21% 21% 26% 26% 26% 29% 22% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2
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A 27-2 A 27-1 A	WB EB EB EB EB EB EB EB EB EB WB NB B WB NB SB NB SB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 2-3 3-1 2-13 12	4 644, 4050 4 4050, 44055 3 1156, 2656 2 6556, 1760 1 760, 40134 4 0032, 40033 4 0033, 40033 4 0033, 40033 4 0032, 40034 4 0032, 40034 4 0032, 40034 4 0032, 40034 4 0032, 40038 4 0033, 40043 4 0038, 40043 4 0038, 40043 4 0038, 40043 4 0043, 40047 4 0124, 1760 1 760, 2656 3 1156, 4156 3 1156, 4156 3 1156, 4156 3 1156, 4151 4 645, 9001 1 1001, 5739 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 17052 0 911 1797 2440 3104 5587 9084 11870 13288 14144 14924 15842 17061 17061 20547 17061 20547 17061	133 181 210 257 351 466 554 575 603 642 685 0 39 71 120 205 321 434 495 548 600 703 909 909 909 909 909 909 902 650 6650 6650 6650 664 399	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 774 708 817 735 575 501 347	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 96 308 400 444 472 497 545 638 638 SUMMARY Cumulative Observed Low JT 390 646 657 619 505 430	2009 2856 3806 6006 8799 12114 14674 15302 16891 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920 14920 14920 15795 16574 15775 16574 17774 17774 2488 898 5537 5227 5227 4490 4293 3401	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 792.81 792.81 Cumulative Modelled JT 420.44 552.75 803.12 742.51 479.52 521.97 365.04	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 77.63 101.28 94.54 77.65 101.28 94.54 88.26 54.24 19.25 19.25 Difference (seconds) -4.56 -155.25 -13.88 7.51 -95.48 20.97 18.04	6% 7% 9% 20% 20% 16% 13% 11% 11% 14% 21% 21% 21% 26% 26% 26% 26% 26% 26% 26% 26% 27% 27% 27% 27% 27% 27% 27% 27% 27% 27
A 27-2 A 27-1 A	WB EB WB NB SB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 1-2 2-3 3-4 4-5 5-6 6-7 7-8 9-10 10-11 11-12 12-13 12-13 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 12-12-13 12-1	4 644, 4050 4 4050, 4055 4 4050, 4055 3 1356, 2656 2 2 556, 1760 1 760, 40134 4 40134, 40039 4 40039, 40033 4 40032, 40030 4 40032, 40004 1 Total 4 40032, 40034 4 40032, 40004 4 40032, 40003 4 40032, 40003 4 40032, 40033 4 40034, 40033 4 40034, 40037 4 40032, 40043 4 40032, 40043 4 40032, 40043 4 40032, 40043 4 40032, 4156 1 156, 4156 4 156, 4156 4 156, 4156 4 156, 4151 1 1001, 5739 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 1797 2440 3104 5687 9084 11870 1288 14144 14924 15842 17061 17061 2288 4811 5647 5150 4377 4154 3367 3367 3367	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 660 703 909 902 650 604 399 304	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 200 314 417 470 510 549 624 774 274 708 817 735 575 501 347 271	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 657 619 505 430 307 247	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 0 911 17793 0 911 17793 0 911 17793 0 911 17793 2438 3102 5602 5602 5602 15795 11770 14920 15795 16574 17774 17774 17774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 736.98 736.98 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 792.81 702.81	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 19.25 201fference (seconds) -4.56 -155.25 -13.88 7.51 -95.48 20.97 18.04 19.25 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.05 -13.08 -13.04 -14.05 -13.	6% 7% 20% 20% 20% 16% 13% 11% 11% 11% 10% 8% 14% 218% 14% 228% 26% 19% 22% 2% 2% Difference % -2% -2% -2% -2% 1% -1% -1% -2% -2% -2% -2% -2% -2% -2% -2
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 2-3 3-4 4-5 5-7 6-7 7-8 8-9 9-10 10-11 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 10-13 11-12 12-13 12-13 1	4 644, 4050 4 4050, 44055 4 4055, 4156 2 6565, 1760 1 760, 40134 4 0013, 40039 4 0003, 40033 4 0003, 40023 4 00023, 40004 Total 4 0003, 40004 4 0003, 40004 4 0003, 40004 4 0003, 40004 4 0003, 40003 4 0003, 40003 4 0003, 40003 4 0003, 40003 4 0003, 40003 4 0003, 40003 4 0003, 40033 4 0003, 40033 4 0003, 40043 4 0012, 4156 1 166, 2655 3 156, 4156 3 156, 4156 1 1001, 5739 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 17052 17051	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 455 600 703 909 909 909 909 909 909 903 904	115 115 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 510 549 624 774 774 774 774 708 817 735 501 347 271	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 SUMMARY Cumulative Observed Low JT 390 646 657 619 505 430 307 247	2009 2856 3806 6006 8799 12174 14674 15302 16891 17793 0 911 17793 0 911 17793 0 911 17793 2438 3102 5602 8977 11770 14920 1574 13970 14920 1574 17774 17774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 600.53 630.8 661.62 736.98 736.98 0 115.49 168.74 191.91 279.16 396.94 494.41 577.19 604.34 634.88 678.43 792.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81 702.81	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.40 77.610 76.40 77.65 101.28 94.54 54.24 19.25 19.25 19.25 19.25 19.25 19.25 13.88 7.51 -4.56 -155.25 -13.88 7.51 -9.548 20.97 18.04 44.143	6% 7% 20% 20% 16% 13% 11% 11% 10% 8% 24% 66% 66% 66% 66% 66% 66% 66% 66% 26% 29% 22% 19% 22% 29% 22% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2
A 27-2 A 27-1 A	WB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13	4644_4050 4050_4055 4055_3156 3156_2656 2656_1760 1760_40134 40134_40039 40033_40035 40034_40039 40035_40030 40032_40036 40032_40036 40032_40036 40032_40036 40033_4004 Total 1760_2656 2656_3156 3156_4151 4645_9001 11001_5739 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 17052 0 911 17052 0 911 1797 2440 3104 5587 9084 9084 11870 13288 11870 13288 14144 14924 15642 17061 17061 17061 17061 17061	133 181 210 351 466 554 603 642 685 0 39 71 97 120 205 321 434 495 548 600 703 909 909 909 909 909 903 650 664 339 738 1025 932 650 664 399 304	125 158 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 774 774 778 817 735 575 501 347 271 635	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 538 505 430 307 247 577	2009 2856 3806 6006 8799 12174 14674 15302 16801 17793 0 911 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920 15795 16574 17774 17774 17774 Model Distance 4888 4888 5537 5227 4490 4293 3401 3220 7211	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 779.281 792.81 Cumulative Modelled JT 420.44 552.75 803.12 742.51 479.52 521.97 365.04 229.57 572.54	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 58.27 58.29 51.54 88.59 0.00 79.13 78.03 76.10 77.63 77.65 101.28 94.54 86.26 54.24 19.25 19.25 19.25 Difference (seconds) -4.56 -155.25 -13.88 7.51 -95.48 20.97 18.04 -4.43 -4.43 -4.246	6% 7% 20% 20% 16% 13% 11% 11% 10% 8% 14% 218% 14% 218% 14% 22% 26% 26% 29% 22% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2
A 27-2 A 27-1 A	WB EB B B B B B B B B B B B B B B B B B	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 1-2 1-2 2-3 3-4 4-5 5-6 6-7 7-8 9-10 1-2 1-2 2-3 3-4 4-5 5-7 6-7 1-2 2-3 3-4 4-5 5-7 6-7 1-2 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 2-3 2-3 2-3 2-3 2-3 2-3 2-3 2-3 2	4 644 4050 4 0050 4055 4 0050 4055 3 156 2656 2 656 1760 1 760 40134 4 0032 40033 4 0033 40033 4 0032 40023 4 0032 40004 1 7 total 4 0032 40036 4 0032 40036 4 0032 40037 4 0032 40038 4 0032 40038 4 0032 40038 4 0032 40038 4 0032 40037 4 0032 40038 4 0032 40038 4 0032 40037 4 0032 40038 4 0032 40037 4 0032 40038 4 0032 40038 4 0032 40037 4 0032 40038 4 0032 40038 4 0032 40037 4 0032 40038 4 0032 40037 4 0032 40038 4 0032 40037 4 0032 40047 4 0024 1760 1 760 2556 2 2 5 56 2 2 5 56 2 3 156 3 1 56 3	2146 2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17051	133 181 210 257 351 466 554 575 603 642 685 0 39 71 120 205 321 434 495 548 600 703 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 932 650 604 399 304 703 304 716	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 624 774 774 708 817 735 501 347 271 635 641	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 638 657 619 505 430 307 247 577 587	2009 2856 3806 6006 8799 12174 14674 15302 16002 16002 17793 0 911 17793 0 911 17793 0 911 1797 2438 3102 5602 5602 5602 13970 13970 13970 13970 13970 13970 13970 13970 14920 15795 16574 17774 17774 Model Distance 4888 4888 4888 4888 4888 4888 4888 48	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 737.19 807.19 792.81 792.81 792.81 792.81 792.81 792.81 792.81 792.81 792.81 792.81 792.81 792.81 792.52 521.97 365.04 229.57 522.54 656.4	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.00 76.40 77.65 101.28 94.54 86.26 54.24 19.25 19.25 Difference (seconds) 4.56 -155.25 -13.88 7.51 -95.48 20.97 18.04 -4.43 -62.46 -14.6	6% 7% 20% 20% 16% 13% 11% 11% 10% 8% 24% 218% 14% 218% 115% 26% 26% 26% 26% 26% 26% 26% 26% 26% 22% 27% 2%
A 27-2 A 27-1 A	WB EB EB EB EB EB EB EB EB EB WB WB WB WB WB EB EB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 12-	4 644, 4050 4 4050, 44055 4 4055, 3156 2 6556 2 6556, 1760 1 760, 40134 4 40134, 40039 4 40033, 40033 4 40033, 40033 4 40032, 40034 4 40032, 40034 4 40032, 40034 4 40032, 40034 4 40034, 40097 4 40034, 40097 4 40037, 40043 4 40034, 40097 4 4007, 41024 1 761 1 761	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 17052 0 911 1797 2440 3104 5687 9084 11870 13288 14144 1587 13288 14144 15842 17061 17061 17061 17061 17061	133 181 210 257 351 466 554 575 603 642 685 0 39 71 205 321 434 495 548 600 703 909 932 650 604 394 703 704 703 716	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 774 774 778 817 735 501 347 271 635 641	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 96 308 400 444 472 497 545 638 638 SUMMARY Cumulative Observed Low JT 390 646 657 619 505 430 307 247 577 587	2009 2856 3806 6006 8799 12174 14674 15302 16801 17793 0 911 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920 15795 16574 13970 14920 15795 16574 17774 17774 2438 3400 15795	140.24 169.98 203.34 280.6 378.68 497.2 584.99 6005.53 630.8 661.62 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 577.19 604.34 634.88 678.43 792.81 792.81 Cumulative Modelled JT 420.44 552.75 803.12 742.51 479.52 521.97 365.04 229.57 572.54 626.4	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 77.63 101.28 94.54 77.65 101.28 94.54 88.26 54.24 19.25 19.25 Difference (seconds) 4.56 5.5.25 13.88 7.51 -9.5.48 20.97 18.04 4.4.3 -4.65 -14.6 -14.6 -14.6 -14.6 -14.6 -16.2 -15.246 -14.6 -16.246 -14.6 -16.246 -14.6 -16.246 -14.6 -16.25 -15.246 -16.246 -14.6 -16.246 -16.246 -14.6 -16.246 -16.246 -14.6 -16.25 -15.246 -14.6 -14.6 -14.6 -14.6 -14.6 -14.6 -16.246 -14.6 -16.246 -16.246 -14.6 -16.246 -16.246 -16.246 -14.6 -16.246 -16.246 -16.246 -14.6 -16.246 -14.6 -16.246 -16.246 -16.246 -16.246 -16.246 -16.246 -16.246 -16.246 -14.65 -15.246 -16.246 -17.456 -17.557 -17.557 -17.557 -17.557 -17.557 -17.548 -27.548	6% 7% 9% 20% 16% 13% 13% 11% 11% 14% 24% 24% 26% 26% 26% 26% 26% 26% 26% 26% 26% 26
A 27-2 A 27-1 A	WB EB B SB EB WB NB SB EB WB WB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 12-13 12-13 12-13 10-11 12-13 12-	4644_4050 4050_4055 4055_3156 3156_2656 2656_1760 1760_40134 40134_40033 40032_40035 40033_40031 40032_40036 40032_40036 40033_4004 1761_ 40032_40036 40033_40043 40034_40033_40043 40037_40124 40037_40124 40037_40124 40037_41760 1760_2656 2656_3156 3156_4156 3156_4151 4645_9001 11001_5739 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 1797 2440 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 17061 17061 2878 4881 5476 5150 4377 4154 3367 5150 4377 4154 3196 7093 7188	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 548 600 703 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 9102 650 604 399 304 703 716 685	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 774 708 817 735 575 501 347 271 635 641	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 657 619 505 430 307 247 577 587 537	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 0 911 17793 0 911 17793 0 911 17793 2438 3102 5602 5602 5602 15795 16574 17774 15795 16574 17774 17774 17774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 742.51 745.52 7575.54 7575.54 7575.54 7575.5	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 19.25 19.25 0lifference (seconds) -4.56 -155.25 -13.88 7.51 -95.48 20.97 18.04 -4.6 54.24 -4.6 54.24 -4.6 54.24 -4.6 54.24 -4.6 54.24 -4.6 54.24 -4.6 54.24 -4.6 55.45 -4.55 -5.55	6% 7% 20% 20% 20% 16% 13% 11% 11% 11% 10% 8% 14% 218% 14% 218% 14% 66% 39% 22% 2% 2% 0 bifference % -2% -2% -2% -1% -1% -1% -1% -2% -2% -2% -2% -2% -2% -2% -2
A 27-2 A 27-1 A	WB EB SB EB EB WB SB EB EB EB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-2 1-2 12-13 0-1 1-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-1 11-12 12-13 0-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13 11 11 11-12 12-13 11 11 11 11-12 11 11 11 11 11 11 11 11 11 11 11 11 1	4 644, 4050 4 4050, 44055 4 4055, 3156 2 6556 2 6556, 1760 1 760, 40134 4 40134, 40039 4 40032, 40033 4 40032, 40030 4 40032, 40040 Total 4 40032, 40036 4 40032, 40038 4 40032, 40038 4 40032, 40038 4 40032, 40038 4 40032, 40038 4 40034, 40097 4 40124, 1760 1 760, 2656 3 156, 4156 3 156, 4156 3	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 17052 17051	133 181 210 257 351 466 554 575 603 642 685 0 39 71 205 321 434 495 548 600 703 909 909 909 909 909 650 650 664 798 1025 932 650 664 399 304 703 703 703 703 1025 932 650 604 399 304 703 716	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 510 549 624 774 774 774 773 708 817 735 501 347 271 635 641 606 624	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 646 657 619 505 430 307 247 577 587 537	2009 2856 3806 6006 8799 12174 14674 15302 16891 17793 0 911 17793 0 911 17793 0 911 17793 2438 3102 5602 8977 11770 14920 14920 14920 14920 14920 14920 14920 14920 14920 14920 14920 14920 14920 14920 14920 14920 14920 1574 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 605.53 630.8 661.62 736.98 736.98 0 115.49 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 792.81 702.81	8.27 11.82 11.623 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.40 77.65 101.28 94.54 54.24 19.25 19.25 19.25 19.25 19.25 19.25 19.25 19.25 19.25 13.88 7.51 19.25 13.88 7.51 13.88 7.51 14.43 4.62 4.68 14.141 14.1	6% 7% 20% 20% 20% 16% 13% 11% 11% 10% 8% 14% 14% 218% 115% 218% 66% 39% 26% 29% 26% 2% 2% Difference % -1% -2% 1% -1% -1% -1% -2% 8% 8% -1% -1% -2% 8% 8% -1% -1% -2% 8% 8% -1% -2% 8% 8% -1% -2% 8% 8% -2% -2% 8% 8% -1% -2% 8% -1% -2% -2% 8% -1% -2% -2% -2% -2% -2% -2% -2% -2
A 27-2 A 27-1 A	WB EB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 10-11 11-12 12-13 10-11 11-12 12-13	4644_4050 4050_4055 4055_3156 3156_2656 2656_1760 1760_40134 40134_40039 40033_40035 40033_40031 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40033_4004 Total 1760_2656 2656_3156 3156_4151 4645_9001 11001_5739 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 17052 0 911 1797 2440 3104 5587 9084 9084 11870 13288 11414 14924 15842 17061 17061 17061 17061 17061 17061 17061 17061	133 181 210 351 466 554 603 642 685 0 391 71 205 321 434 495 548 600 703 909 932 650 644 399 304 703 716 685 716	125 158 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 774 774 708 817 735 501 347 271 635 641 606 624	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 SUMMARY Cumulative Observed Low JT 390 646 657 619 505 430 307 247 537 537	2009 2856 3806 6006 8799 12114 14674 15302 16891 17793 0 911 1797 2438 3102 5602 8977 14320 1430	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 779.281 792.81 Cumulative Modelled JT 420.44 552.75 803.12 742.51 479.52 521.97 365.04 229.57 577.54 625.48 635.41	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 58.27 58.27 58.29 51.54 88.59 0.00 79.13 78.03 76.10 77.63 77.65 101.28 94.54 86.26 54.24 19.25 19.25 Difference (seconds) -4.56 -155.25 -13.88 7.51 -95.48 20.97 18.04 -4.43 -4.43 -4.44 -14.6 46.88 -11.41 -14.14 -14	6% 7% 20% 20% 16% 13% 13% 11% 11% 11% 8% 21% 21% 22% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2
A 27-2 A 27-1 A	WB EB B WB WB WB EB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 1-2 1-2 2-3 3-4 4-5 5-6 6-7 7-8 9-10 1-2 1-12 2-3 3-4 4-5 5-7 8-9 9-10 1-12 1-12 1-12 1-12 1-12 1-12 1-12 1	4 644, 4050 4 4050, 4055 4 4052, 4156 3 1365, 6266 2 62656, 1760 1 760, 40134 4 40134, 40039 4 40032, 40030 4 40032, 40030 4 40032, 40040 4 7 total 4 40032, 40034 4 40032, 40038, 40038 4 40034, 40038, 40043 4 40034, 40037, 40124 4 40124, 21760 1 760, 2556 3 156, 4156 3 1156, 4156 3 1156, 4156 3 1156, 4151 3 11601, 5739 7 total 7	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17051 17061 17061 17061 17051 17051 17052 17052 17051 17051 17051 17051 17051 17052 17051 17052	133 181 210 257 351 466 554 575 603 642 685 0 39 71 120 205 321 434 495 548 600 703 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 932 650 664 399 304 703 716 685 716 685 716	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 624 774 774 778 817 735 575 501 347 271 635 641 606 624 425	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 638 638 657 619 505 430 307 247 577 587 537 557	2009 2856 3806 6006 8799 12174 14674 15302 16002 16002 17793 0 911 17793 0 911 1797 2438 3102 5602 5602 5602 15795 16574 17770 13970 14920 15795 16574 17774 17774 17774 888 4888 4888 4888	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 737.19 604.34 634.88 678.43 792.81 702.82 7	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.00 76.40 77.640 77.65 101.28 94.54 86.26 54.24 19.25 19.25 19.25 19.25 19.25 13.88 7.51 -4.56 -5.88 -5.	6% 7% 20% 16% 13% 11% 11% 11% 10% 8% 14% 218% 14% 218% 66% 39% 26% 19% 22% 26% 19% 26% 26% 26% 26% 27% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2%
A 27-2 A 27-1 A	WB EB EB EB EB EB EB EB EB EB B SB EB WB WB EB WB	2.3 3.4 4.5 5.6 6.7 7.8 8.9 9.10 10.11 11.12 12.13 0.1 1.2 12.13 3.4 4.5 5.6 6.7 7.8 8.9 9.10 10.1 11.12 12.13 12.13 12.13 12.13	4 644, 4050 4 4050, 44055 3 1156, 2656 2 6556, 1760 1 760, 40134 4 40134, 40039 4 40032, 40033 4 40033, 40033 4 40033, 40004 Total 4 40032, 40004 4 40032, 40004 4 40032, 40003 4 40032, 40003 4 40032, 40033 4 40032, 40032 4 40032, 40033 4 40032, 40033 4 40032, 40033 4 40032, 40033 4 40032, 40033 4 40032, 40032 4 40124, 1760 1 1760, 2556 2 2556 2 2556 2 2556 2 2556 2 2 556 2 556	2143 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 17052 0 911 1797 2440 3104 5687 9084 11870 13288 14144 14878 14842 17061 17061 17061 17061 17061 17061 17061 17061 17061 17061	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 495 548 600 703 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 91025 932 650 604 703 716 685 716 694	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 774 774 774 775 501 347 271 635 641 606 624	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 308 400 444 472 497 545 638 638 SUMMARY Cumulative Observed Low JT 390 646 657 619 505 430 307 247 577 587 537 557 415	2009 2856 3806 6006 8799 12174 14674 15302 16801 17793 0 911 17793 0 911 17793 0 911 17793 2438 3102 5602 8977 11770 14920 14920 14920 15754 16574 19770 14920 15755 16574 17774 17774 2438 3400 15357 16574 17774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 605.53 630.8 661.62 736.98 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 577.19 604.34 634.88 678.43 792.81 792.85 80 80 80 80 80 80 80 80 80 80	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.40 76.40 76.40 76.77 76.5 101.28 94.54 54.24 19.25 19.25 19.25 19.25 19.25 19.25 19.25 115.25 1.13.88 7.51 4.56 15.25 13.88 7.51 4.65 4.68 4.68 11.41 -5.88 -65.04	6% 7% 20% 20% 16% 13% 11% 11% 10% 8% 14% 218% 14% 218% 14% 228% 66% 66% 39% 22% 19% 2% 2% 1% 15% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1
A 27-2 A 27-1 A	WB EB WB NB SB EB WB WB WB WB WB WB SB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 3-4 10-11 11-12 12-13 3-4 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 10-11 11-12 12-13 10-11 10-11 12-13 10-11 11-12 12-13 10-11 10-11 12-12 12-13 10-11 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-13 10-11 12-13 10-11 12-13 10-11 12-13 12-13 10-11 12-13 10-11 12-13 12-	4644_4050 4050_4055 4055_3156 3156_2656 2656_1760 1760_40134 40134_40033 40032_40035 40033_40031 40032_40036 40032_40036 40032_40036 40032_40036 40032_40038 40034_40033_40043 40037_40124 40037_40124 40038_40043 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40124_1760 1760_2656 2656_3156 3156_4156 4155_4151 4645_9001 11001_5739 Total Total Total Total Total Total Total Total Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 1797 2440 3104 5687 9084 11870 13288 14144 14924 15842 17061 17061 17061 17061 17061 17061 17061 17061 17061 17061 17061 17061	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 495 548 600 703 909 91025 932 650 604 399 304 703 716 694 694<	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 200 314 417 470 510 549 624 774 2708 817 708 817 735 575 501 347 271 635 641 605 624 452 634	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 638 646 657 619 505 430 307 247 577 587 537 537 537 515 588	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 0 911 17793 0 911 17793 0 911 1779 2438 3102 5602 5602 5602 15795 11770 14920 15795 16574 17774 17774 17774 17774 17774 17774 17774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 737.95 80.312 742.51 420.44 552.75 803.12 742.51 479.52 521.97 365.04 229.57 572.54 626.4 652.88 635.41 446.12 568.96	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 19.25 19.25 19.25 19.25 19.25 11.54 86.26 15.525 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.48 20.97 18.04 -4.6 -4.6 -4.6 -4.6 -5.04	6% 7% 20% 20% 20% 16% 13% 11% 11% 11% 11% 218% 14% 8% 22% 2% 2% 0 bifference % -2% -2% -2% -2% -2% -2% -2% -2
A 27-2 A 27-1 A	WB EB EB EB EB EB EB EB EB WB NB S8 EB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-3 4-5 5-6 6-7 7-8 8-9 9-10 10-2 1-2 12-2 3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-2 11-12 12-13 12	4644_4050 4050_4055 4050_3156 3156_2656 2656_1760 1760_40134 40134_40039 40032_40035 40033_40033 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40032_40037 40032_40038 40034_40043_40097 40037_40124 40124_1760 1760_2656 2656_3156 3156_4156 4155_4156 4155_4151 46645_9001 11001_5739 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 901 17052 17051	133 181 210 257 351 466 554 575 603 642 685 0 39 71 120 205 321 434 495 548 600 703 909 909 909 909 650 664 399 3903 903 903 903 903 904 905 650 664 399 304 703 716 685 716 493 694 983	125 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 510 549 624 774 774 774 774 708 817 735 501 347 271 635 641 606 624 452 634 950	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 638 646 657 619 505 430 307 247 577 537 537 557 415 588 916	2009 2856 3806 6006 8799 12174 14674 15302 16891 17793 0 911 17793 0 911 17793 2438 3102 5602 8977 11770 14920 15705 16574 13970 14920 15775 16574 17774 17774 17774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 605.53 630.8 661.62 736.98 736.98 0 115.49 168.74 191.91 279.16 396.54 494.41 571.19 604.34 634.88 678.43 792.81 793.85 80.04 20.55 70.55 80.04 20.55 80.04 80.0	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.00 76.10 76.40 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 102.8 94.54 19.25 19.25 19.25 113.88 7.51 4.56 -155.25 -13.88 7.51 -4.56 -14.6 46.88 11.41 -5.88 -65.04 -112	6% 7% 20% 20% 20% 16% 13% 11% 11% 10% 8% 21% 218% 11% 11% 218% 218% 66% 39% 26% 26% 26% 26% 26% 26% 27% 2% 2% 11% 12%
A 27-2 A 27-1 A	WB EB WB SB EB EB EB WB EB EB EB EB EB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 2-3 3-4 10-12 11-12 12-13 2-3 10-12 11-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 12-12 12-13 10-11 11-11 11-12 12-13 10-11 11-11 11-12 12-13 10-11 11-11 11-12 12-13 10-11 11-11 11-12 12-13 10-11 11-11 11-12 12-13 10-11 11-11 11-12 12-13 10-11 11-11 11-12 12-13 1	4644_4050 4050_4055 4050_3156 3156_2656 2656_1760 1760_40134 40134_40039 40032_40035 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40032_40036 40032_40037 40032_40038 40034_40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40124_1760 1760_2656 2656_3156 3155_4151 4645_9001 11001_5739 Total Total Total Total Total Total Total Total <	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 9111 1797 2440 3104 5587 9084 9084 11870 13288 14144 14924 15842 17061 1707 1708 1708 1708 1708 1708 1708 170	133 181 210 351 466 575 603 642 685 0 391 71 205 321 434 495 548 600 703 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 903 650 661 399 304 703 716 685 716 685 716 693 933 <tr< th=""><th>125 1158 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 774 PM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 425 708 817 735 501 347 271 635 641 606 624 452 634 950 1021</th><th>135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 308 400 444 472 497 545 638 638 638 646 657 619 505 430 307 247 537 537 537 557 415 588 916</th><th>2009 2856 3806 6006 8799 12114 14674 15302 16801 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920 14920 14920 14920 14920 14920 14920 14920 14920 1574 17774 17774 17774 17774 17774 17774 17774 17774</th><th>140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 0 115.49 145.9 145.9 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 772.81 793.85 80.312 744.51 742.51 742.51 742.51 742.51 743.53 755.54 755.55 755.55 755.55 7</th><th>8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 58.27 58.29 51.54 88.59 0.00 79.13 78.03 76.10 77.63 77.65 101.28 94.54 86.26 54.24 19.25 19.25 19.25 19.25 19.25 19.25 19.25 19.25 19.25 11.888 7.51 -55.25 -13.88 7.51 -55.48 20.97 18.04 -4.45 -4.56 -155.25 -13.88 7.51 -55.48 -155.25 -13.88 7.51 -55.48 -155.25 -13.88 7.51 -55.48 -155.25 -13.88 7.51 -55.48 -155.25 -13.88 7.51 -55.48 -14.6 46.88 -11.41 -5.88 -65.04 -11.2 -90</th><th>6 % 7% 7% 20% 20% 20% 16% 13% 11% 11% 11% 10% 8% 14% 8% 2% 2% 2% 2% 2% 2% 2% 2% 2% 1% -1% -1% 4% 8% 2% -1% -1% 1% 8%</th></tr<>	125 1158 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 774 PM JOURNEY TIME VALIDATION Cumulative Observed Mean JT 425 708 817 735 501 347 271 635 641 606 624 452 634 950 1021	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 308 400 444 472 497 545 638 638 638 646 657 619 505 430 307 247 537 537 537 557 415 588 916	2009 2856 3806 6006 8799 12114 14674 15302 16801 17793 0 911 1797 2438 3102 5602 8977 11770 13970 14920 14920 14920 14920 14920 14920 14920 14920 14920 1574 17774 17774 17774 17774 17774 17774 17774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 0 115.49 145.9 145.9 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 772.81 793.85 80.312 744.51 742.51 742.51 742.51 742.51 743.53 755.54 755.55 755.55 755.55 7	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 58.27 58.29 51.54 88.59 0.00 79.13 78.03 76.10 77.63 77.65 101.28 94.54 86.26 54.24 19.25 19.25 19.25 19.25 19.25 19.25 19.25 19.25 19.25 11.888 7.51 -55.25 -13.88 7.51 -55.48 20.97 18.04 -4.45 -4.56 -155.25 -13.88 7.51 -55.48 -155.25 -13.88 7.51 -55.48 -155.25 -13.88 7.51 -55.48 -155.25 -13.88 7.51 -55.48 -155.25 -13.88 7.51 -55.48 -14.6 46.88 -11.41 -5.88 -65.04 -11.2 -90	6 % 7% 7% 20% 20% 20% 16% 13% 11% 11% 11% 10% 8% 14% 8% 2% 2% 2% 2% 2% 2% 2% 2% 2% 1% -1% -1% 4% 8% 2% -1% -1% 1% 8%
A 27-2 A 27-1 A	WB EB WB SB EB WB B B B B B B B B B B B B B B B B B	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-2 1-2 12-2 3-3 4-4 5-5 6-7 7-8 9-10 10-11 11-12 12-13 12-12-13 12-1	4 644, 4050 4 4050, 44055 4 4055, 3156 3 156, 2656 2 656, 1760 1 760, 40134 4 40134, 40039 4 40039, 40035 4 40032, 40030 4 40032, 40040 4 7 total 4 40032, 40034 4 40032, 40038, 40038 4 40034, 40038, 40043 4 40034, 40037, 40124 4 40124, 21760 1 7 total 3 156, 4156 3 156, 4156 3 156, 4156 3 156, 4151 3 156, 41	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 17052 17051	133 181 210 257 351 466 554 575 603 642 685 0 39 71 120 205 321 434 495 548 600 703 909 901 1025 932 650 664 399 304 703 716 685 716<	124 158 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 624 774 774 778 817 735 575 501 347 271 635 641 666 624 452 635 641 666 624 635 641 666 624 635 641 666 624 635 641 650	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 638 638 638 638 638 638 638 638 638 638 638 638 6390 646 657 619 505 430 307 247 577 587 515 588 916 968 <td>2009 2856 3806 6006 8799 12174 14674 15302 16002 16793 17793 0 911 17793 0 911 17793 0 911 17793 3102 5602 5602 5602 15795 16574 17770 13970 14920 15795 16574 17774 17774 17774 17774 17774 17774 17774 17774</td> <td>140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 742.91 792.81 702.81 7</td> <td>8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.40 77.63 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 101.28 94.54 55.25 10.28 94.54 19.25 19.25 19.25 19.25 19.25 11.388 7.51 -4.56 -1.55.25 -1.388 20.97 18.04 4.64 4.688 11.41 -5.88 -65.04 -1.12 -9.0</td> <td>6% 7% 20% 20% 16% 13% 11% 11% 11% 11% 218% 24% 25% 26% 19% 16% 22% 2% 2% 2% 1% -1% -2% 8% 2% 1% -1% -1% -2% 8% 2% -1% -1% -2% 8% 2% -1% -1% -2% 8% -1% -2% -2% -2% -2% -2% -2% -2% -2</td>	2009 2856 3806 6006 8799 12174 14674 15302 16002 16793 17793 0 911 17793 0 911 17793 0 911 17793 3102 5602 5602 5602 15795 16574 17770 13970 14920 15795 16574 17774 17774 17774 17774 17774 17774 17774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 742.91 792.81 702.81 7	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.40 77.63 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 101.28 94.54 55.25 10.28 94.54 19.25 19.25 19.25 19.25 19.25 11.388 7.51 -4.56 -1.55.25 -1.388 20.97 18.04 4.64 4.688 11.41 -5.88 -65.04 -1.12 -9.0	6% 7% 20% 20% 16% 13% 11% 11% 11% 11% 218% 24% 25% 26% 19% 16% 22% 2% 2% 2% 1% -1% -2% 8% 2% 1% -1% -1% -2% 8% 2% -1% -1% -2% 8% 2% -1% -1% -2% 8% -1% -2% -2% -2% -2% -2% -2% -2% -2
A 27-2 A 27-1 A 27-2 A	WB EB WB SB EB WB WB WB SB SB SB EB WB WB WB WB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 12-	4644,4050 4050,4055 4052,4055 3156,2656 2656,1760 1760,40134 40134,40039 40032,40035 40033,40023 40032,40036 40032,40037 40032,40034 40032,40034 40032,40034 40032,40034 40032,40034 40034,40033 40032,40034 40034,40037 40035,40038 40034,40043 40037,40034 40037,40034 40037,40034 40038,40043 40037,40124 40124,1760 1760,2656 2656,3156 3156,4156 4155,4156 4155,4151 4645,9001 11001,5739 Total	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 17052 0 911 17052 0 911 1797 2440 3104 5687 9084 11870 13288 14144 1487 13288 14144 15842 17061 1707 1885 5539 5539 5539 5539 5539 5539 5539 5	133 181 210 257 351 466 554 575 603 642 685 0 39 71 205 321 434 495 548 600 703 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 903 650 664 703 716 685 716 685 716 685 716 685	124 158 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 774 774 774 775 501 347 271 635 641 606 624 774	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 308 400 444 472 497 545 638 638 638 638 638 646 657 619 505 430 307 247 577 587 537 557 415 588 916 968 611	2009 2856 3806 6006 8799 12174 14674 15302 16801 17793 0 911 17793 0 911 17793 0 911 1779 2438 3402 18977 11770 14920 14920 14920 14920 14920 14920 15755 16574 17774 17774 17774 17774 17774 17774 17774 17774 17774 17774 17774	140.24 169.98 203.34 280.6 378.68 497.2 584.99 605.53 630.8 661.62 736.98 736.98 0 115.49 105.74 145.9 168.74 191.91 279.16 396.94 494.41 577.19 604.34 634.88 634.88 634.88 634.88 634.88 634.83 792.81 793.85 60 803.12 742.51 40 60 803.12 742.51 60 803.12 742.51 60 803.12 742.51 757.54 635.44 635.41 446.12 568.96 838 931 737	8.27 11.82 16.23 46.12 51.06 55.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 76.10 76.40 776.40 776.77 76.25 101.28 94.54 101.28 94.54 102.8 94.54 103.88 103.88 103.88 103.88 103.88 103.88 103.88 104.45 103.88 103.	6% 7% 20% 20% 16% 13% 11% 11% 10% 8% 14% 218% 115% 8% 22% 19% 26% 29% 2% 2% 19% 2% 2% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1
A 27-2 A 27-1 A	WB EB B SB EB WB WB SB EB WB SB EB WB SB	2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 1-12 12-13 3-4 4-5 5-6 6-7 7-8 9-10 10-11 11-12 12-13 3-4 1-12 12-13 1	4644_4050 4050_4055 4055_3156 3156_2656 2656_1760 1760_40134 40134_40033 40032_40035 40033_40031 40032_40036 40033_40033 40034_40033 40035_40033 40036_40033 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40037_40124 40124_1760 1760_2656_156 2656_3156 3156_4156 3156_4156 3156_4156 3156_4156 3156_4156 3156_4156 3156_4156 3156_4156 3156_4156 3156_4156 3156_4156	2146 2912 3758 5184 7978 11363 13931 14559 15260 16149 17052 0 911 1797 2440 3104 5687 9084 11870 3104 5687 3084 11870 13288 14144 14924 15842 17061 17061 17061 2407 3106 13288 4881 5872 5852 5150 4377 4154 5150 4377 4154 5150 5150 4377 4154 5150 5150 5150 4377 4154 5150 5150 5150 5150 5150 5150 5150	133 181 210 257 351 466 554 575 603 642 685 0 39 71 97 120 205 321 434 495 548 600 703 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 909 932 650 604 399 304 703 716 498 694	125 187 187 234 328 440 527 548 575 610 648 0 36 68 93 116 200 314 417 470 510 549 624 774 774 774 775 501 347 271 635 641 652 634 950 1021 648 950 1021 648	135 164 211 304 415 501 522 547 578 611 0 34 64 89 111 196 308 400 444 472 497 545 638 638 638 638 505 430 307 247 577 587 537 415 588 916 968 611 638	2009 2856 3806 6006 8799 12174 14674 15302 16002 16891 17793 0 911 17793 0 911 17793 0 911 17793 2438 3102 5602 5602 5602 14920 15795 16574 17774 17774 17774 Model Distance 4888 4888 4888 4888 5537 5227 4490 4293 3401 7211 7193 5668 5523 5739 5739 5739 5739 5739 5739 5739	140.24 169.98 203.34 280.6 378.68 497.2 584.99 606.53 630.8 661.62 736.98 736.98 736.98 0 115.49 145.9 168.74 191.91 279.16 396.94 494.41 571.19 604.34 634.88 678.43 779.81 792.81 793.85 80 81 737 793 793 793 793 793 793 793	8.27 11.82 16.23 46.12 51.06 56.90 57.85 58.27 55.99 51.54 88.59 0.00 79.13 78.03 76.10 76.40 77.65 101.28 94.54 86.26 54.24 19.25 19.25 19.25 19.25 0 0 0 0 19.25 13.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 7.51 -4.56 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.25 -1.3.88 -1.55.24 -1.4.5 -1.55.25 -1.3.88 -1.55.25	6% 7% 20% 20% 20% 16% 13% 11% 11% 11% 10% 8% 14% 218% 14% 22% 26% 19% 22% 2% 0 0 0 0 0 0 0 0 0 0 0 0 0



onds)	Difference %	DMRB
	-1%	Pass
	-22%	Fail
	-2%	Pass
	1%	Pass
	-17%	Fail
	4%	Pass
	5%	Pass
	-15%	Pass
	-10%	Pass
	-2%	Pass
	8%	Pass
	2%	Pass
	-1%	Pass
	-10%	Pass
	-12%	Pass
	-9%	Pass
	14%	Pass
	2%	Pass
	16	
	2	
	89%	

Pass %Pass


































